

Metaltech srl | Via Saviabona 113/G | 36010 | Cavazzale di Monticello Conte Otto (VI) | ITALIA C.F. e P.IVA 03955300243 | Reg. Imprese VI: 03955300243 | REA: VI - 367516 | Cap. Soc. € 10.000,00 i.v.



TECHNICAL DATA SHEET

PRIMA187HPLUS - 750 ‰

TAB.1 - Mechanical data

Master alloy for the production of red 585 - 750 ‰ gold jewellery obtained by investment casting. This product, thanks to its complex composition made of numerous different special elements, ensures an extreme level of deoxidation, an extreme surface quality, an enhanced fluidity and a long lasting of this features also after many reuses of casting scraps, making it the most advanced solution for castings with and without stones in place.

	nanical data				
Hardness as cast		205	HV		
Hardness hardened		327	HV		
Tensile strength		560	MPa		
Yield strength		363	MPa		
Elongation		27	%		
TAB.2 - Physical data					
Color		Deep red			
Colour Coordinates	L*: a*: b*:	86.03 9.07 16.71			
Density		14.81	g/cm3		
Melting Range	Solidus: Liquidus:	894 903	°C °C		
TAB.3 - Heat treatments					
Solution annealing		675 20	°C min		
Recrystallization Annealing		675 20	°C min		
Hardening		275 180	°C min		



Metaltech srl | Via Saviabona 113/G | 36010 | Cavazzale di Monticello Conte Otto (VI) | ITALIA C.F. e P.IVA 03955300243 | Reg. Imprese VI: 03955300243 | REA: VI - 367516 | Cap. Soc. € 10.000,00 i.v.



TAB.4 - Investment casting parameters

Premelting temperature		1003	°C
Casting Temperature	Min:	953	°C
	Max:	1053	°C
Water investment powder ratio		36-38	%
Flask temperature	Min:	450	D°
	Max:	700	D°
Quenching time without stones in place	Min:	5	min
	Max:	20	min
Quenching time with stones in place		15	min in boiling water
Pickling	H2SO4:	20	%
	Temp:	50	°C
	Time:	50	min