



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

# **STAR713A - 750 ‰**

Universal master alloy for the production of white palladium based 585 - 750 % gold jewellery obtained by investment casting and mechanical working. The elements contained in this product ensure a high surface quality in investment casting, while in mechanical working a high deformation capability thanks the small grain structure, making it suitable for the production of hand and machine made hollow and solid chains, deep drawn items and tube.

#### TAB.1 - Mechanical data

Hardness as cast	165 HV	
Hardness hardened	250 HV	
Tensile strength	n.d.	
Yield strength	n.d.	
Elongation	n.d.	

#### TAB.2 - Physical data

Color		Off-white	
Colour Coordinates	L*: a*: b*:	82.59 6.73 15.42	
Density		15.70	g/cm3
Melting Range	Solidus: Liquidus:	850 900	°C °C

#### TAB.3 - Heat treatments

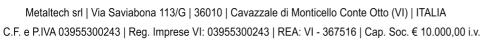
Solution annealing	650 30	°C min
Recrystallization Annealing	700 30	°C min
Hardening	300 180	°C min











## TAB.4 - Investment casting parameters

Premelting temperature		1000	°C
Casting Temperature	Min:	950	°C
	Max:	1050	°C
Water investment powder ratio		36-38	%
Flask temperature	Min:	500	°C
	Max:	720	°C
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

### TAB.5 - Mechanical working parameters

Premelting temperature		1050	°C
Casting Temperature	Min: Max:	1000 1100	°C
First thickness reduction	Lamination:	50	%
	Drawing:	25	%
Following thickness reductions	Lamination:	75	%
	Drawing:	50	%
Pickling after annealing	H2SO4:	20	%
	Temp:	50	°C
	Time:	5	min