

# Crown and Bridge Alloys

## Premium High Noble

Alloy	Au	Pt	Pd	Ag	Cu	Other	Type	Color	IdentAlloy Class.*	Implant Use	Laser Weldable**	Vickers Hardness HV	Yield Strength (0.2% offset)		Elongation %	Density		Melting Range		Casting Temperature		Burnout Temperature		Solder
													psi	MPa		dwt/in <sup>3</sup>	g/cm <sup>3</sup>	°F	°C	°F	°C	°F	°C	
Ney-Oro® PF-CB	80.0	1.0	–	9.0	9.0	Zn, Ir	III	Yellow	HN			126	39,900	275	45	171	16.2	1625-1715	885-935	1875	1025	1200	650	.650/.728 Fine
Ney-Oro® A-1	77.5	–	2.0	12.5	7.3	Zn	II	Yellow	HN			125	33,400	230	48	169	16.0	1702-1774	928-968	1940	1060	1200	650	Balanced Line/.650 Fine
Ney-Oro® B-2	74.0	–	4.0	11.5	9.5	Zn	III	Yellow	HN			185	46,600	321	39	159	15.1	1679-1771	916-966	1940	1060	1200	650	Balanced Line/.650 Fine
Degunorm®	73.8	9.0	–	9.2	4.4	Zn, In, Ir	V	Yellow	HN	Yes	Yes	230	72,500	500	6	176	16.7	1650-1815	900-990	2012	1100	1300	700	Degunorm® 728
Ney-Oro® G-3	68.5	2.5	4.0	12.0	11.0	Zn	IV	Yellow	HN	Yes		282	100,000	690	13	154	14.6	1663-1740	906-949	1913	1045	1200	650	Balanced Line/.650 Fine
Ney-Oro® #5	63.0	–	5.0	19.0	12.0	Zn	IV	Yellow	HN	Yes		260	99,000	685	15	152	14.4	1635-1733	890-945	1895	1035	1200	650	.650/.615 Fine
Ney-Oro® B-20	61.75	–	3.0	26.0	8.0	Zn	III	Yellow	HN			205	80,500	555	19	147	13.9	1630-1742	885-950	1904	1040	1200	650	.650/.615 Fine
Ney-Oro® CB	59.0	–	4.0	22.5	13.5	Zn	IV	Yellow	HN	Yes		275	115,000	795	11	146	13.9	1580-1661	860-905	1823	995	1200	650	.615 Fine
Ney-Oro® 60	56.0	–	4.0	19.9	17.0	Zn, Ir	IV	Yellow	HN	Yes		265	114,600	790	8	141	13.4	1540-1589	835-865	1751	955	1200	650	.490 Fine
G-Cast	50.0	–	4.95	32.0	12.0	Zn, Ir	V	Yellow	N		Yes	235	118,000	815	8	141	13.4	1580-1700	860-925	2050	1125	1300	700	Degulor 2
Majority®	50.0	–	4.5	10.0	31.3	Zn	IV	Yellow	N			220	76,300	526	7	132	12.5	1540-1630	835-885	1814	990	1200	650	.585 Fine
Miracast	41.0	1.0	4.0	9.0	38.0	Zn	III	Yellow	N			128	49,300	340	39	124	11.8	1544-1700	840-925	1877	1025	1200	650	.650/.615 Fine
Ney-Oro® 41	20.0	0.9	20.0	39.0	–	In, Zn, Ir	IV	Yellow	N			185	58,800	405	6	123	11.7	1580-1895	860-1035	2070	1130	1200	650	.585 Fine
Palliag® M	2.0	–	27.4	58.5	10.5	Zn, Ir	IV	White	N	Yes	Yes	310	136,300	940	3	117	11.1	1740-1905	950-1040	2190	1200	1300	700	Regular White/Degulor 2
Ney® 76	–	–	25.0	59.0	14.0	Zn	IV	White	N			235	95,700	660	9	110	10.5	1650-1800	900-980	1976	1080	1200	650	Paliney® Medium Fusing

\* IdentAlloy® Classification: HN = Noble Metal Content  $\geq$  60%, Gold Content  $\geq$  40%; N = Noble Metal Content  $\geq$  25%; PB = Noble Metal Content  $<$  25%  
Noble metals are gold (Au), palladium (Pd), platinum (Pt), rhodium (Rh), indium (In), osmium (Os) and ruthenium (Ru).

\*\*Laser weldable with Degutan® (white) or Degunorm® (gold) laser wire.  
All mechanical properties are for the heat treated or hard condition.