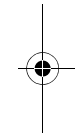
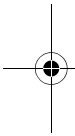
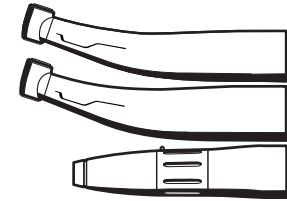




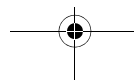
Midwest[®] E Pro Midwest[®] E Plus

 Dentsply
Sirona



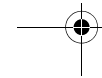
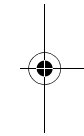
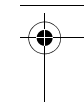
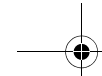
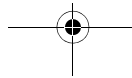
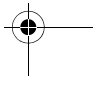
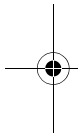
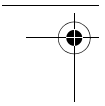
English / Français / Español

Operating Instructions
Notice d'utilisation
Instrucciones de uso





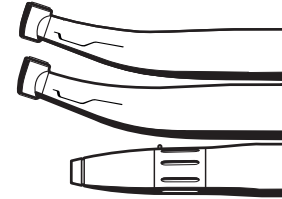
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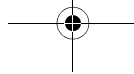
Midwest[®] E Pro Midwest[®] E Plus

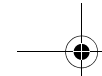
 Dentsply
Sirona



English

Operating Instructions





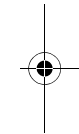
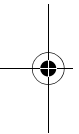
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Operating Instructions Midwest E Pro / E Plus



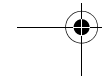
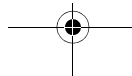
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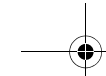
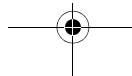
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Operating Instructions Midwest E Pro / E Plus

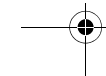
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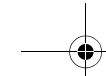


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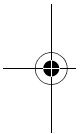


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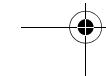
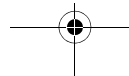
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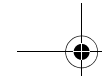
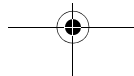
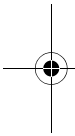
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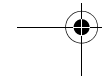
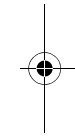
Operating Instructions Midwest E Pro / E Plus

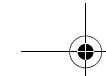
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English





1 Before you begin ...

Operating Instructions Midwest E Pro / E Plus

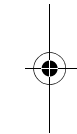


1 Before you begin ...

Midwest E Pro / E Plus complies with state-of-the-art technical regulations. Midwest E Pro / E Plus complies with the ISO 14457 standard.

1. Read the operating instructions prior to using Midwest E Pro / E Plus.
2. Only use Midwest E Pro / E Plus for the applications described in the operating instructions.
3. Observe the applicable hygiene standards, occupational safety regulations and accident prevention measures for Midwest E Pro / E Plus.
 - Midwest E Pro / E Plus is intended for use in dental operator to prepare dental cavities for restorations such as fillings, and for cleaning teeth.

None

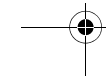
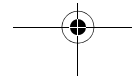


Intended Use

Contraindications

6

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Operating Instructions Midwest E Pro / E Plus

1 Before you begin ...

Target group

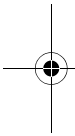
This product is intended only for use by trained dental personnel in dental practices and laboratories.

Scope of validity of operating instructions

These Operating Instructions are valid for the following instruments:

- Midwest E Pro
- Midwest E Plus

English



Warnings

1.1 Structure of the document

1.1.1 Labeling of information

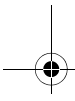
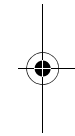
➤ To prevent injuries, please observe all warnings.

Warnings are labeled as follows:

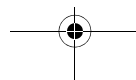
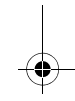
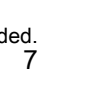
⚠ DANGER! indicates a danger **leading** to death or serious injury if not avoided.

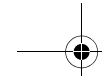
⚠ WARNING! indicates a danger that **may lead** to death or serious injury if not avoided.

⚠ CAUTION! indicates a danger that **may lead** to injury if not avoided.



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1 Before you begin ...

Instructions for use

Operating Instructions Midwest E Pro / E Plus

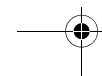
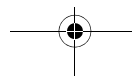
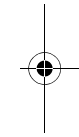
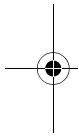
➤ To prevent material damage and additional expenses, please observe all instructions for use.

Instructions for use are labeled as follows:

NOTICE! indicates measures for the prevention of material damage.

IMPORTANT: indicates information on the avoidance of additional expenses and other important information.

Tip: indicates information for facilitating work.

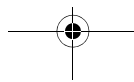
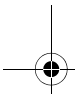
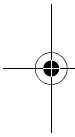


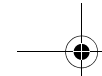


1.1.2 Formats and symbols

The formats and symbols used in this document have the following meaning:

<ul style="list-style-type: none"> ✓ Prerequisite 1. First action step 2. Second action step or > Alternative action ↔ Result ➤ Individual action step 	Requests you to do something.
Use of formats and symbols [→ 9].	Identifies a reference to another text passage and specifies its page number.
• List	Identifies a list.





1 Before you begin ...

Operating Instructions Midwest E Pro / E Plus



1.1.3 Abbreviations/codes used

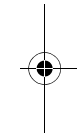
FG	Friction grip bur
CA	Contra-angle handpiece bur
HP	Straight handpiece bur

1.2 Service life

When used as intended:

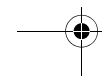
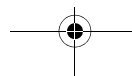
- Non-moving parts have a typical service life of 5 years
- Moving parts have a typical service life of 3 years

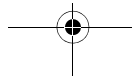
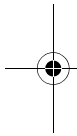
No warranty claim can be inferred here, as wear may occur earlier or later than indicated above depending on use, frequency of sterilization, and frequency of maintenance.



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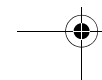
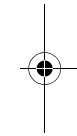
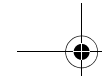


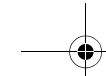
1.3 Trade names / registered trade marks of the manufacturers

The designations used in this operating instruction with reference to the instruments are trade names or registered trade names of the manufacturers:

KaVo, Biberach, Germany:

- INTRAmatic LUX

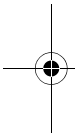




2 Safety information

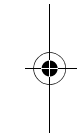
Obligations of the user

- Use only fault-free materials that do **not** deviate from the specified data [→ 19].
- Protect yourself, patients, and others against any foreseeable dangers. To do this, follow the safety information.
- Comply with the Intended use of the equipment.
- You should always keep these operating instructions within reach for further reference.



Preventing the spread of infections and cross contamination

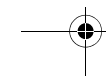
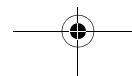
Prevent the spread of infections and cross contamination between patients, users, and third parties. Sterilize equipment after each patient. Take the appropriate hygiene measures, e.g. wear protective gloves.



Emitted cooling air

The cooling air emitted by the coupling of the motor must have a flow rate of 1.5 - 10 l/min.

To keep the cooling air coming out of the instrument away from the cavity, silicone disks are available [→ 37].





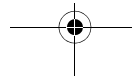
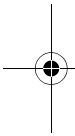
Instrument head overheating

Malfunction or damage

Repair

Spare and accessory parts

First aid measures in the case of lubricant accidents



If the instrument is defective, the area around the instrument head may heat up, thus creating a risk of burning the patient's oral mucosa.

Discontinue use immediately in case of malfunction, unusual or different sounds or damage. Damaged instruments may cause injury. Notify the dental dealer or the manufacturer.

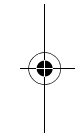
Do **not** repair the instrument yourself.

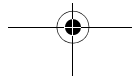
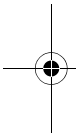
Use only original parts produced by the manufacturer.

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: If skin irritation continues, consult a doctor.





After eye contact:

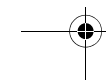
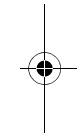
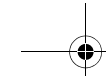
Rinse opened eye for several minutes under running water.

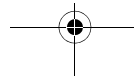
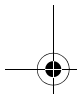
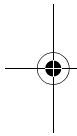
After swallowing:

If symptoms persist consult doctor.

For details download the "*Midwest® Plus Aerosol Spray*" Material Safety Data Sheet from the Midwest homepage:
www.dentsplysirona.com

If you have any questions, please contact your dental dealer or the manufacturer.





3 Technical description

3.1 Task

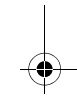
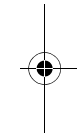
The instrument transmits the driving power and speed of the electric motor or air motor to the preparation tool.

3.2 Functionality

The transmission ratio of the instrument distorts the operating speed of the preparation tool.



English

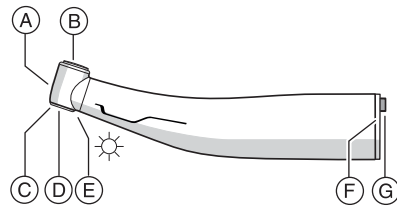




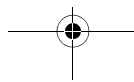
3 Technical description

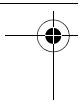
Operating Instructions Midwest E Pro / E Plus

3.3 Structure of Midwest E Pro

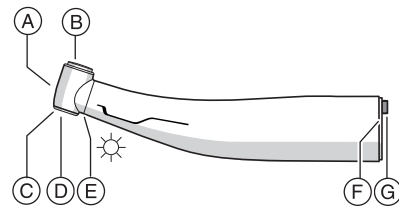


A	Instrument head
B	Push button
C	Cooling spray outlet
D	Opening of chuck system
E	Light aperture
F	Color coding for gear ratio
G	ISOslider





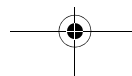
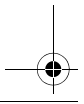
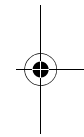
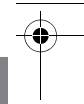
3.4 Structure of Midwest E Plus Contra-angle handpiece

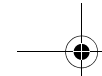


A	Instrument head
B	Push button
C	Cooling spray outlet
D	Opening of chuck system
E	Light aperture
F	Color coding for gear ratio
G	ISOslider

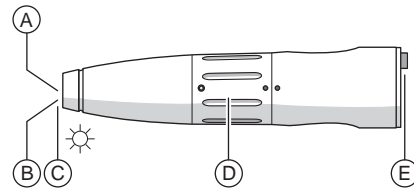


English



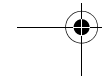
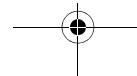


3 Technical description



Straight handpiece

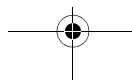
A	Opening of chuck system
B	Cooling spray outlet
C	Light aperture
D	Center part of handpiece
E	ISOslider





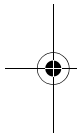
3.5 Technical data Contra-angle handpiece

Midwest E Pro	1:5	1:1
Transmission ratio (approx. specification)	1:5	1:1
Color coding for gear ratio	Red	Blue
Maximum motor speed in rpm	40 000	40 000
Maximum operating speed in rpm	~ 200 000	~ 40 000
Clamping system	FG	CA/LA
Internal cooling media	x	x
Back suction stop	x	x
Light function	x	x

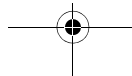


Midwest E Pro	1:5	1:1
Apex measurement function	-	-
Instrument coupling	INTRAmatic LUX®	INTRAmatic LUX®

Midwest E Plus	1:5	1:1	6:1
Transmission ratio (approx. specification)	1:5	1:1	6:1
Color coding for gear ratio	Red	Blue	Green
Maximum motor speed in rpm	40000	40000	40000
Maximum operating speed in rpm	~ 200000	~ 40000	~ 6000
Clamping system	FG	CA/LA	CA/LA



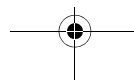
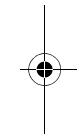
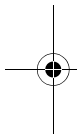
Midwest E Plus	1:5	1:1	6:1
Internal cooling media	x	x	x
Back suction stop	x	x	x
Light function	x	x	x
Apex measurement function	-	-	-
Instrument coupling	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic LUX®

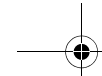




Straight handpiece

Midwest E Plus	1:1 S
Transmission ratio (approx. specification)	1:1
Color coding for gear ratio	Blue
Maximum motor speed in rpm	40 000
Maximum operating speed in rpm	~ 40 000
Clamping system	HP / CA/LA
Internal cooling media	x
Back suction stop	x
Light function	x





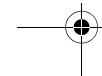
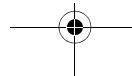
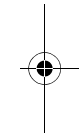
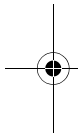
English



Midwest E Plus	1:1 S
Apex measurement function	-
Instrument coupling	INTRAmatic LUX®

Bur instruments

	FG	CA/LA	HP
Shank diameter in mm	1.59 - 1.60	2.334 - 2.35	2.334 - 2.35
Maximum total length in mm	25	34	50



3 Technical description

Operating Instructions Midwest E Pro / E Plus

	FG	CA/LA	HP
Maximum working diameter in mm	2.1	-	-
Standard	ISO 1797-1 ISO 2157	ISO 1797-1	ISO 1797-1

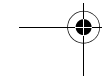
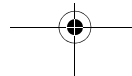
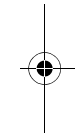
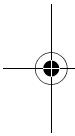
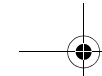
Treatment center

	Midwest E Pro / E Plus
Spray air pressure in bar	2.7
Spray water pressure in bar	2.0



	Midwest E Pro / E Plus
Maximum water temperature in °C	40
Recommended water content in spray in ml/min	> 50

English





4 Preparation

4.1 Initial start-up and longer breaks in use

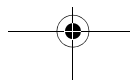
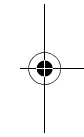
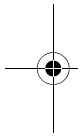
- Sterilize the instrument and accessories prior to startup.
- Clean and maintain the instrument after longer breaks in use.

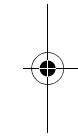
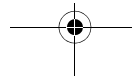
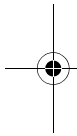
4.2 Prior to starting the work day

- Purge the water and air channels for 30 seconds.

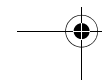
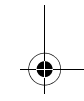
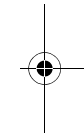
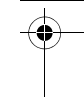
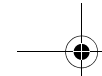
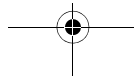
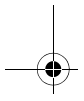
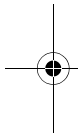
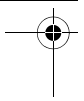
4.3 Before each patient

1. Purge the water and air channels for 30 seconds.
2. **⚠ CAUTION!** Keep the motor running.
Insert the instrument [→ 30].
3. Insert the bur instrument [→ 31].
4. Set a sufficient amount of cooling water (> 50 ml/min).





- 5. Use filtered water only (< 50 µm).
 - 6. Check the nozzles for blockages and lime deposits, for example, and clean the nozzles if necessary.
- ⚠ CAUTION!** Insufficient cooling leads to overheating of the preparation site and damage to the tooth substance. Ensure that the water content is > 50ml/min.



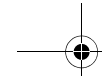
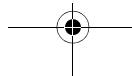
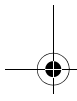
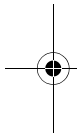
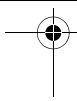
5 Operation

NOTICE! Use only burs and diamond polishers that are sharp and undamaged. Use clean burs and diamond polishers to avoid dirt in the clamping system.

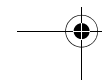
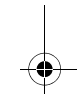
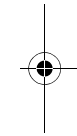
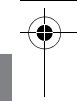
⚠ CAUTION! A loose or partially removed bur instrument can come loose from the head or break off. Risk of injury! Therefore the instrument must only be used when the bur instrument is securely clamped at least 10 mm deep.

⚠ CAUTION! The handpiece must only be operated with the clamping system closed.

⚠ CAUTION! Insufficient cooling leads to overheating of the preparation site and damage to the tooth substance. Ensure that the water content is > 50ml/min.



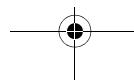
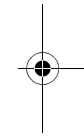
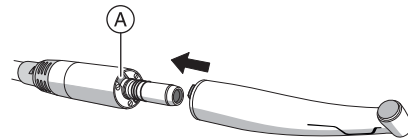
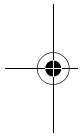
English



⚠ CAUTION! Do not pull the patient's cheek back with the contra-angle handpiece while the motor is running. This would actuate the pushbutton, thus creating a risk of burning the patient's oral mucosa.

⚠ CAUTION! Always operate the contra-angle handpieces with cooling spray when marked red!

IMPORTANT: For application details and operating data of the different preparation tools, please refer to the information provided by the manufacturer.



5.1 Replacing the instrument

⚠ CAUTION! The instrument should only be fitted or removed when the motor is at standstill.

NOTICE! Do not use instruments with fiber optics on motors that do not have fiber optics.

Attaching the instrument

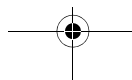
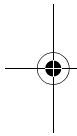
✓ The motor is at a standstill.

1. Insert the instrument until it snaps into place.
2. When using a motor with a light groove (A): turn the instrument until the ISO slider clicks into place.

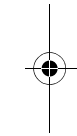
Removing the instrument

✓ The motor is at a standstill.

- Detach the instrument. Do not pull on the supply hose while doing this.



English



5.2 Inserting and removing burs

IMPORTANT: Check the push button to make sure it moves freely!

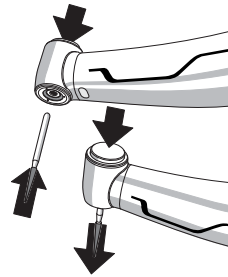
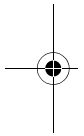
NOTICE! Use only burs and diamond polishers that are sharp and undamaged. Use clean burs and diamond polishers to avoid dirt in the clamping system.

⚠ CAUTION! A loose or partially removed bur instrument can come loose from the head or break off. Risk of injury! Therefore the instrument must only be used when the bur instrument is securely clamped at least 10 mm deep.

⚠ CAUTION! The handpiece must only be operated with the clamping system closed.



5 Operation



Inserting the friction grip bur

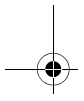
✓ The motor is at a standstill.

1. Press the button and insert the bur up to the stop.
2. Pull on the bur to check that it is firmly attached.

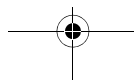
Removing the friction grip bur

✓ The bur must not be moving.

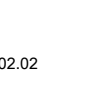
- Press the button and remove the bur.



32

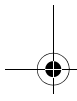
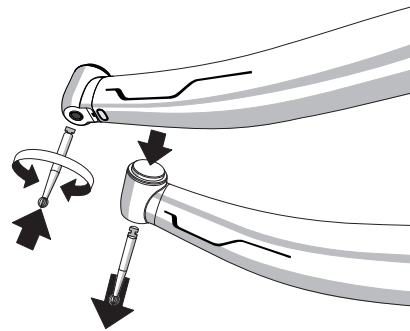
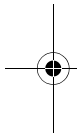


Operating Instructions Midwest E Pro / E Plus



66 04 206 D3686.201.01.02.02





Inserting the contra-angle handpiece bur

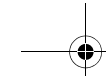
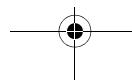
✓ The motor is at a standstill.

1. Insert the bur without pushing the button.
2. Turn the bur back and forth gently until it snaps into place.
3. Pull and turn the bur to check that it is firmly in place.

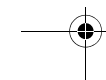
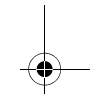
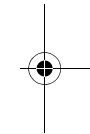
Removing the contra-angle handpiece bur

✓ The bur must not be moving.

- Press the button and remove the bur.

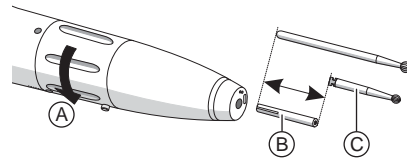


English



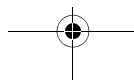
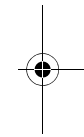


5 Operation



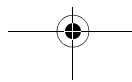
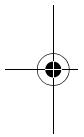
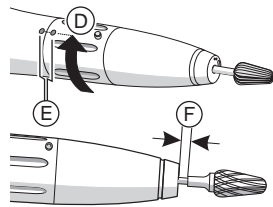
Inserting the straight handpiece bur

- ✓ The motor is at a standstill.
- 1. Turn the center part of the handpiece in the direction of the arrow (A) up to the stop.
- 2. If you are using a **contra-angle handpiece bur** (C): insert the mandrel adapter (B) into the handpiece, slit end first. The mandrel adapter compensates for the difference in length between straight and contra-angle handpiece burs.
- 3. Insert the bur until it reaches the stop.





Operating Instructions Midwest E Pro / E Plus



4. Clamp the bur by turning the center part of the handpiece in direction (D) until it reaches the stop.
- ↳ When the two marks (E) are located opposite each other, the bur is clamped.
 - ↳ When using handpiece burs with a reduced shank: always make sure that the reduced shank does not come into contact with the opening for the chuck (F).
5. Pull and turn the bur to check that it is firmly in place.

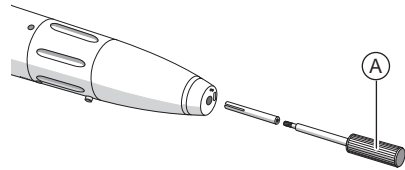
5 Operation

English



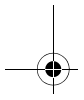
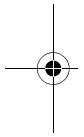


5 Operation

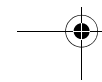
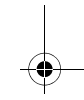
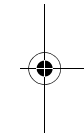
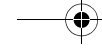
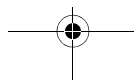


Removing the mandrel adapter

1. Screw in the supplied tool (A).
2. Open the clamping system.
3. Pull out the mandrel adapter.



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5.3 Plugging in and removing the spray clip for NaCl application

Attaching the spray clip

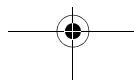
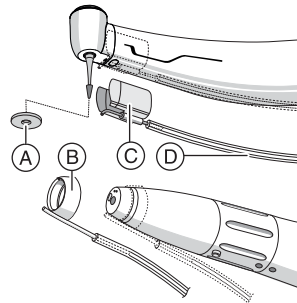
- ✓ The spray water supply at the motor or treatment center is turned off.
1. Plug the silicone hose (D) into the tubule on the spray clip for saline solutions (B/C).

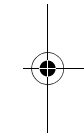
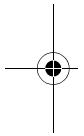
2. Attach the spray clip to the instrument.

Tip: Use the silicone disks (A), to hold back the cooling air emitted from the instrument from the preparation site and to direct it away laterally.

Detaching the spray clip

1. Remove the spray clip from the instrument.
2. Flush the spray clip and silicone hose with clear water.





6 Follow-up

6.1 After each treatment session

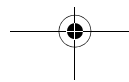
NOTICE! Condition immediately, or at the latest, one hour after treatment.

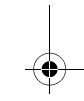
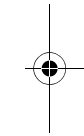
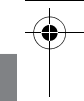
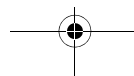
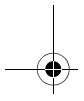
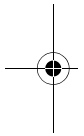
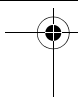
NOTICE! Only use Midwest® Plus Aerosol Spray.

✓ The bur instrument must not be moving.

✓ Wear appropriate protective clothing.

1. Purge the water and air channels on the treatment center for 30 seconds.
2. Remove the bur instrument with tweezers.
3. Pre-disinfect directly at the treatment center [→ 40].
4. Detach the instrument from the motor.
5. Transport the instrument to the hygiene room in a suitable transport container.



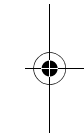
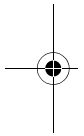


6. Conduct automatic conditioning [→ 41]. Manual conditioning [→ 43] is possible in exceptional cases if the national/local regulations are followed.
7. Apply spray to the instrument [→ 45].
8. Sterilize the instrument and accessories [→ 48].

6.2 At the end of the work day

- Apply spray to the instrument [→ 45].

NOTICE! Do not leave any instruments on the motor overnight, in order to prevent oil from leaking into the electric motor. Never lubricate the electric motor.



7 Conditioning

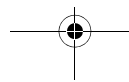
7.1 Conduct pre-disinfection

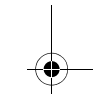
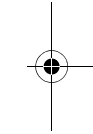
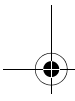
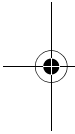
- ✓ Wear appropriate protective clothing.
 - ✓ All disinfectants must be approved in your country and have proven bactericidal, fungicidal and virucidal properties. Only use disinfectants with **no** protein-fixing properties.
1. Spray the surface with disinfectant.
 2. Wipe the disinfectant off with a cloth.
- ↳ For further conditioning, the instrument should be dry and free of residue.

In USA and Canada use **only** following agents:

- CAVICIDE®
- CAVIWIPES™

Please observe the manufacturer's instructions for using instrument disinfectants.





7.2 Automated cleaning and disinfecting ...

7.2.1 ... with cleaning and disinfection equipment

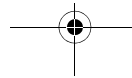
The instrument can also be cleaned and disinfected in a suitable piece of cleaning and disinfection equipment.

The cleaning and disinfection equipment used must be approved by its manufacturer for the cleaning and disinfection of dental instruments and comply with EN ISO 15883-1 (e.g. 95°C (203°F) and 10 min. holding time).

For further details, refer to the operating instructions supplied with the unit.

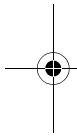
✓ The instrument is conditioned with a cleaning and disinfection device.

1. Check whether the instrument is clean after conditioning under good lighting (min. 500 lux) and color rendering index (min. 80 Ra).
2. If it is still dirty, repeat the process.

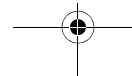




7 Conditioning

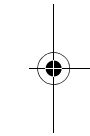


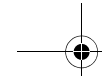
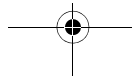
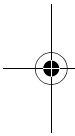
42



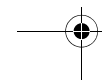
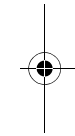
↳ For further conditioning, the instrument should be dry and free of residue.

- 3. Blow the instrument out with max. 3 bar.
- 4. Manual care of mechanical parts [→ 45].
- 5. Manual care of the push button chuck [→ 46].
- 6. Pack the instrument in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
- 7. Sterilize the instrument [→ 48].





English



7.3 Manual cleaning and disinfection

IMPORTANT: Manual conditioning is possible in exceptional cases if the national/regional regulations are followed. The national/regional regulations are to be checked before.

NOTICE! Condition immediately, or at the latest, one hour after treatment.

NOTICE! Never clean in an ultrasound bath!

NOTICE! Never immerse in disinfectant solution!

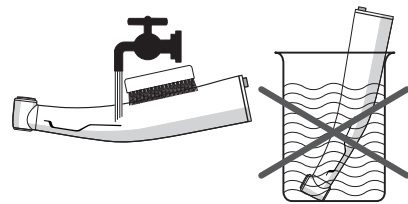
NOTICE! Only use Midwest® Plus Aerosol Spray.

IMPORTANT: Use a soft, clean, and disinfected brush for cleaning.

- ✓ Wear appropriate protective clothing.
- ✓ All disinfectants must be approved in your country and have proven bactericidal, fungicidal and virucidal properties. Only use disinfectants with **no** protein-fixing properties.



7 Conditioning



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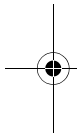
Operating Instructions Midwest E Pro / E Plus

1. Brush the instrument under running water ($< 38\text{ }^{\circ}\text{C}$, $< 100\text{ }^{\circ}\text{F}$, at least drinking water quality) and good lighting (min. 500 lux) and color rendering index (min. 80 Ra) until no more dirt can be seen, for at least 10 seconds.
2. Flush the drive channels with spray.
3. Clean and disinfect spray channels with suitable agents and adapters according to manufacturer's instructions.
4. Blow spray channels with suitable adapters out with 2.5 - 3 bar until no more moisture displaces, but at least 10 seconds.
5. Conduct thermal disinfection or unwrapped steam sterilization.
6. Maintain mechanical parts manually [→ 45].
7. Maintain the push button chuck manually [→ 46].
8. Pack the instrument in packaging material suitable for sterilization and storage. e.g. paper/plastic composite packaging.
9. Conduct sterilization [→ 48].



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7.4 Manual maintenance

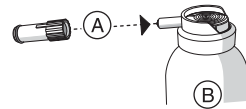
7.4.1 Maintenance of mechanical parts

Intervals

- At least every noon and evening
- Prior to each sterilization
- After every thermal disinfection without integrated maintenance

Required accessories

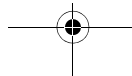
- A Spray adapter
 B Midwest® Plus Aerosol Spray



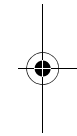
NOTICE! Only use Midwest® Plus Aerosol Spray.

Process

- ✓ The spray adapter is disinfected.

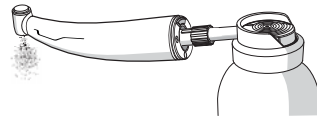
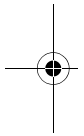


English





7 Conditioning



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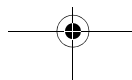
- ✓ The O-ring on the spray adapter is intact.
- 1. Fit the spray adapter onto the nozzle of the spray can.
- 2. Insert the instrument until it snaps into place and hold it.
- 3. Spray the instrument for 1 - 2 seconds.
IMPORTANT: Hold the spray can upright.
- 4. Wipe any spray that comes out with a disinfection cloth.
- 5. Repeat the process until the spray is clear.

7.4.2 Care of the push button chuck

Use Midwest® Plus Aerosol Spray on the push button chuck to remove deposits and ensure proper functioning of the clamping system.

Interval

- At least once a week

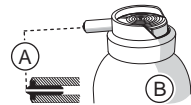




Operating Instructions Midwest E Pro / E Plus

7 Conditioning

English



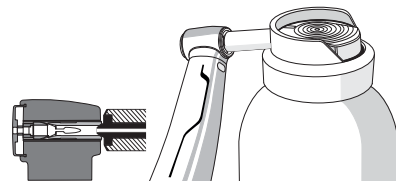
Required accessories

A	Black nozzle insert
B	Midwest® Plus Aerosol Spray

NOTICE! Only use Midwest® Plus Aerosol Spray.

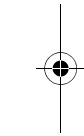
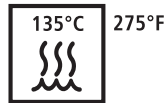
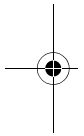
Procedure

- ✓ The instrument is clean and disinfected.
- 1. Press the contra-angle handpiece head with the chuck firmly against the spray can nozzle.
- 2. Spray the chuck for 1 - 2 seconds.
IMPORTANT: Hold the spray can upright.
- 3. Wipe any spray that comes out with a disinfection cloth.



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7.5 Sterilizing

Intervals:

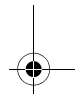
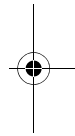
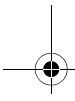
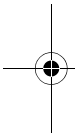
- Prior to initial operation
- Prior to every other use

Process

- ✓ The instrument is clean and disinfected.
- ✓ Instrument maintenance is complete.
- ✓ The instrument can be sterilized in packaging suitable for sterilization and storage: paper/plastic composite packaging according to ISO 11607.
- Sterilize the instrument in the steam sterilizer with saturated water vapor.

Temperature: 135° C (275° F)

Overpressure: 2.13 bar (30.89 psi)



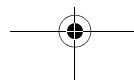
Article	Holding time at 135 °C (275° F)	Drying time
Wrapped instruments	10 minutes	30 minutes
Unpackaged instruments	3.5 minutes	0 - 1 minute

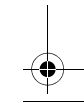
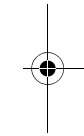
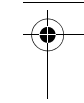
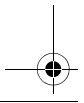
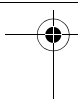
Gravity displacement steam sterilizers are permitted.

NOTICE! Do not exceed 140°C (284°F), even during the drying phase.

After sterilizing

1. Remove the instrument from the steam sterilizer immediately.
⚠ CAUTION! The instrument is hot. Risk of burns!
NOTICE! Do **not** attempt to accelerate the cooling process by immersing the instrument in cold water. This can damage your instrument.
2. Store all instruments so that they are protected from contamination.
3. Sterilize again once the storage period has elapsed.





8 Maintenance

Elastomers, e.g. O-rings, must be replaced depending on their degree of wear.

For safety and technical reasons, check the clamping system of the contra-angle and straight handpiece burs on an annual basis.

Check the clamping system of friction grip burs on a monthly basis [→ 50].

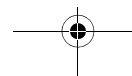
8.1 Testing the FG clamping system

Interval

Test the FG clamping system at least once a month.

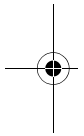
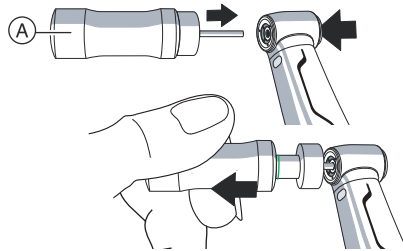
Required accessories

Chuck tester





Operating Instructions Midwest E Pro / E Plus



Process

✓ The expiry date of the chuck tester (A) has **not** elapsed.

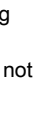
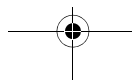
1. Insert the chuck tester into the FG clamping system [→ 31].
2. Tighten the chuck tester until the marking ring appears (withdrawal force: 22 N)

Does the chuck tester slide out of the chuck before the marking ring appears?

⚠ CAUTION! The chuck is defective and the secure fit of the bur is not guaranteed. This may cause injury!

1. Do not use the product.
2. Have the clamping system replaced by Midwest.

Tip: Record the time and result of the check for your own information.



9 Spare parts and consumables

Use only original Midwest parts or parts approved by Midwest.

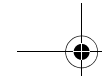
	REF		REF
Midwest® Plus Aerosol Spray (500 ml)	38 00 80	Chuck tester	33 27 793
Cleaning wire for spray nozzles	24 00 232	O-ring 8 x 1	70 36 189
Mandrel adapter for contra-angle handpiece bur	89 17 866	Tool for mandrel adapter (contra-angle handpiece bur)	89 17 874
Spray adapter	89 17 858	O-ring for spray adapter	70 36 353
NaCl coupling for silicone hoses	58 82 618	NaCl silicone hose, thin, 200 mm long, 6 pcs.	59 17 419
NaCl silicone hose, thick, 1.8 m long	89 23 658	NaCl spray clip C for contra-angle handpiece	41 74 087



	REF		REF
NaCl spray clip H for straight handpiece	41 74 079	Silicone disk for contra-angle handpiece, dia. 2.35 mm	41 76 223
Spray clip B for contra-angle handpiece	64 28 374		

English





10 Storage and transport conditions

Operating Instructions Midwest E Pro / E Plus



10 Storage and transport conditions



Protect from
moisture

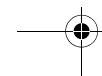
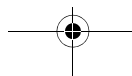


Sensitive contents



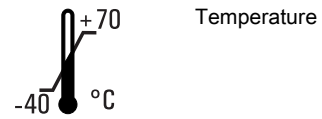
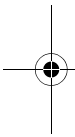
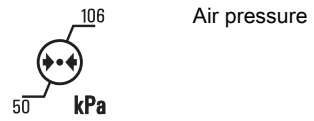
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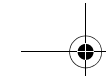
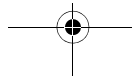
Operating Instructions Midwest E Pro / E Plus



After a severe change in temperature, allow sufficient time for acclimation.

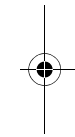


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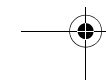


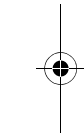
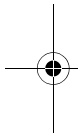
10 Storage and transport conditions

English



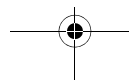
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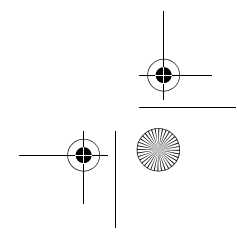
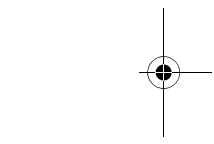
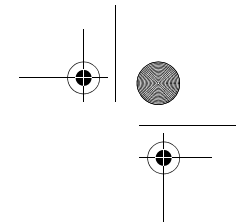
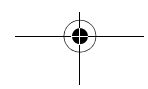
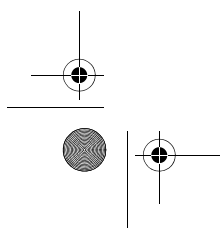
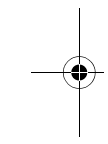
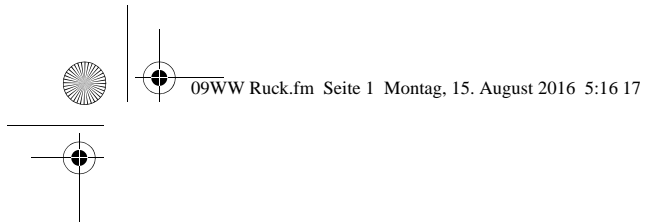


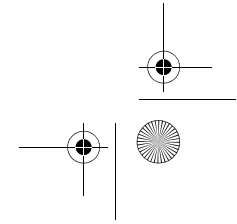
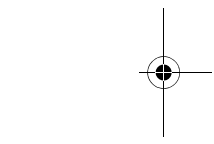
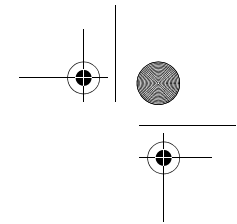
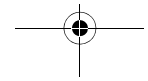
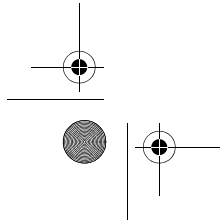
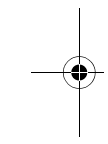
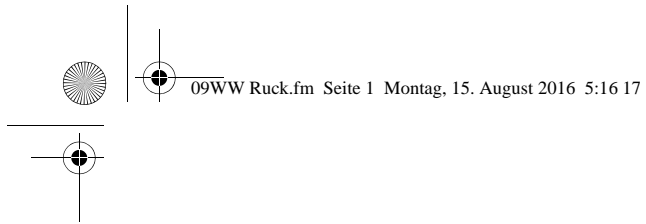


11 Disposal

- According to current information, the product does not contain any substances that are hazardous to the environment.
- Disinfect the product prior to disposal.
- Observe the applicable disposal regulations for your area.



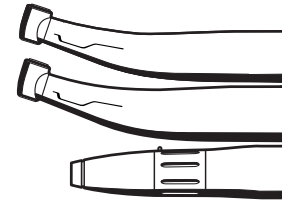






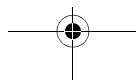
Midwest[®] E Pro Midwest[®] E Plus

 Dentsply
Sirona



Français

Notice d'utilisation



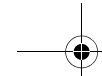


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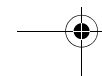
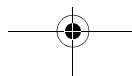
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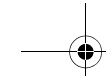
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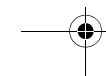
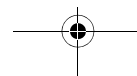


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Français



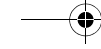
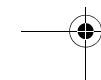
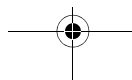
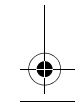
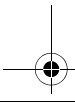
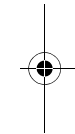
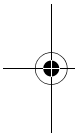


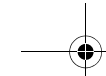
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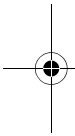




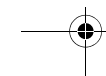
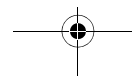
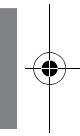
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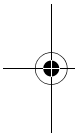


Français

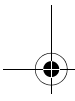




1 Avant de commencer...



Utilisation conforme à la destination prévue



Contre-indications

6



Notice d'utilisation Midwest E Pro / E Plus

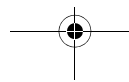


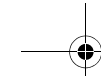
1 Avant de commencer...

Midwest E Pro / E Plus satisfait aux dispositions correspondant à l'état actuel de la technologie. Midwest E Pro / E Plus répond à la norme ISO 14457.

1. Lisez la notice d'utilisation avant d'utiliser Midwest E Pro / E Plus.
2. Utilisez Midwest E Pro / E Plus uniquement pour les applications décrites dans la notice d'utilisation.
3. Observez les prescriptions d'hygiène, les dispositions en matière de sécurité au travail et les mesures de prévention des accidents applicables lors de l'utilisation de Midwest E Pro / E Plus.
 - Midwest E Pro / E Plus convient pour une utilisation dans les cabinets dentaires, dans le cadre de préparation des cavités pour les restaurations comme les obturations et pour le nettoyage des dents.

Aucun





Notice d'utilisation Midwest E Pro / E Plus

1 Avant de commencer...

Groupe cible

Le présent produit est exclusivement prévu pour une utilisation au cabinet dentaire ou en laboratoire par un personnel dentaire formé à cet effet.

Domaine de validité de la notice d'utilisation

La présente notice d'utilisation est valable pour les instruments suivants :

- Midwest E Pro
- Midwest E Plus

1.1 Structure du document

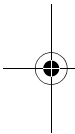
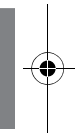
1.1.1 Marquage des avertissements

➤ Observez les avertissements visant à la prévention de dommages corporels.

Les avertissements sont représentés comme suit :

⚠ DANGER! indique un danger entraînant la mort ou des blessures graves si rien n'est fait pour éviter ce danger.

Français

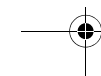
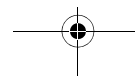


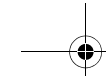
Avertissements



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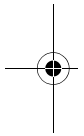


1 Avant de commencer...

Notice d'utilisation Midwest E Pro / E Plus



Indications relatives à l'utilisation



⚠ AVERTISSEMENT! indique un danger **pouvant entraîner** la mort ou des blessures graves si rien n'est fait pour éviter ce danger.

⚠ ATTENTION! indique un danger **pouvant entraîner** des blessures si rien n'est fait pour éviter ce danger.

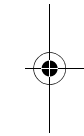
➤ Observez les indications relatives à l'utilisation afin d'éviter les dommages matériels et un travail supplémentaire.

Les indications relatives à l'utilisation sont représentées comme suit :

AVIS! indique des mesures de prévention de dommages matériels.

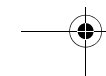
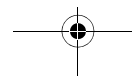
IMPORTANT : indique des informations importantes et des informations pour la prévention de travail supplémentaire.

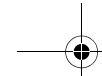
Astuce : indique des informations visant à faciliter le travail.



8

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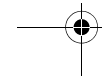
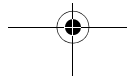
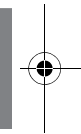
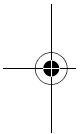


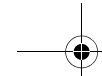
1.1.2 Mises en page et symboles

Signification des mises en page et des symboles utilisés dans le présent document :

<ul style="list-style-type: none"> ✓ Condition à remplir 1. Première étape à réaliser 2. Deuxième étape à réaliser ou ➤ Tâche alternative ↔ Résultat ➤ Étape individuelle à réaliser 	Vous invite à exécuter une tâche.
Utilisation de la mise en page et des symboles [→ 9].	Indique une référence à un autre emplacement de texte et indique le numéro de page.
• Énumération	Indique une énumération.

Français





1 Avant de commencer...

Notice d'utilisation Midwest E Pro / E Plus



1.1.3 Abréviations / codes utilisés

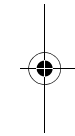
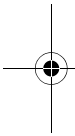
FG	Fraise Friction Grip
CA	Fraise pour contre-angle
HP	Fraise pour pièce-à-main

1.2 Durée de vie

Sous réserve d'une utilisation conforme :

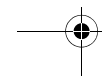
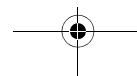
- les composants statiques présentent une longévité typique de 5 ans,
- les composants dynamiques présentent une longévité typique de 3 ans.

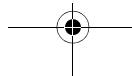
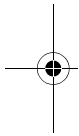
Ces indications ne comportent toutefois aucune obligation de garantie, car l'usure peut apparaître avant ou après les délais nommés, en fonction de l'utilisation et de la fréquence de stérilisation et d'entretien.



10

66 04 206 D3686.201.01.02.03



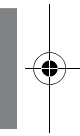


1.3 Dénominations commerciales / marques déposés des fabricants

Les dénominations utilisées dans cette notice d'utilisation pour les produits sont des dénominations commerciales ou des marques déposées des fabricants:

KaVo, Biberach, Allemagne:

- INTRAmatic LUX





Obligations de l'utilisateur

2 Consignes de sécurité

- Utilisez exclusivement des outils de travail en parfait état qui ne s'écartent **pas** des caractéristiques indiquées [→ 19].
- Vous devez vous protéger et protéger les patients et les tiers contre les dangers. Observez à cet effet les consignes de sécurité.
- Observez les indications du point Utilisation conforme.
- Gardez la notice d'utilisation à portée de main pour pouvoir la consulter en cas de besoin.



Prévention de transmissions d'infections et de contaminations croisées

Évitez les transmissions d'infections et les contaminations croisées entre les patients, les praticiens et les tiers : procédez à une stérilisation après chaque utilisation sur un patient.



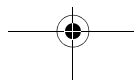
Débit de sortie d'air de refroidissement

Prenez des mesures d'hygiène adéquates, telles que le port de gants de protection.

Le débit de sortie d'air de refroidissement au niveau de l'accouplement sur le moteur doit être de 1,5 - 10 NI/min.



12





Echauffement de la tête de l'instrument

Des rondelles en silicone [→ 37] sont disponibles pour protéger la préparation contre l'air de refroidissement sortant de l'instrument.

Un défaut de l'instrument peut entraîner, au niveau de la tête de l'instrument, un échauffement susceptible de provoquer des brûlures au niveau des muqueuses buccales.

Dysfonctionnement ou dommages

Arrêtez immédiatement l'utilisation en cas de dysfonctionnements, de bruits inhabituels ou de dommages. Les instruments endommagés peuvent provoquer des blessures. Informez le dépôt dentaire ou le fabricant.



Réparation

Ne réparez **pas** vous-même l'instrument.

Pièces de rechange et accessoires

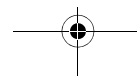
Utilisez exclusivement des pièces d'origine du fabricant.

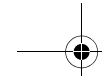
Premiers secours en cas d'accidents avec des lubrifiants

Remarques générales : Ôter immédiatement tous les vêtements ayant été tachés avec le produit.

Après inhalation : Inspirer de l'air frais, consulter un médecin en cas de malaise.

Français





2 Consignes de sécurité

Notice d'utilisation Midwest E Pro / E Plus



Après contact avec la
peau :

Consulter un médecin en cas d'irritation
cutanée prolongée.

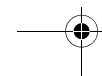
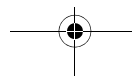
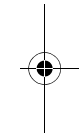
Après contact avec les
yeux :

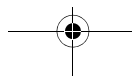
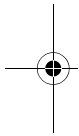
Rincer l'œil ouvert pendant plusieurs
minutes à l'eau courante.

Après ingestion :

Consulter un médecin en cas
d'incommodité prolongée.

Pour obtenir des détails, télécharger la fiche technique de sécurité du
matériel du "Spray aérosol Midwest® Plus" sur le site Internet de
Midwest: www.dentsplysirona.com
En cas de questions, veuillez contacter votre dépôt dentaire ou le
fabricant.





3 Description technique

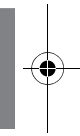
3.1 Tâche

L'instrument transmet la puissance d'entraînement et la vitesse de rotation du moteur électrique ou pneumatique à l'outil de préparation.

3.2 Principe de fonctionnement

La démultiplication de l'instrument influe sur la vitesse de travail de l'outil de préparation.

Français

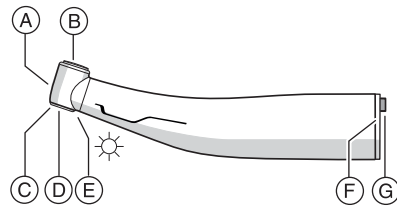




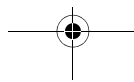
3 Description technique

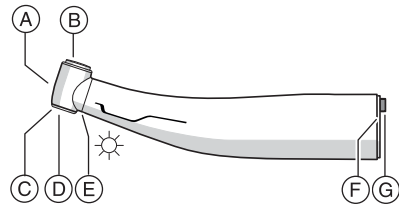
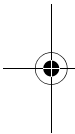
Notice d'utilisation Midwest E Pro / E Plus

3.3 Structure Midwest E Pro



A	Tête de l'instrument
B	Bouton-poussoir
C	Sortie de spray de refroidissement
D	Ouverture du système de pince de serrage
E	Sortie de l'éclairage
F	Marquage de couleur de la démultiplication
G	Curseur ISOslider

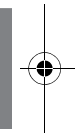




3.4 Structure Midwest E Plus

Contre-angle

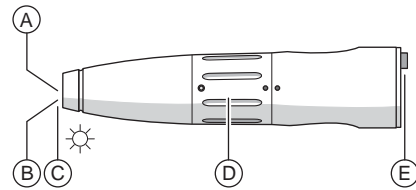
A	Tête de l'instrument
B	Bouton-poussoir
C	Sortie de spray de refroidissement
D	Ouverture du système de pince de serrage
E	Sortie de l'éclairage
F	Marquage de couleur de la démultiplication
G	Curseur ISOslider





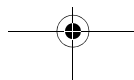
3 Description technique

Notice d'utilisation Midwest E Pro / E Plus



Pièce à main

A	Ouverture du système de pince de serrage
B	Sortie de spray de refroidissement
C	Sortie de l'éclairage
D	Partie centrale de la pièce à main
E	Curseur ISOslider

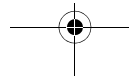
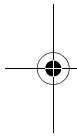




3.5 Caractéristiques techniques Contre-angle

Midwest E Pro	1:5	1:1
Démultiplication (approximative)	1:5	1:1
Marquage de couleur de la démultiplication	rouge	bleu
Vitesse de rotation maximale du moteur en tr/min	40 000	40 000
Vitesse de travail maximale en tr/min	~ 200 000	~ 40 000
Système de serrage	FG	CA/LA
Fluides de refroidissement intégrés	x	x
Arrêt de réaspiration	x	x
Fonction d'éclairage	x	x

Français



3 Description technique

Notice d'utilisation Midwest E Pro / E Plus

Midwest E Pro	1:5	1:1
Fonction de mesure de l'apex	-	-
Raccord d'instrument	INTRAmatic LUX®	INTRAmatic LUX®

Midwest E Plus	1:5	1:1	6:1
Démultiplication (approximative)	1:5	1:1	6:1
Marquage de couleur de la démultiplication	rouge	bleu	vert
Vitesse de rotation maximale du moteur en tr/min	40 000	40 000	40 000
Vitesse de travail maximale en tr/min	~ 200 000	~ 40 000	~ 6 000
Système de serrage	FG	CA/LA	CA/LA



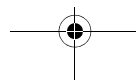
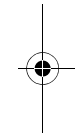
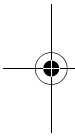
Midwest E Plus	1:5	1:1	6:1
Fluides de refroidissement intégrés	x	x	x
Arrêt de réaspiration	x	x	x
Fonction d'éclairage	x	x	x
Fonction de mesure de l'apex	-	-	-
Raccord d'instrument	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic LUX®

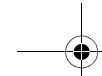




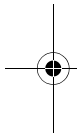
Pièce à main

Midwest E Plus	1:1 S
Démultiplication (approximative)	1:1
Marquage de couleur de la démultiplication	bleu
Vitesse de rotation maximale du moteur en tr/min	40 000
Vitesse de travail maximale en tr/min	~ 40 000
Système de serrage	HP / CA/LA
Fluides de refroidissement intégrés	x
Arrêt de réaspiration	x
Fonction d'éclairage	x

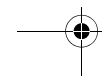
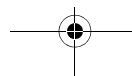
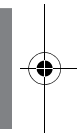




Midwest E Plus	1:1 S
Fonction de mesure de l'apex	-
Raccord d'instrument	INTRAmatic LUX®



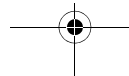
Français

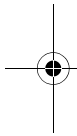
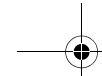




Instruments dynamiques

	FG	CA/LA	HP
Diamètre de la tige en mm	1,590 - 1,600	2,334 - 2,350	2,334 - 2,350
Longueur totale maximale en mm	25	34	50
Diamètre de travail maximal en mm	2,1	-	-
Norme	ISO 1797-1 ISO 2157	ISO 1797-1	ISO 1797-1

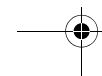
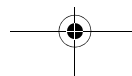
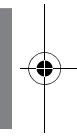


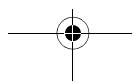
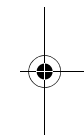
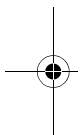


Poste de traitement

	Midwest E Pro / E Plus
Pression d'air de spray en bar	2,7
Pression d'eau de spray en bar	2,0
Température d'eau maximale en °C	40
Proportion d'eau recommandée dans le spray en ml/min	> 50

Français





4 Préparation

4.1 Mise en service initiale et pauses d'utilisation prolongées

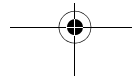
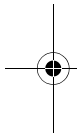
- Stérilisez l'instrument et les accessoires avant la mise en service.
- Nettoyez et entretenez l'instrument après des pauses d'utilisation prolongées.

4.2 Avant de commencer la journée de travail

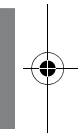
- Rincez les conduits d'eau et d'air pendant 30 secondes.

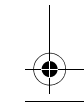
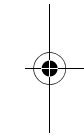
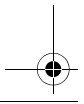
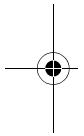
4.3 Avant chaque patient

1. Rincez les conduits d'eau et d'air pendant 30 secondes.
2. **⚠ ATTENTION!** Arrêtez le moteur.
Emmanchez l'instrument [→ 30].
3. Mettez la fraise en place [→ 31].
4. Réglez un débit d'eau de refroidissement suffisant (> 50 ml/min).



5. Utilisez exclusivement de l'eau filtrée ($< 50 \mu\text{m}$).
 6. Vérifiez que les buses ne sont pas obstruées et qu'elles ne présentent pas de dépôts par ex. de calcaire et nettoyez les buses si nécessaire.
- ⚠ ATTENTION!** Un refroidissement insuffisant conduit à un échauffement excessif au niveau du site de préparation et à des lésions du tissu dentaire. Assurez-vous que la proportion d'eau est $> 50\text{ml/min}$.





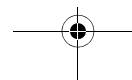
5 Manipulation

AVIS! Utilisez exclusivement des fraises et des outils diamantés aiguisés et en parfait état. Utilisez des fraises et des outils diamantés propres afin d'éviter l'introduction de saleté dans le système de serrage.

⚠ ATTENTION! Une fraise mal fixée ou en partie extraite peut se détacher de la tête ou se casser. Cela entraîne un risque de blessures ! Il convient donc d'utiliser l'instrument uniquement si la fraise est enfoncée d'au moins 10 mm et solidement serrée.

⚠ ATTENTION! La pièce-à-main doit uniquement être utilisée avec le système de serrage fermé.

⚠ ATTENTION! Un refroidissement insuffisant conduit à un échauffement excessif au niveau du site de préparation et à des lésions du tissu dentaire. Assurez-vous que la proportion d'eau est > 50 ml/min.

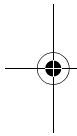




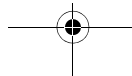
6604206 FR.book Seite 29 Mittwoch, 30. November 2016 12:14 12



Notice d'utilisation Midwest E Pro / E Plus



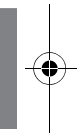
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5 Manipulation



Français



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⚠ ATTENTION! Lorsque le moteur tourne, ne pas utiliser le contre-angle pour retoucher la joue ! Ceci pourrait provoquer un actionnement du poussoir et entraîner un risque de brûlure de la muqueuse buccale.

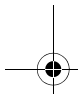
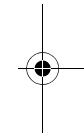
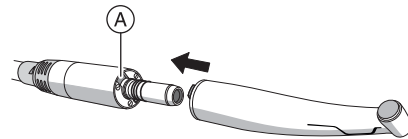
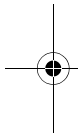
⚠ ATTENTION! Les contre-angles avec marquage en rouge doivent être uniquement utilisés avec du spray de refroidissement !

IMPORTANT : Pour l'utilisation et les caractéristiques des différents outils de préparation, reportez-vous aux indications du fabricant.



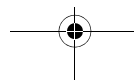
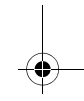
5 Manipulation

Notice d'utilisation Midwest E Pro / E Plus



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66 04 206 D3686.201.01.02.03



5.1 Remplacement de l'instrument

⚠ ATTENTION! L'instrument doit uniquement être fixé ou retiré lorsque le moteur est à l'arrêt.

AVIS! Ne pas utiliser d'instruments avec éclairage sur des moteurs sans éclairage.

Emmancher l'instrument

- ✓ Le moteur est à l'arrêt.
- 1. Emmanchez l'instrument jusqu'à ce qu'il s'enclenche.
- 2. Si vous utilisez un moteur qui présente une rainure d'éclairage (A), tournez l'instrument jusqu'à ce que l'ISOslider s'enclenche.

Retrait de l'instrument

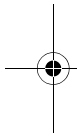
- ✓ Le moteur est à l'arrêt.
- Retirez l'instrument. Ne jamais tirer sur le cordon d'alimentation.



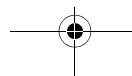
6604206 FR.book Seite 31 Mittwoch, 30. November 2016 12:14 12



Notice d'utilisation Midwest E Pro / E Plus



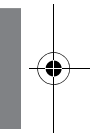
66 04 206 D3686.201.01.02.03



5 Manipulation



Français



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5.2 Fixer et retirer les fraises

IMPORTANT : contrôlez la mobilité du bouton-poussoir !

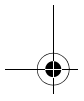
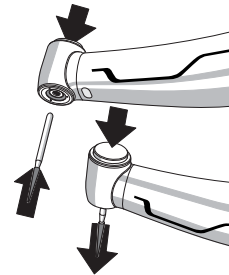
AVIS! Utilisez exclusivement des fraises et des outils diamantés aiguisés et en parfait état. Utilisez des fraises et des outils diamantés propres afin d'éviter l'introduction de saleté dans le système de serrage.

⚠ ATTENTION! Une fraise mal fixée ou en partie extraite peut se détacher de la tête ou se casser. Cela entraîne un risque de blessures ! Il convient donc d'utiliser l'instrument uniquement si la fraise est enfoncée d'au moins 10 mm et solidement serrée.

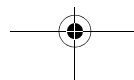
⚠ ATTENTION! La pièce-à-main doit uniquement être utilisée avec le système de serrage fermé.



5 Manipulation



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Mise en place d'une fraise Friction Grip

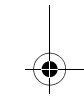
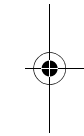
✓ Le moteur est à l'arrêt.

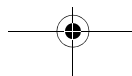
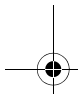
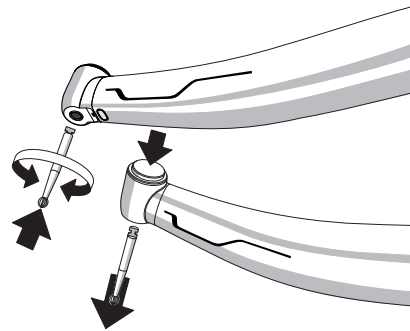
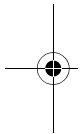
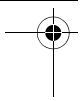
1. Appuyez sur le bouton-poussoir et insérez l'instrument de fraisage jusqu'en butée.
2. Contrôlez la bonne fixation en effectuant des mouvements de traction sur la fraise.

Retrait d'une fraise Friction Grip

✓ L'instrument de fraisage est à l'arrêt.

- Appuyez sur le bouton-poussoir et retirez l'instrument de fraisage.



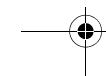
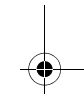
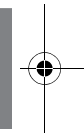
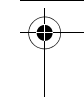
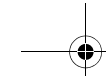


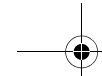
Mettre en place une fraise pour contre-angle

- ✓ Le moteur est à l'arrêt.
- 1. Introduisez la fraise sans actionner le bouton-poussoir.
- 2. Tournez la fraise en effectuant de légers mouvements dans les deux sens, jusqu'à ce qu'elle s'enclenche.
- 3. Effectuez des mouvements de traction et de rotation sur la fraise pour vérifier qu'elle est bien fixée.

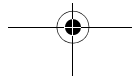
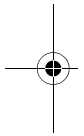
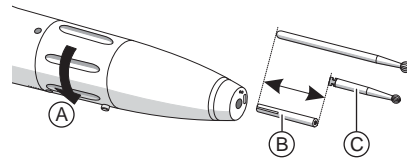
Retirer une fraise pour contre-angle

- ✓ L'instrument de fraisage est à l'arrêt.
- Appuyez sur le bouton-poussoir et retirez la fraise.





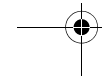
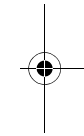
5 Manipulation



Mettre en place la fraise pour pièce-à-main

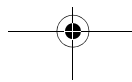
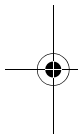
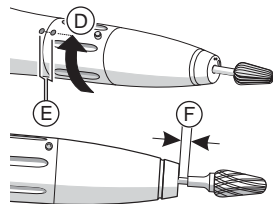
✓ Le moteur est à l'arrêt.

1. Tournez la partie centrale de la pièce-à-main jusqu'en butée dans le sens de la flèche (A).
2. Si vous utilisez une **fraise pour contre-angle** (C) : engagez la broche (B) avec l'extrémité fendue dirigée vers l'avant dans la pièce-à-main. La broche compense la différence de longueur entre les fraises pour pièces-à-main et pour contre-angles.
3. Engagez la fraise jusqu'en butée.



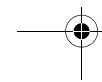
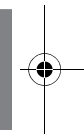
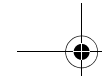


Notice d'utilisation Midwest E Pro / E Plus



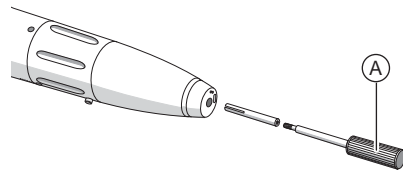
4. Serrez la fraise en tournant la partie centrale de la pièce-à-main jusqu'en butée dans le sens (D).
 - ↳ La fraise est serrée lorsque les deux repères (E) sont l'un en face de l'autre.
 - ↳ Si vous utilisez des fraises pour pièce-à-main à tige dégagée : veillez à ce que la tige dégagée n'applique pas contre l'ouverture prévue pour le système de fixation (F).
5. Contrôlez la bonne fixation en effectuant des mouvements de traction et de rotation sur la fraise.

5 Manipulation



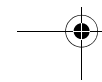
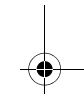
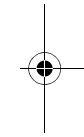
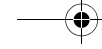
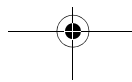
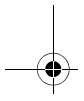
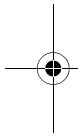


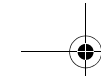
5 Manipulation



Retirer la tige

1. Vissez l'outil (A) fourni.
2. Ouvrez le système de serrage.
3. Retirez la tige.





5.3 Emmancher et retirer le clip de spray pour l'utilisation de NaCl

Emmancher le clip de spray

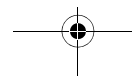
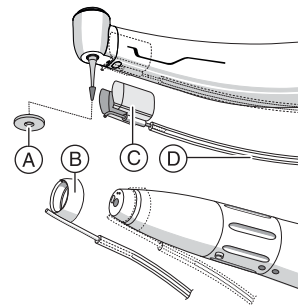
✓ L'amenée d'eau de spray sur le moteur ou le poste de travail doit être arrêtée.

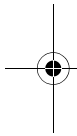
1. Emmanchez le flexible silicone (D) sur le petit tube au niveau du clip de spray pour solutions salines (B/C).
2. Emmanchez le clip de spray sur l'instrument.

Conseil: Utilisez les rondelles en silicone (A) pour éloigner de l'endroit de la préparation l'air de refroidissement qui s'échappe de l'instrument et pour l'évacuer latéralement.

Retirer le clip de spray

1. Retirez le clip de spray de l'instrument.
2. Rincez les clips de spray et le tuyau en silicone à l'eau claire.





6 Traitement ultérieur

6.1 Après chaque traitement

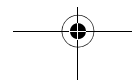
AVIS! Effectuez la préparation immédiatement après le traitement, au plus tard 1 heure après.

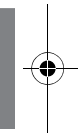
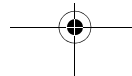
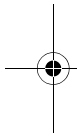
AVIS! Utilisez exclusivement le Spray aérosol Midwest® Plus.

✓ L'instrument de fraisage est à l'arrêt.

✓ Portez des vêtements de protection adaptés.

1. Rincez les voies d'eau et d'air pendant 30 secondes directement sur le poste de traitement.
2. Retirez l'instrument de fraisage à l'aide d'une pincette.
3. Procédez à une désinfection préalable, directement sur le poste de traitement [→ 40].
4. Retirez l'instrument du moteur.



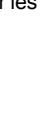


5. Transportez l'instrument dans la salle d'hygiène, à l'aide d'un récipient de transport adapté.
6. Effectuez une préparation en machine [→ 41]. Une préparation manuelle [→ 43] est possible dans les cas exceptionnels, si vous respectez les exigences nationales et locales en vigueur.
7. Procédez à l'entretien de l'instrument avec du spray [→ 46].
8. Stérilisez l'instrument et les accessoires [→ 49].

6.2 À la fin de la journée de travail

- Procédez à l'entretien de l'instrument avec du spray [→ 46].

AVIS! Après la journée de travail, séparez l'instrument et le moteur afin d'éviter la pénétration d'huile dans le moteur électrique. Le moteur électrique ne doit jamais être lubrifié.



7 Préparation

7.1 Procéder à une pré-désinfection

- ✓ Portez des vêtements de protection adaptés.
- ✓ Tous les produits de désinfection doivent être agréés dans votre pays et doivent présenter des propriétés bactéricides, fongicides et virucides prouvées. Les désinfectants qui ont la propriété de fixer les protéines ne doivent **pas** être employés.

1. Pulvérisez la surface avec du désinfectant.

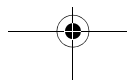
2. Essuyez le désinfectant à l'aide d'un chiffon.

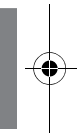
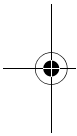
↳ L'instrument est exempt de résidus et sec en vue du traitement ultérieur.

Aux États-Unis et au Canada **selon** ces produits de nettoyage sont utilisables:

- CAVICIDE®
- CAVIWIPES™

Observez les indications du fabricant pour l'utilisation du désinfectant pour instruments.





7.2 Nettoyage et désinfection en machine ...

7.2.1 ... avec un appareil de nettoyage et de désinfection

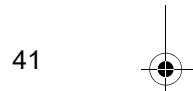
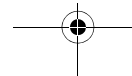
L'instrument peut aussi être nettoyé et désinfecté dans un appareil de nettoyage et de désinfection approprié.

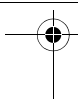
L'appareil de nettoyage et de désinfection doit être validé par son fabricant pour la thermodésinfection d'instruments dentaires et satisfaire aux exigences de la norme EN ISO 15883-1 (p. ex. 95 °C (203 °F) et 10 min. de temps de maintien).

Pour l'utilisation, se reporter à la notice d'utilisation de l'appareil.

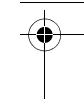
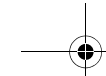
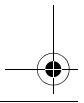
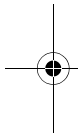
✓ L'instrument est préparé avec un appareil de nettoyage et de désinfection.

1. Vérifiez que l'instrument est propre après l'avoir préparé avec un éclairage adéquat (min. 500 Lux) et un bon index de rendu des couleurs (min. 80 Ra).
2. En cas d'encrassement : répétez le processus.



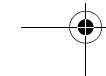
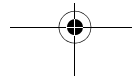
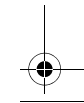
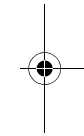


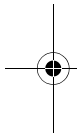
7 Préparation



↳ L'instrument est exempt de résidus et sec en vue du traitement ultérieur.

3. Soufflez l'instrument sous une pression maximale de 3 bar.
4. Procédez à l'entretien manuel des composants mécaniques [→ 46].
5. Procédez à l'entretien manuel de la pince de serrage avec bouton-poussoir [→ 47].
6. Emballez l'instrument dans un emballage convenant à la stérilisation et au stockage, par ex. dans un emballage papier/stratifié.
7. Procédez à une stérilisation [→ 49].





7.3 Nettoyer et désinfecter manuellement

IMPORTANT : Une préparation manuelle peut être réalisée exceptionnellement en respectant les exigences nationales ou locales en vigueur. Il est indispensable de s'informer au préalable sur les exigences nationales ou locales.

AVIS! Effectuez la préparation immédiatement après le traitement, au trop tard 1 heure après.

AVIS! Ne **jamais** nettoyer dans une cuve à ultrasons !

AVIS! Ne **jamais** plonger dans une solution de désinfectant !

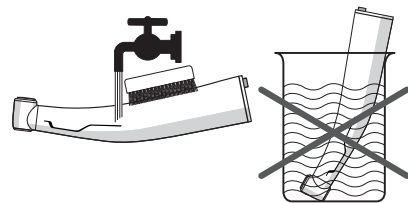
AVIS! Utilisez exclusivement le Spray aérosol Midwest® Plus.

IMPORTANT : utilisez une brosse douce, propre et désinfectée pour le nettoyage.

- ✓ Portez des vêtements de protection adaptés.
- ✓ Tous les produits de désinfection doivent être agréés dans votre pays et doivent présenter des propriétés bactéricides, fongicides et



7 Préparation



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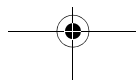


Notice d'utilisation Midwest E Pro / E Plus

virucides prouvées. Les désinfectants qui ont la propriété de fixer les protéines ne doivent **pas** être utilisés.

1. Brossez l'instrument à l'eau courante (< 38 °C, < 100 °F, qualité d'eau potable minimale) pendant au moins 10 secondes jusqu'à ne plus voir de saleté sous un bon éclairage (min. 500 Lux) et avec un bon indice de rendu des couleurs (min. 80 Ra).
2. Rincez les canaux de propulsion à l'aide d'un spray.
3. Nettoyez les canaux de spray avec des adaptateurs et les produits adéquats conformément aux indications du fabricant.
4. Soufflez les canaux de spray avec des adaptateurs à l'air comprimé sous une pression de 2,5 - 3 bar qu'il ne peut plus absorber davantage d'humidité, mais 10 secondes au moins.
5. Effectuez une désinfection thermique ou une stérilisation à la vapeur d'eau à l'état non emballé.
6. Procédez à l'entretien manuel des composants mécaniques [→ 46].

66 04 206 D3686.201.01.02.03

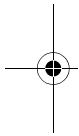




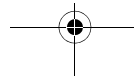
6604206 FR.book Seite 45 Mittwoch, 30. November 2016 12:14 12



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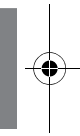
66 04 206 D3686.201.01.02.03



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7. Procédez à l'entretien manuel de la pince de serrage avec bouton-poussoir [→ 47].
8. Emballez l'instrument dans un emballage convenant à la stérilisation et au stockage, par ex. dans un emballage papier/stratifié.
9. Procédez à une stérilisation [→ 49].

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7.4 Entretien manuel

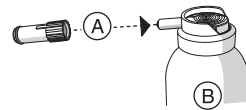
7.4.1 Entretien mécanique

Périodicité

- au minimum tous les jours à midi et le soir
- avant chaque stérilisation
- après chaque désinfection thermique sans entretien intégré

Accessoires nécessaires

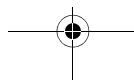
- A Embout de spray
B Spray aérosol Midwest® Plus

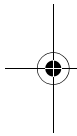
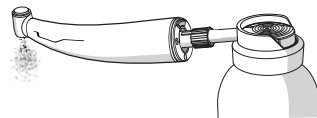


AVIS! Utilisez exclusivement le Spray aérosol Midwest® Plus.

Procédure

- ✓ L'embout de spray est désinfecté.





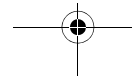
- ✓ Le joint torique au niveau de l'embout de spray est intact.
- 1. Emmanchez l'embout de spray sur la buse du pulvérisateur.
- 2. Emmanchez l'instrument jusqu'à ce qu'il s'enclenche et maintenez-le fermement.
- 3. Pulvérisez le spray dans l'instrument pendant une à deux secondes.
ATTENTION : tenez le spray à la verticale.
- 4. Absorberez le spray sortant à l'aide d'une lingette désinfectante.
- 5. Répétez le processus jusqu'à ce que le spray sortant soit clair.

7.4.2 Entretien de la pince de serrage avec bouton-poussoir

L'entretien de la pince de serrage avec bouton-poussoir avec du Spray aérosol Midwest® Plus élimine les dépôts dans le système de serrage et préserve ainsi son caractère opérationnel.

Périodicité

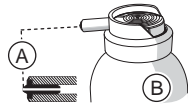
- Au moins une fois par semaine





7 Préparation

Notice d'utilisation Midwest E Pro / E Plus



Accessoires nécessaires

A	Insert de buse noir
B	Spray aérosol Midwest® Plus

AVIS! Utilisez exclusivement le Spray aérosol Midwest® Plus.

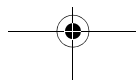
Procédure

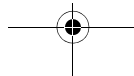
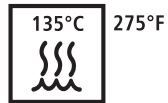
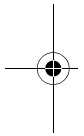
✓ L'instrument est nettoyé et désinfecté.

1. Maintenez fermement la tête du contre-angle avec la pince de serrage au niveau de la buse du pulvérisateur.
2. Pulvérisez du spray dans la pince de serrage pendant 1 à 2 secondes.

IMPORTANT : Maintenez le flacon pulvérisateur à la verticale.

3. Retirez le spray sortant à l'aide d'une lingette désinfectante.





7.5 Stérilisation

Périodicités :

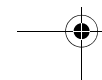
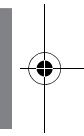
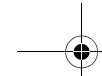
- Avant la mise en service initiale
- Avant chacune des utilisations suivantes

Procédure

- ✓ L'instrument est nettoyé et désinfecté.
 - ✓ L'instrument est entretenu.
 - ✓ L'instrument est conditionné dans un emballage convenant à la stérilisation et au stockage, par ex. dans un emballage papier/stratifié conformément à la norme ISO 11607.
- Stérilisez l'instrument dans un stérilisateur contenant de la vapeur d'eau saturée.

Température : 135 °C (275° F)

Surpression : 2,13 bar (30.89 psi)





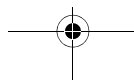
Article	Temps de maintien de 135 °C (275° F)	Temps de séchage
Instruments emballés	10 minutes	30 minutes
Instruments non emballés	3,5 minutes	0 - 1 minute

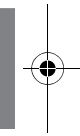
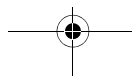
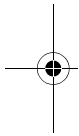
Sont autorisés les stérilisateur à vapeur par gravité.

AVIS! Pendant la phase de séchage, ne dépassez pas une température de 140° C (284° F).

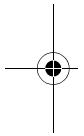
Après la stérilisation

1. Retirer immédiatement l'adaptateur du stérilisateur à la vapeur.
⚠ ATTENTION! L'instrument est chaud. Risque de brûlure !
AVIS! N'accélérez **pas** le refroidissement en plongeant l'instrument dans de l'eau froide. Ceci endommage votre instrument !





2. Conservez tous les instruments dans des conditions permettant de les préserver de toute contamination !
3. Répétez la stérilisation au terme de la durée de conservation.



8 Maintenance

Remplacez les élastomères (par ex. les joints toriques) comme décrit, en fonction de leur usure.

Pour des raisons de sécurité technique, contrôlez une fois par an le système de serrage des fraises pour contre-angles et de fraises pour pièces-à-main.

Contrôlez une fois par mois le système de serrage des fraises Friction Grip [→ 52].

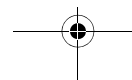
8.1 Contrôler le système de serrage FG

Périodicité

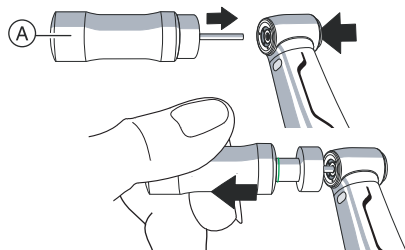
Contrôlez le système de serrage FG au moins une fois par mois.

Accessoires nécessaires

Dispositif de contrôle de la pince de serrage



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Procédure

✓ La date de péremption du dispositif de contrôle de la pince de serrage (A) n'est **pas** dépassée.

1. Placez le dispositif de contrôle de la pince de serrage dans le système de serrage FG [→ 31].
2. Tirez sur le dispositif de contrôle de la pince de serrage jusqu'à ce que le repère apparaisse (force d'extraction : 22 N).

Le dispositif de contrôle de la pince de serrage glisse hors de la pince de serrage avant que la bague de repère apparaisse ?

⚠ ATTENTION! Cela signifie que la pince de serrage est défectueuse et que la bonne fixation de la fraise ne peut pas être garantie. Vous risquez de vous blesser !

1. Arrêtez d'utiliser le produit.
2. Faites remplacer le système de serrage par Midwest.

Astuce : consignez la date et le résultat de la vérification pour votre propre contrôle.

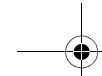
8 Maintenance

Français

9 Pièces de rechange et consommables

Utilisez exclusivement des pièces d'origine ou des pièces autorisées par Midwest ou par Midwest.

	RÉF.		RÉF.
Spray aérosol Midwest® Plus (500 ml)	38 00 80	Dispositif de contrôle de la pince de serrage	33 27 793
Fil de nettoyage pour buses de spray	24 00 232	Joint torique 8x1	70 36 189
Tige pour fraise pour contre-angle	89 17 866	Outil pour tige (fraise pour contre-angle)	89 17 874
Embout de spray	89 17 858	Joint torique pour embout de spray	70 36 353
Raccord NaCl pour flexibles silicone	58 82 618	Flexible silicone pour NaCl, mince, longueur 200 mm, 6 pièces	59 17 419
Flexible silicone pour NaCl, épais, longueur 1,8 m	89 23 658	Clip de spray C NaCl pour contre-angle	41 74 087



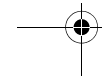
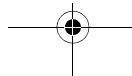
Notice d'utilisation Midwest E Pro / E Plus

9 Pièces de rechange et consommables

	RÉF.		RÉF.
Clip de spray H NaCl pour pièce-à-main	41 74 079	Rondelle silicone pour contre-angle Ø 2,35 mm	41 76 223
Clip de spray B pour contre-angle	64 28 374		



Français





10 Conditions de stockage et de transport

Notice d'utilisation Midwest E Pro / E Plus



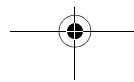
10 Conditions de stockage et de transport



Protéger contre
l'humidité



Contenu fragile

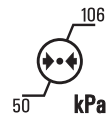




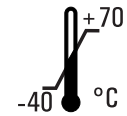
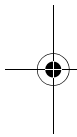
Notice d'utilisation Midwest E Pro / E Plus



Humidité relative de l'air



Pression d'air



Température

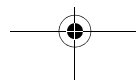
Après de fortes variations de température, laisser à l'appareil le temps de s'acclimater.

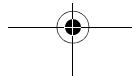
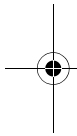


10 Conditions de stockage et de transport



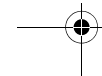
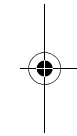
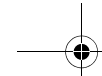
Français

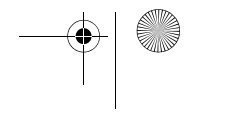
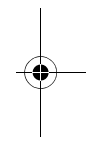
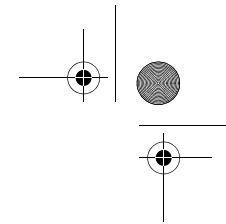
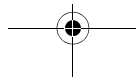
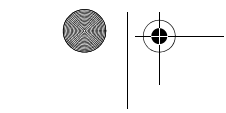
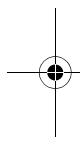
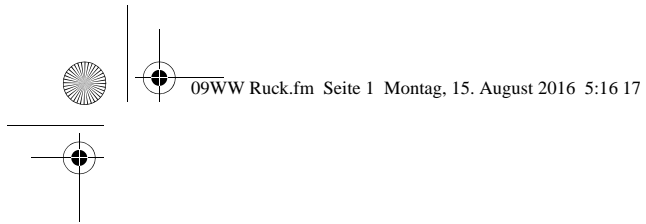


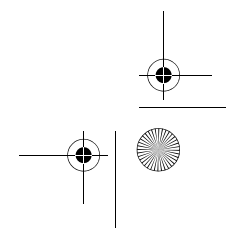
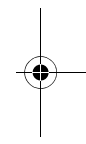
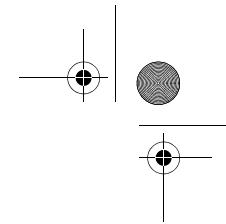
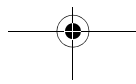
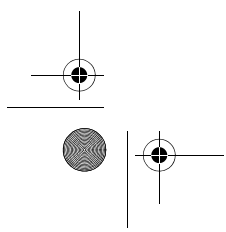
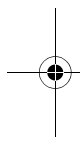
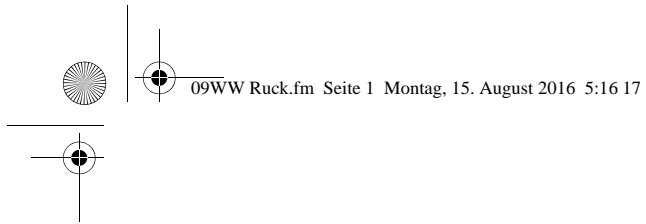


11 Élimination du produit

- En l'état actuel des connaissances, le produit ne contient pas de substances nuisibles à l'environnement.
- Désinfectez le produit avant de le mettre au rebut.
- Observez les prescriptions de mise au rebut locales en vigueur.

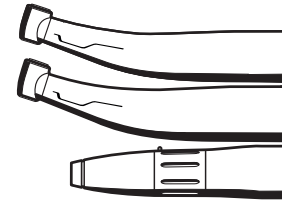








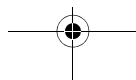
Midwest[®] E Pro Midwest[®] E Plus



Español



Manual del operador





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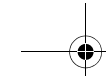
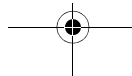
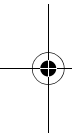
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Manual del operador Midwest E Pro / E Plus

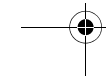
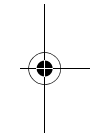
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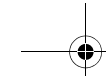


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Español



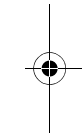
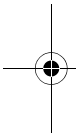


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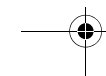
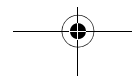
Manual del operador Midwest E Pro / E Plus



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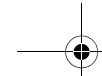
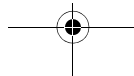
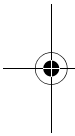
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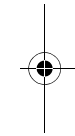
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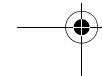
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Español





1 Antes de empezar...

Manual del operador Midwest E Pro / E Plus



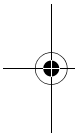
1 Antes de empezar...

Midwest E Pro / E Plus cumple las disposiciones con arreglo al estado de la técnica. Midwest E Pro / E Plus cumple la norma ISO 14457.

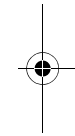
1. Lea el manual del operador antes de utilizar Midwest E Pro / E Plus.
2. Utilice Midwest E Pro / E Plus sólo para las aplicaciones descritas en el manual del operador.
3. Tenga en cuenta las normas sanitarias, las disposiciones sobre seguridad e higiene en el trabajo y las medidas de prevención de accidentes aplicables a Midwest E Pro / E Plus.
 - Midwest E Pro / E Plus está destinado al empleo en clínicas dentales para la preparación de cavidades con fines de restauración tales como obturaciones y para la limpieza dental.

Ninguna

Este producto es de uso exclusivo para profesionales especializados en odontología en la consulta dental y en el laboratorio.



Uso previsto



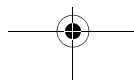
Contraindicaciones

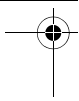
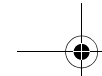
Grupo destinatario



6

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Ámbito de validez del manual del operador

Este manual del operador es válido para los siguientes instrumentos:

- Midwest E Pro
- Midwest E Plus

1.1 Estructura del documento

1.1.1 Identificación de las indicaciones

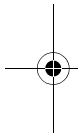
➤ Tenga en cuenta las advertencias para evitar daños personales.

Las advertencias se identifican del siguiente modo:

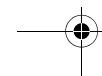
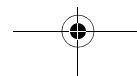
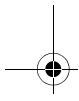
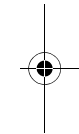
⚠ **¡PELIGRO!** identifica un peligro que, si no se evita, **provoca** lesiones graves o la muerte.

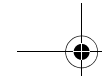
⚠ **¡ADVERTENCIA!** identifica un peligro que, si no se evita, **puede provocar** lesiones graves o la muerte.

⚠ **¡ATENCIÓN!** identifica un peligro que, si no se evita, **puede provocar** lesiones.



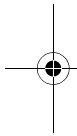
Advertencias



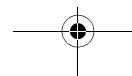


1 Antes de empezar...

Indicaciones de uso



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Manual del operador Midwest E Pro / E Plus

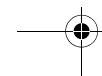
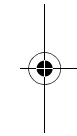
➤ Tenga en cuenta las indicaciones de uso para evitar daños materiales y costes adicionales.

Las indicaciones de uso se identifican del siguiente modo:

¡AVISO! identifica medidas para evitar daños materiales.

¡IMPORTANTE! identifica información para evitar costes adicionales, así como demás información importante.

Consejo: identifica información para facilitar el trabajo.

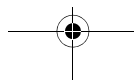


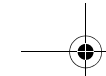


1.1.2 Formatos y símbolos

Los símbolos y formatos utilizados en este documento tienen el siguiente significado:

<ul style="list-style-type: none"> ✓ Requisito 1. Primer paso de manejo 2. Segundo paso de manejo o ➤ Manejo alternativo ↶ Resultado ➤ Paso de manejo individual 	Insta a llevar a cabo una actividad.
Uso de formatos y símbolos [→ 9].	Identifica una referencia a otra parte del texto e indica su número de página.
<ul style="list-style-type: none"> • Enumeración 	Identifica una enumeración.





1 Antes de empezar...

Manual del operador Midwest E Pro / E Plus



1.1.3 Abreviaturas/códigos utilizados

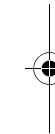
FG	Instrumento de fresado Friction Grip
CA	Instrumento de fresado de contrángulo
HP	Instrumento de fresado de pieza de mano

1.2 Vida útil

Cuando se utiliza para el fin indicado:

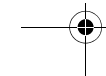
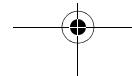
- las partes no móviles, normalmente una vida útil de 5 años,
- las partes móviles, normalmente una vida útil de 3 años.

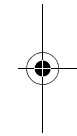
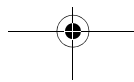
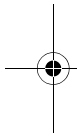
En este punto no existe ninguna obligación de garantía, ya que el desgaste se puede producir antes o después de los tiempos indicados, según el uso y la frecuencia de esterilización y cuidado.



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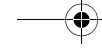


1.3 Nombres comerciales / marcas registradas de los fabricantes

Las denominaciones en este manual del operador, utilizadas en relación con los artículos, son nombres comerciales, o sea, marcas registradas de los fabricantes:

KaVo, Biberach, Alemania:

- INTRAmatic LUX



2 Indicaciones de seguridad

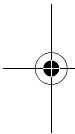
Manual del operador Midwest E Pro / E Plus



2 Indicaciones de seguridad

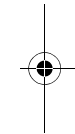
Obligaciones del operador

- Use sólo equipos de trabajo en perfecto estado que **no**difieran de los datos indicados [→ 19].
- Protéjase a sí mismo, al paciente y a terceros de peligros. Para ello, tenga en cuenta las notas sobre seguridad.
- Tenga en cuenta el uso previsto.
- Mantenga el manual del operador al alcance para consultas posteriores.



Prevención de la transmisión de infecciones y la contaminación cruzada

Prevenga la transmisión de infecciones y la contaminación cruzada entre pacientes, operadores y terceros: después de atender a cada paciente, realice una esterilización.



Aire de refrigeración de salida

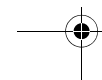
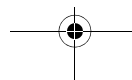
Tome las medidas de higiene adecuadas, p. ej., utilice guantes protectores.

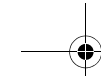
El aire de refrigeración de salida en el acoplamiento del motor debe ser de 1,5 – 10 NI/min.



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Calentamiento del cabezal

Para desviar el aire frío que sale del instrumento de modo que no llegue a la zona de tratamiento, pueden utilizarse discos de silicona [→ 37].

Si el instrumento está dañado, se puede calentar la zona del cabezal. En este caso, existe peligro de quemaduras de la mucosa bucal.

Fallos de funcionamiento o daños

En caso de producirse fallos de funcionamiento, un aumento o una modificación del comportamiento acústico o daños, deje de utilizar inmediatamente el instrumento. Los instrumentos dañados pueden provocar lesiones. Informe a su distribuidor dental o al fabricante.

Reparación

No repare el instrumento usted mismo.

Repuestos y accesorios

Utilice únicamente piezas originales del fabricante.

Primeros auxilios en caso de accidente con lubricantes

Indicaciones generales: Eliminar inmediatamente las prendas de vestir contaminadas con el producto.

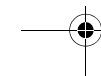
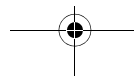
Tras la instalación: Ventilación; acudir al médico en caso de molestias.



Reparación

Repuestos y accesorios

Primeros auxilios en caso de accidente con lubricantes





2 Indicaciones de seguridad

Manual del operador Midwest E Pro / E Plus



Tras el contacto con la piel:

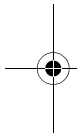
Acudir al médico en caso de irritación cutánea persistente.

Tras el contacto con los ojos:

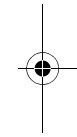
Enjuagar el ojo abierto durante varios minutos bajo el agua corriente.

Tras la ingestión:

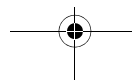
Consultar con su médico en caso de molestias persistentes.

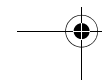
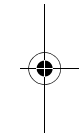
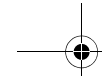
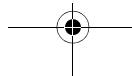
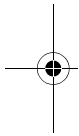


Para consultar información detallada, descargue la ficha de datos del "Spray aerosol Midwest® Plus" en la página web Midwest: www.dentsplysirona.com



En caso de duda, dirijase a su distribuidor dental o al fabricante.





3 Descripción técnica

3.1 Función

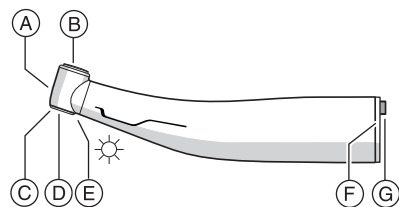
El instrumento transmite la potencia de accionamiento y el número de revoluciones del micromotor o del motor de aire a la herramienta de preparación.

3.2 Funcionamiento

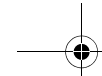
La multiplicación del instrumento influye en el número de revoluciones de trabajo de la herramienta de preparación.

3 Descripción técnica

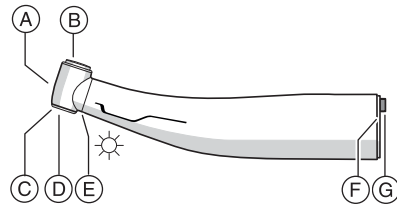
3.3 Estructura Midwest E Pro



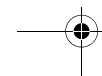
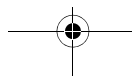
A	Cabezal del instrumento
B	Botón pulsador
C	Salida del spray refrigerante
D	Abertura del sistema de mordaza
E	Salida de luz
F	Farbliche Kennzeichnung für Übersetzung
G	ISOslider



3.4 Estructura Midwest E Plus Contra-ángulo



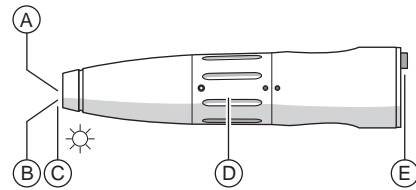
A	Cabezal del instrumento
B	Botón pulsador
C	Salida del spray refrigerante
D	Abertura del sistema de mordaza
E	Salida de luz
F	Farbliche Kennzeichnung für Übersetzung
G	ISOslider





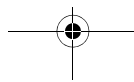
3 Descripción técnica

Manual del operador Midwest E Pro / E Plus



Pieza de mano

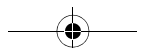
A	Abertura del sistema de mordaza
B	Salida del spray refrigerante
C	Salida de luz
D	Parte central de la pieza de mano
E	ISOslider





3.5 Datos técnicos Contra-ángulo

Midwest E Pro	1:5	1:1
Multiplicación (datos aproximados)	1:5	1:1
Farbliche Kennzeichnung für Übersetzung	rojo	azul
Número máximo de revoluciones del motor en min^{-1}	40 000	40 000
Número máximo de revoluciones de trabajo en min^{-1}	~ 200 000	~ 40 000
Sistema de mordaza	FG	CA/LA
Refrigerantes internos	x	x
Bloqueo doble de reabsorción	x	x



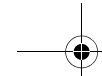
3 Descripción técnica

Manual del operador Midwest E Pro / E Plus

Midwest E Pro	1:5	1:1
Función de luz	x	x
Función de medición de ápice	-	-
Acoplamiento del instrumento	INTRAmatic LUX®	INTRAmatic LUX®

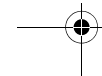
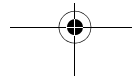
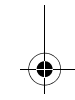
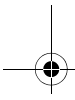
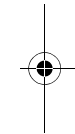
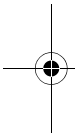
Midwest E Plus	1:5	1:1	6:1
Multiplicación (datos aproximados)	1:5	1:1	6:1
Farbliche Kennzeichnung für Übersetzung	rojo	azul	verde
Número máximo de revoluciones del motor en min ⁻¹	40000	40000	40000
Número máximo de revoluciones de trabajo en min ⁻¹	~ 200000	~ 40000	~ 6000

Midwest E Plus	1:5	1:1	6:1
Sistema de mordaza	FG	CA/LA	CA/LA
Refrigerantes internos	x	x	x
Bloqueo doble de reabsorción	x	x	x
Función de luz	x	x	x
Función de medición de ápice	-	-	-
Acoplamiento del instrumento	INTRAmatic LUX®	INTRAmatic LUX®	INTRAmatic LUX®



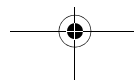
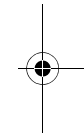
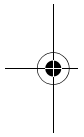
Pieza de mano

Midwest E Plus	1:1 S
Multiplicación (datos aproximados)	1:1
Farbliche Kennzeichnung für Übersetzung	azul
Número máximo de revoluciones del motor en min^{-1}	40000
Número máximo de revoluciones de trabajo en min^{-1}	~ 40000
Sistema de mordaza	HP / CA/LA
Refrigerantes internos	x
Bloqueo doble de reabsorción	x
Función de luz	x





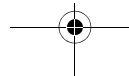
Midwest E Plus	1:1 S
Función de medición de ápice	-
Acoplamiento del instrumento	INTRAmatic LUX®





Instrumentos de fresado

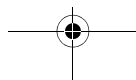
	FG	CA/LA	HP
Diámetro del mango en mm	1,590 - 1,600	2,334 - 2,350	2,334 - 2,350
Longitud total máxima en mm	25	34	50
Diámetro de trabajo máximo en mm	2,1	-	-
Norma	ISO 1797-1 ISO 2157	ISO 1797-1	ISO 1797-1

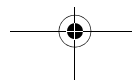
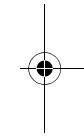
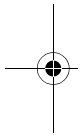




Unidad de tratamiento

	Midwest E Pro / E Plus
Presión aire del spray en bares	2,7
Presión de agua del spray en bares	2,0
Temperatura máxima del agua en °C	40
Proporción de agua recomendada en el spray en ml/min	> 50





4 Preparativos

4.1 Primera puesta en funcionamiento y pausas prolongadas

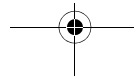
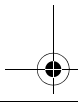
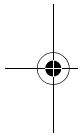
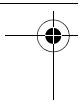
- Esterilice el instrumento y los accesorios antes de la puesta en funcionamiento.
- Limpie y conserve el instrumento tras pausas prolongadas.

4.2 Antes de iniciar la jornada

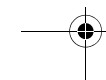
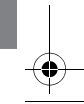
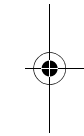
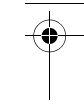
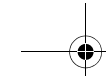
- Enjuague los conductos de agua y aire durante 30 segundos.

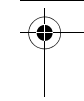
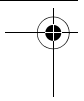
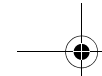
4.3 Antes de cada paciente

1. Enjuague los conductos de agua y aire durante 30 segundos.
2. **⚠ ¡ATENCIÓN!** Detenga el motor.
Acople el instrumento [→ 30].
3. Coloque el instrumento de fresado [→ 31].
4. Ajuste una cantidad suficiente de agua refrigerante (> 50 ml/min).



- 5. Utilice sólo agua filtrada (< 50 µm).
 - 6. Compruebe si las toberas presentan obstrucciones o incrustaciones (p. ej., de cal) y, en caso necesario, limpie las toberas.
- ⚠ ¡ATENCIÓN!** Una refrigeración insuficiente produce un sobrecalentamiento de la zona de preparación y daños en la sustancia dental. Asegúrese de que la proporción de agua es > 50ml/min.





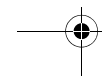
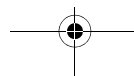
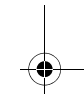
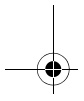
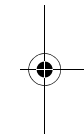
5 Manejo

¡AVISO! Utilice solamente fresas y talladores de diamante afilados y en perfecto estado. Utilice fresas y talladores de diamante limpios para evitar que entre suciedad en el sistema de mordaza.

⚠ ¡ATENCIÓN! Si el instrumento de fresado está suelto o un poco desprendido, puede soltarse del cabezal o romperse. ¡Existe peligro de lesiones! Por lo tanto, utilice el instrumento solo si el instrumento de fresado está al menos a 10 mm de profundidad y bien sujeto.

⚠ ¡ATENCIÓN! Accione la pieza de mano sólo cuando el sistema de mordaza esté cerrado.

⚠ ¡ATENCIÓN! Una refrigeración insuficiente produce un sobrecalentamiento de la zona de preparación y daños en la sustancia dental. Asegúrese de que la proporción de agua es > 50 ml/min.

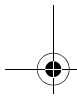
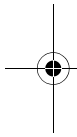




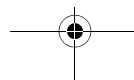
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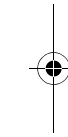
Manual del operador Midwest E Pro / E Plus



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5 Manejo



Español

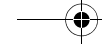
29



⚠ ¡ATENCIÓN! ¡No retire la mejilla del paciente con el contrángulo cuando el motor esté en marcha! Se accionaría el botón y existe riesgo de quemar la mucosa bucal.

⚠ ¡ATENCIÓN! ¡Utilizar el contrángulo marcado en rojo siempre con spray de refrigeración!

¡IMPORTANTE! En las indicaciones del fabricante encontrará todo lo referente al uso y los datos de funcionamiento de las diferentes herramientas de preparación.



5 Manejo

Manual del operador Midwest E Pro / E Plus



5.1 Cambio de instrumento

⚠ ¡ATENCIÓN! Inserte o extraiga el instrumento sólo con el motor parado.

⚠ ¡AVISO! No utilizar instrumentos con luz en motores sin luz.

Acoplar el instrumento

✓ El motor está parado.

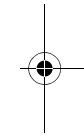
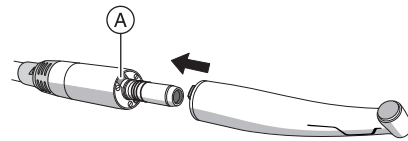
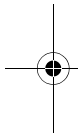
1. Inserte el instrumento hasta que encaje.

2. Si utiliza un motor con una ranura de luz (A): gire el instrumento hasta que la ISOslider quede enclavada.

Extracción del instrumento

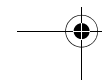
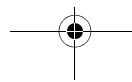
✓ El motor está parado.

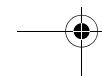
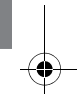
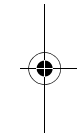
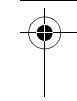
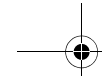
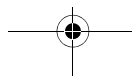
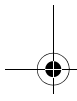
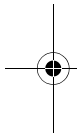
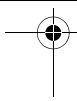
➤ Extraiga el instrumento. No tire de la manguera de alimentación.



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5.2 Inserción y extracción de instrumentos de fresado

¡IMPORTANTE: ¡Asegúrese de que el botón pueda moverse libremente!

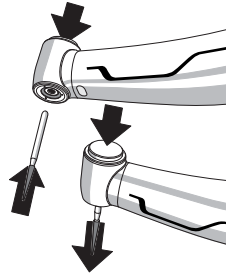
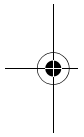
¡AVISO! Utilice solamente fresas y talladores de diamante afilados y en perfecto estado. Utilice fresas y talladores de diamante limpios para evitar que entre suciedad en el sistema de mordaza.

⚠ ¡ATENCIÓN! Si el instrumento de fresado está suelto o un poco desprendido, puede soltarse del cabezal o romperse. ¡Existe peligro de lesiones! Por lo tanto, utilice el instrumento solo si el instrumento de fresado está al menos a 10 mm de profundidad y bien sujeto.

⚠ ¡ATENCIÓN! Accione la pieza de mano sólo cuando el sistema de mordaza esté cerrado.



5 Manejo



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Inserción del instrumento de fresado Friction Grip

✓ El motor está parado.

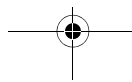
1. Accione el botón e introduzca el instrumento de fresado hasta el tope.

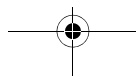
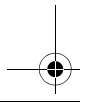
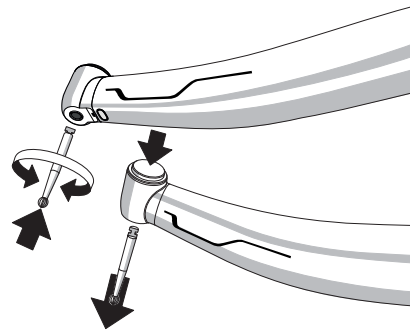
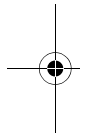
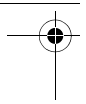
2. Compruebe si el instrumento de fresado está fijo tirando de él.

Extracción del instrumento de fresado Friction Grip

✓ El instrumento de fresado está parado.

➤ Accione el botón y extraiga el instrumento de fresado.



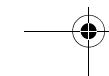
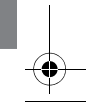
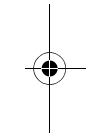
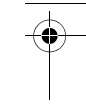
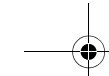


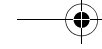
Inserción del instrumento de fresado de contrángulo

- ✓ El motor está parado.
- 1. Introduzca el instrumento de fresado sin pulsar el botón.
- 2. Encaje el instrumento de fresado girándolo ligeramente en ambas direcciones.
- 3. Compruebe la fijación del instrumento de fresado tirando de él y girándolo.

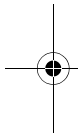
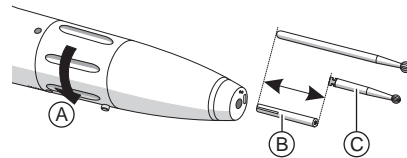
Extracción del instrumento de fresado de contrángulo

- ✓ El instrumento de fresado está parado.
- Accione el botón y extraiga el instrumento de fresado.





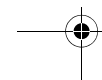
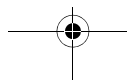
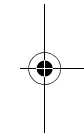
5 Manejo

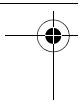


Inserción del instrumento de fresado de pieza de mano

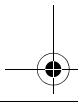
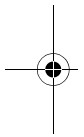
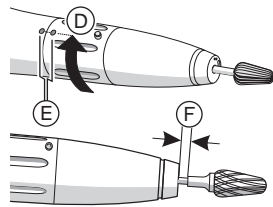
✓ El motor está parado.

1. Gire la sección media de la pieza de mano en el sentido de la flecha (A) hasta el tope.
2. Si utiliza un **instrumento de fresado de contrángulo** (C): introduzca el perno (B) en la pieza de mano con la punta hendida hacia delante. El perno compensa la diferencia de longitud entre el instrumento de fresado de pieza de mano y de contrángulo.
3. Introduzca el instrumento de fresado hasta el tope.

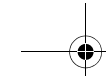
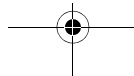




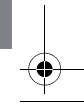
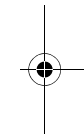
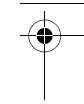
Manual del operador Midwest E Pro / E Plus



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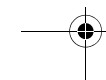


5 Manejo



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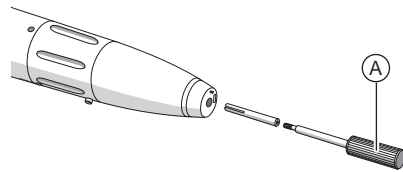
Español



4. Sujete el instrumento de fresado girando la sección media de la pieza de mano en sentido (D) hasta el tope.
 - ↳ Cuando las dos marcas (E) coincidan, el instrumento de fresado estará sujeto.
 - ↳ Si utiliza instrumentos de fresado de pieza de mano con mango escalonado: asegúrese de que el mango escalonado no ocupe la abertura para el mandril (F).
5. Compruebe si el instrumento de fresado está bien sujeto tirando de él y girándolo.

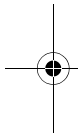


5 Manejo

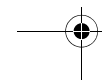
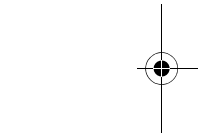
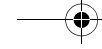
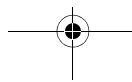


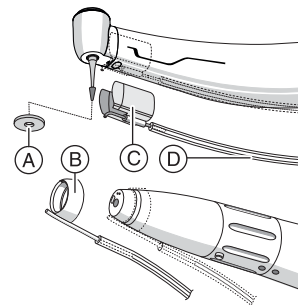
Retirar perno

1. Enrosque la herramienta suministrada (A).
2. Abra el sistema de mordaza.
3. Extraiga el perno.



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5.3 Inserción y retirada del clip de spray para uso de NaCl

Inserción del clip de spray

✓ El suministro de agua de spray al motor o al puesto de trabajo está cortado.

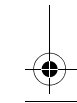
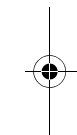
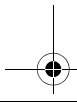
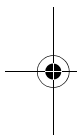
1. Enchufe la manguera de silicona (D) al tubo del clip de spray para soluciones salinas (B/C).
2. Acople el clip de spray al instrumento.

Consejo: Utilice discos de silicona (A) para desviar lateralmente el aire frío que sale del instrumento de modo que no llegue a la zona de tratamiento.

Retirada del clip de spray

1. Retire el clip de spray del instrumento.
2. Enjuague el clip de spray y la manguera de silicona con agua clara.





6 Acondicionamiento posterior

6.1 Después de cada tratamiento

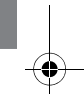
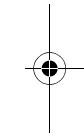
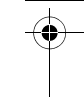
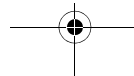
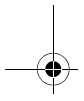
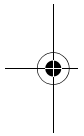
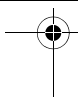
¡AVISO! Lleve a cabo el acondicionamiento inmediatamente después del tratamiento, a más tardar tras una hora.

¡AVISO! Use exclusivamente el Spray aerosol Midwest® Plus.

✓ El instrumento de fresado está parado.

✓ Utilice ropa de protección adecuada.

1. Enjuague los conductos de agua y aire directamente en la unidad de tratamiento durante 30 segundos.
2. Retire el instrumento de fresado con unas pinzas.
3. Lleve a cabo una desinfección previa directamente en la unidad de tratamiento [→ 40].
4. Separe el instrumento del motor.

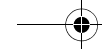


5. Transporte el instrumento a la sala de higiene utilizando un recipiente de transporte adecuado.
6. Realice un acondicionamiento mecanizado [→ 41]. En casos excepcionales, es posible realizar un acondicionamiento manual [→ 43] teniendo en cuenta los requisitos nacionales/locales pertinentes.
7. Conserve el instrumento con spray [→ 45].
8. Esterilice el instrumento y los accesorios [→ 49].

6.2 Al terminar la jornada laboral

- Conserve el instrumento con spray [→ 45].

¡AVISO! No deje ningún instrumento montado en el motor durante la noche para que no caiga aceite al electromotor. No lubrique nunca el electromotor.



7 Acondicionamiento

7.1 Realizar desinfección previa

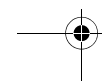
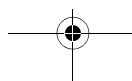
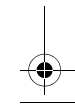
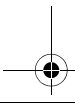
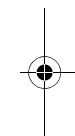
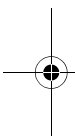
- ✓ Utilice ropa de protección adecuada.
- ✓ Todos los desinfectantes deben estar autorizados en su país y tener propiedades bactericidas, fungicidas y virucidas probadas. Utilice únicamente productos de desinfección **sin** efecto fijador de proteínas.

1. Rocíe la superficie con desinfectante.
2. Elimine el desinfectante frotando con un paño.

☞ Para continuar el acondicionamiento, el instrumento no debe presentar residuos y debe estar seco.

En EE. UU. y Canadá pueden usar **sólo** siguientes productos de limpieza:

- CAVICIDE®





- CAVIWIPES™

Tenga en cuenta las indicaciones del fabricante sobre la aplicación del desinfectante de instrumentos.

7.2 Limpieza y desinfección mecanizadas...

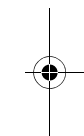
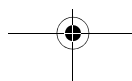
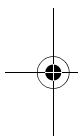
7.2.1 ...con un equipo de limpieza y desinfección

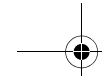
También puede limpiar y desinfectar el instrumento en un equipo de limpieza y desinfección apropiado.

El equipo de limpieza y desinfección debe estar autorizado por su fabricante para la limpieza y la desinfección de instrumentos odontológicos y debe cumplir la norma EN ISO 15883-1 (p. ej., 95 °C (203 °F) y un tiempo de permanencia de 10 min).

Consulte la aplicación en el Manual del operador del equipo.

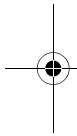
- ✓ El instrumento está acondicionado con un equipo de limpieza y desinfección.



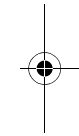


7 Acondicionamiento

Manual del operador Midwest E Pro / E Plus

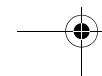
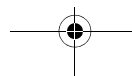


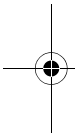
1. Compruebe, en un entorno con buena iluminación (como mín. 500 Lux) y un índice de reproducción cromática (como mín. 80 Ra), que el instrumento se encuentra limpio tras realizar el acondicionamiento.
2. Si la suciedad persiste, repita el proceso.
 - ↳ Para continuar el acondicionamiento, el instrumento no debe presentar residuos y debe estar seco.
3. Sople el instrumento con un máximo de 3 bares.
4. Realice los trabajos de conservación de las piezas mecánicas de forma manual [→ 45].
5. Realice los trabajos de conservación del mandril de botón de forma manual [→ 47].
6. Embale el instrumento empleando un embalaje adecuado para la esterilización y el almacenamiento, p.ej. papel o laminado.
7. Lleve a cabo un proceso de esterilización [→ 49].



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7.3 Limpieza y desinfección manual

IMPORTANTE: En casos excepcionales es posible realizar un acondicionamiento manual teniendo en cuenta los requisitos nacionales/locales pertinentes. Los requisitos nacionales/locales deben revisarse de antemano.

¡AVISO! Lleve a cabo el acondicionamiento inmediatamente después del tratamiento, a más tardar tras una hora.

¡AVISO! ¡No limpiar en baño de ultrasonidos!

¡AVISO! ¡No sumergir en soluciones desinfectantes!

¡AVISO! Use exclusivamente el Spray aerosol Midwest® Plus.

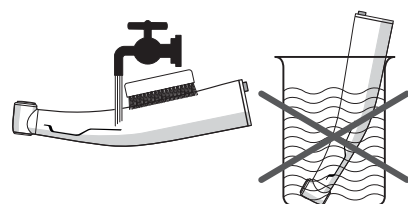
IMPORTANTE: Para la limpieza, use un cepillo suave, limpio y desinfectado.

- ✓ Utilice ropa de protección adecuada.
- ✓ Todos los desinfectantes deben estar autorizados en su país y tener propiedades bactericidas, fungicidas y virucidas probadas. Utilice



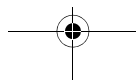
7 Acondicionamiento

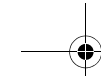
Manual del operador Midwest E Pro / E Plus



únicamente productos de desinfección **sin** efecto fijador de proteínas.

1. Cepille el instrumento empleando un cepillo, bajo un chorro de agua corriente ($< 38\text{ }^{\circ}\text{C}$, $< 100\text{ }^{\circ}\text{F}$, calidad de agua potable como mínimo), al menos 10 segundos hasta comprobar que no se aprecian restos de suciedad, en un entorno con buena iluminación (mín. 500 Lux) y un índice de reproducción cromática (mín. 80 Ra).
2. Enjuague con spray los canales del engranaje.
3. Limpie los canales de spray con productos y adaptadores adecuados siguiendo las indicaciones del fabricante.
4. Sople los canales de spray con aire comprimido con 2,5 - 3 bares hasta que no salga humedad, pero menos 10 segundos.
5. Lleve a cabo una desinfección térmica o una esterilización a vapor sin embalaje.
6. Realice los trabajos de conservación de las piezas mecánicas de forma manual [→ 45].





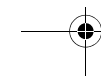
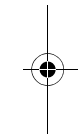
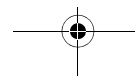
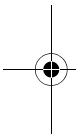
7. Realice los trabajos de conservación del mandril de botón de forma manual [→ 47].
8. Embale el instrumento empleando un embalaje adecuado para la esterilización y el almacenamiento, p.ej. papel o laminado.
9. Lleve a cabo un proceso de esterilización [→ 49].

7.4 Conservación manual

7.4.1 Conservación mecánica

Intervalos

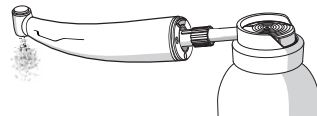
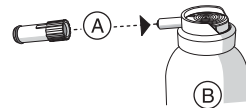
- al menos una vez al mediodía y otra por la noche
- antes de cada esterilización
- después de cada desinfección térmica sin conservación integrada





7 Acondicionamiento

Manual del operador Midwest E Pro / E Plus



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Accesorios necesarios

- A Adaptador de spray
- B Spray aerosol Midwest® Plus

¡AVISO! Use exclusivamente el Spray aerosol Midwest® Plus.

Procedimiento

- ✓ El adaptador de spray está desinfectado.
- ✓ El anillo toroidal del adaptador de spray está intacto.
- 1. Acople el adaptador de spray a la tobera del envase del spray.
- 2. Acople el instrumento hasta que encaje y sujételo.
- 3. Rocíe el instrumento con spray durante 1 - 2 segundos.
¡IMPORTANTE! mantenga el envase del spray en posición vertical.
- 4. Emplee un paño de desinfección para recoger el spray expulsado.

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5. Repita esta acción hasta que el spray expulsado sea claro.

7.4.2 Cuidado del mandril de botón

La conservación del mandril de botón con Spray aerosol Midwest® Plus elimina los depósitos del sistema de mordaza, manteniendo la capacidad de funcionamiento.

Intervalo

- al menos una vez por semana

Accesorios necesarios



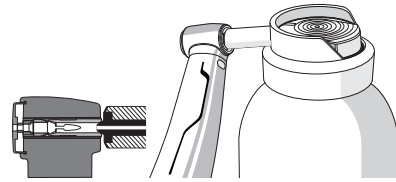
A	Elemento negro de la tobera
B	Spray aerosol Midwest® Plus

¡AVISO! Use exclusivamente el Spray aerosol Midwest® Plus.





7 Acondicionamiento

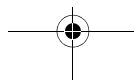


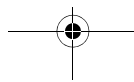
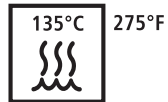
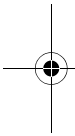
Procedimiento

✓ El instrumento está limpio y desinfectado.

1. Fije el cabezal del contra-ángulo con el mandril a la tobera del envase del spray.
2. Pulverice spray sobre el mandril durante 1 - 2 segundos.
IMPORTANTE: mantenga el envase del spray en posición vertical.
3. Retire el spray que se expulsa con un paño de desinfección.

Manual del operador Midwest E Pro / E Plus





7.5 Esterilización

Intervalos:

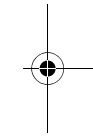
- antes de la primera puesta en servicio
- antes de cada uso

Procedimiento

- ✓ El instrumento está limpio y desinfectado.
- ✓ El instrumento está en buen estado.
- ✓ El instrumento está embalado adecuadamente para la esterilización y el almacenamiento: embalaje de papel/laminado conforme a la norma ISO 11607.
- Esterilice el instrumento en el esterilizador de vapor con vapor saturado.

Temperatura: 135 °C (275° F)

Sobrepresión: 2,13 bares (30.89 psi)





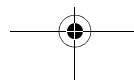
Artículo	Tiempo de permanencia de 135 °C (275° F)	Tiempo de secado
Instrumentos embalados	10 minutos	30 minutos
Instrumentos no embalados	3,5 minutos	0 - 1 minuto

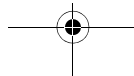
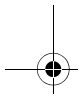
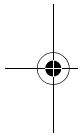
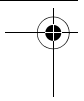


Los esterilizadores de vapor gravitacionales están autorizados.
¡AVISO! Durante la fase de secado tampoco deben superarse los 140° C (284° F).

Después de la esterilización

1. Extraiga inmediatamente el instrumento del esterilizador a vapor.
⚠ ¡ATENCIÓN! El instrumento está muy caliente. ¡Existe peligro de

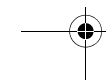
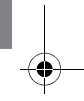
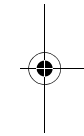
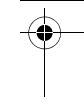
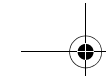


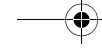


quemaduras!

¡AVISO! No acelere el proceso de enfriamiento sumergiendo el instrumento en agua. ¡Esto causa daños en el instrumento!

2. Guarde todos los instrumentos en un lugar protegido contra la contaminación.
3. Una vez transcurrido el tiempo de conservación, vuelva a esterilizar.





8 Mantenimiento

Sustituya los elastómeros, p. ej. anillos toroidales, según su desgaste, tal y como se indica.

Por motivos de seguridad, compruebe anualmente el sistema de mordaza de los instrumentos de fresado de contrángulo y de los instrumentos de fresado de pieza de mano.

Compruebe una vez al mes el sistema de mordaza de los instrumentos de fresado Friction Grip [→ 52].

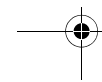
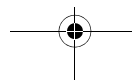
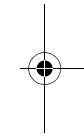
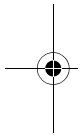
8.1 Comprobación del sistema de mordaza FG

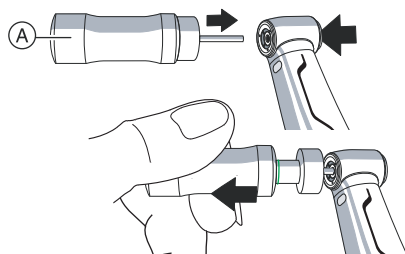
Intervalo

Compruebe el sistema de mordaza FG al menos una vez al mes.

Accesorios necesarios

Dispositivo de comprobación de mandril





Procedimiento

✓ La fecha de caducidad del dispositivo de comprobación de mandril (A) **no** se ha superado.

1. Coloque el dispositivo de comprobación de mandril en el sistema de mordaza FG [→ 31].
2. Tire del dispositivo de comprobación de mandril hasta que visualice el anillo de marcación (fuerza de extracción: 22 N).

¿El dispositivo de comprobación de mandril se desprende del mandril antes de que se visualice la marca del anillo?

⚠ ¡ATENCIÓN! El mandril está defectuoso y resulta imposible garantizar la fijación del instrumento de fresado. ¡Peligro de lesiones!

1. Deje de usar el producto.
2. Diríjase a Midwest para solicitar la sustitución del sistema de mordaza.

Consejo: Para su propio control, documente la fecha y el resultado de la comprobación.

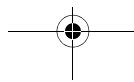
9 Repuestos y artículos consumibles

Utilice únicamente piezas originales de Midwest o autorizadas por Midwest.

	Ref.		Ref.
Spray aerosol Midwest® Plus (500 ml)	38 00 80	Dispositivo de comprobación de mandril	33 27 793
Alambre de limpieza para toberas de spray	24 00 232	Anillo toroidal 8 x 1	70 36 189
Perno para instrumento de fresado de contra-ángulo	89 17 866	Herramienta para perno (instrumento de fresado de contra-ángulo)	89 17 874
Adaptador de spray	89 17 858	Anillo toroidal para adaptador de spray	70 36 353
Acoplamiento NaCl para mangueras de silicona	58 82 618	Manguera de silicona NaCl fina, 200 mm de long., 6 unidades	59 17 419



	Ref.		Ref.
Tubo de silicona NaCl grueso, 1,8 m de largo.	89 23 658	Clip de spray NaCl C para contra-ángulo	41 74 087
Clip de spray NaCl H para pieza de mano	41 74 079	Disco de silicona para contra-ángulo Ø 2,35 mm	41 76 223
Clip de spray B para contra-ángulo	64 28 374		





10 Condiciones de almacenamiento y transporte

Manual del operador Midwest E Pro / E Plus



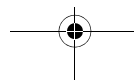
10 Condiciones de almacenamiento y transporte

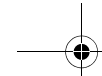


Proteger de la
humedad



Contenido frágil





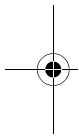
Manual del operador Midwest E Pro / E Plus

10 Condiciones de almacenamiento y transporte

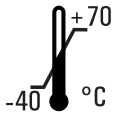
95
10 %
Humedad relativa



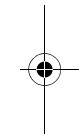
106
50 kPa
Presión atmosférica



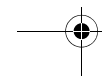
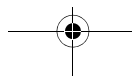
+70
-40 °C
Temperatura

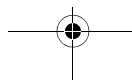
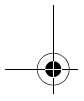
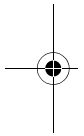


Después de una amplia variación
térmica debe preverse un período de
tiempo suficiente para la aclimatación.



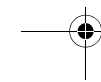
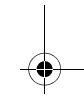
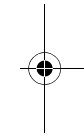
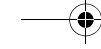
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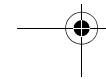
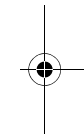
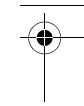
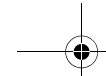
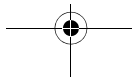
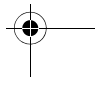
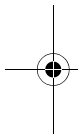
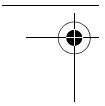
11 Eliminación

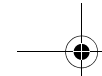
- Este producto no contiene sustancias nocivas para el medio ambiente según los conocimientos actuales.
- Desinfecte el producto antes de su eliminación.
- Tenga en cuenta la legislación nacional vigente sobre la eliminación de residuos.





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We reserve the right to make any alterations which may be required due to technical improvements.
Sous réserve de modifications dues au progrès technique.
Reservados los derechos de modificación en virtud del progreso técnico.



D3686.201.01.02.09 11.2016

Ä.-Nr.: 123 131

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