3 Winners

Duceralloy

The ideal selection of non-precious crown and bridge alloys for more veneering safety

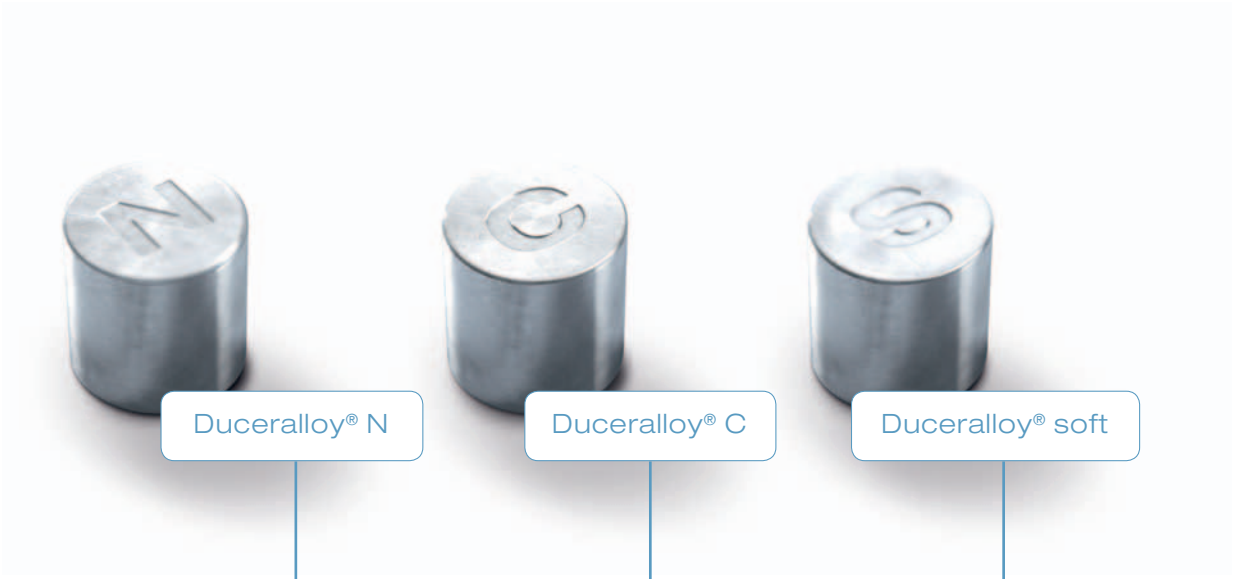
DeguDent
A Dentsply Company

More veneering safety.

3 alloys – 1 goal

Duceralloy N, Duceralloy C and Duceralloy soft are three veneerable non-precious metal alloys for the classic CTE range. You can choose what composition and physical properties are the best choices for you and your customers for a given indication.

The developers of these three base-metal alloys were predominantly guided by a desire to create a material that is safe to veneer. The most critical step is the first opaque firing. An increased firing temperature and the optional use of NE Bonder ensure maximum adhesion between the alloy and the ceramic veneers.



Safe veneering with

Duceram® Plus | Duceram® Kiss | Duceram® love

Important note

For best results, use only ceramic crucibles and new material when casting non-precious metal alloys. During finishing, make sure the framework is free of sharp edges. Sandblast the framework using 250-µm aluminium oxide at a pressure of 3 – 4 bar.

Reduced-hardness nickel-chromium alloy.

Duceralloy® N

NEW

The new Duceralloy N alloy by DeguDent is the perfect supplement to the other members of the Duceralloy line.

Duceralloy N is very easy to finish and to mill thanks to its reduced hardness. In addition to its excellent mechanical properties, this alloy is characterized by its versatility in actual use. As a ceramic-bonding alloy, this material can be veneered easy and safe using Duceram Plus, Duceram Kiss and Duceram love ceramics.

An added benefit to the patient is that Duceralloy N is free of beryllium. Its low thermal conductivity reduces discomfort caused by heat or cold and makes the restoration much more comfortable to wear.

Dental laboratory benefits

- ✔ Reduced hardness for easy finishing
- ✔ Chromium and molybdenum component for high corrosion resistance
- ✔ Very easy to veneer using Duceram Plus, Duceram Kiss, Duceram love

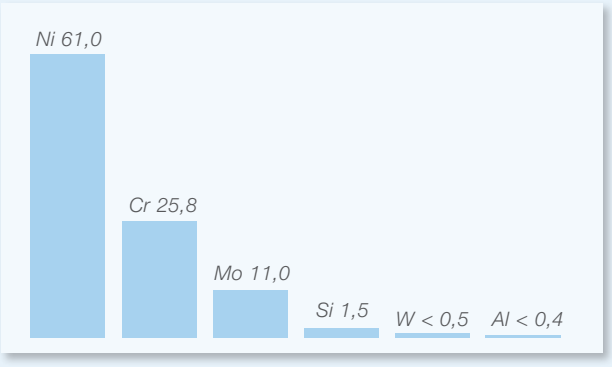
Patient benefits

- ✔ Contains no beryllium
- ✔ Low thermal conductivity for high wear comfort

Technical specifications

Melting range	1325 – 1350 °C
CTE 25 – 500 °C	13.8 µm / m·K
CTE 25 – 600 °C	14.4 µm / m·K
Density	8.2 g / cm³
Hardness	185 HV 10
0,2 % yield strength	340 N / mm²
Tensile strength	550 N / mm²
Elongation	26 %
Elasticity modulus	115 GPa

Composition (% by mass)



Duceralloy N 250 g	REF 53 3508 0250
Duceralloy N 1000 g	REF 53 3508 1000

The classic among the cobalt-chromium alloys.

Duceralloy® C

Duceralloy C is another building block of non-precious metal alloy for ceramic bonding techniques. This alloy was developed based on many years of experience and the most recent technologies. The result: an alloy with excellent material properties and fully in tune with the patient's wishes for a functional dental restoration that is well tolerated.

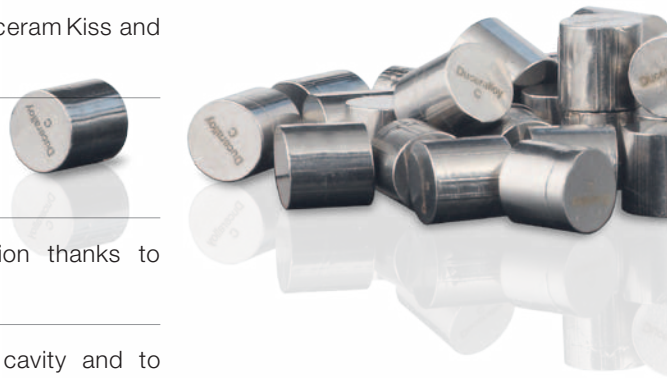
Duceralloy C is a highly corrosion-resistant non-precious metal alloy on a cobalt-chromium basis, ideally suited for ceramic bonding with Duceram Plus, Duceram Kiss and Duceram love. Duceralloy C covers a broad range of prosthodontic solutions. Even difficult situations such as wide-span bridges, bars, adhesive bridges or implants can be mastered with Duceralloy C without any problems.

Dental laboratory benefits

- ✔ Very safe bond with ceramics
- ✔ High heat resistance
- ✔ Suitable for laser welding
- ✔ Ideal ceramic materials: Duceram Plus, Duceram Kiss and Duceram love

Patient benefits

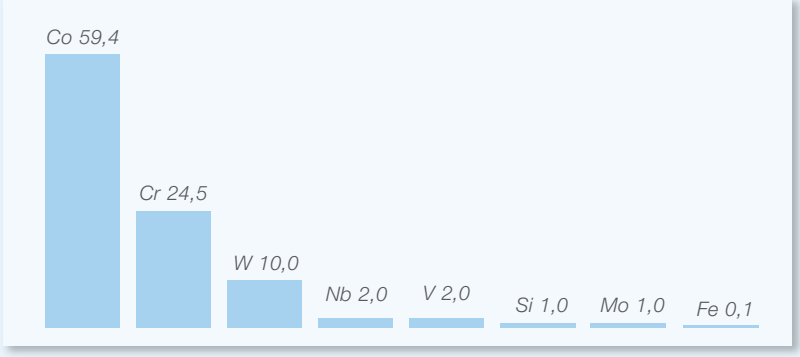
- ✔ Contains no beryllium or nickel
- ✔ High resistance to fracture and corrosion thanks to excellent strength
- ✔ Resistant to the influences of the oral cavity and to discolouration



Technical specifications

Melting range	1270 – 1370 °C
CTE 25 – 500 °C	14.0 µm / m·K
CTE 25 – 600 °C	14.3 µm / m·K
Density	8.8 g / cm³
Hardness	330 HV 10
0,2 % yield strength	630 N / mm²
Tensile strength	790 N / mm²
Elongation	3 %
Elasticity modulus	200 GPa

Composition (% by mass)



Duceralloy C 250 g	REF 53 3508 0025
Duceralloy C 1000 g	REF 53 3508 0010

Reduced-hardness cobalt-chromium alloy.

Duceralloy® soft

Duceralloy soft is a cobalt-chromium alloy characterized by reduced hardness and excellent veneering safety. This veneering safety is mainly owed to a completely novel alloy composition. The main ingredients of this new alloy are cobalt, chromium, iron and tungsten.

With its high tungsten content of more than 16 %, Duceralloy soft exhibits a highly uniform thermal behaviour especially when used with the Duceram Plus, Duceram Kiss and Duceram love veneering ceramics. Enjoy the dual benefits of this alloy: Easy processing. Safe veneering.

Dental laboratory benefits

- ✔ No oxide firing required
- ✔ Low hardness (280 HV 10) for less instrument wear and tear
- ✔ High strength for delicate framework designs
- ✔ Easy to finish, mill and polish

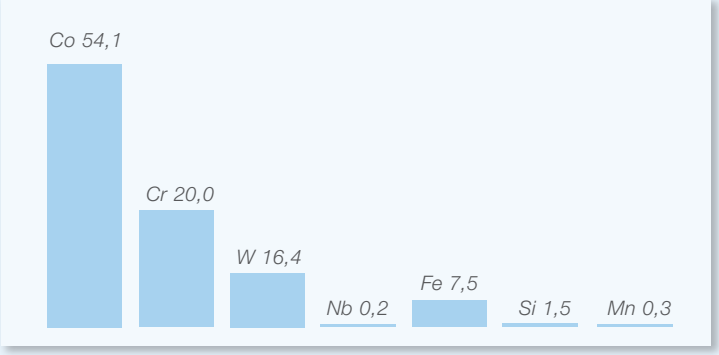
Patient benefits

- ✔ High corrosion resistance = high biocompatibility
- ✔ Low thermal conductivity for high wear comfort
- ✔ Contains no beryllium or nickel

Technical specifications

Melting range	1390 – 1410 °C
CTE 25 – 500 °C	14.6 µm / m·K
CTE 25 – 600 °C	14.9 µm / m·K
Density	9.1 g / cm³
Hardness	280 HV 10
0,2 % yield strength	550 N / mm²
Tensile strength	710 N / mm²
Elongation	12 %
Elasticity modulus	200 GPa

Composition (% by mass)



Duceralloy soft 250 g	REF 53 3508 0035
Duceralloy soft 1000 g	REF 53 3508 0034

Fascination Prosthetics

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