

TECHNICAL DATA SHEET

SPARK588T

Alloy for the production of bronze items, jewels and models obtained by investment casting. The elements contained in this product ensure a high deoxidation after casting and a high surface quality, making it suitable for castings with and without stones in place.

TAB.1 - Mechanical data

| | | |
|-------------------|------|-----|
| Hardness as cast | 130 | HV |
| Hardness hardened | n.d. | |
| Tensile strength | 310 | MPa |
| Yield strength | 150 | MPa |
| Elongation | 25 | % |

TAB.2 - Physical data

| | | |
|--------------------|-----------------------|----------------------|
| Color | Pale yellow | |
| Colour Coordinates | | |
| Density | 8.68 | g/cm ³ |
| Melting Range | Solidus: Liquidus: | 850 1000 °C °C |

TAB.3 - Heat treatments

| | | |
|-----------------------------|-----------|-----------|
| Solution annealing | 700 30 | °C min |
| Recrystallization Annealing | 700 30 | °C min |
| Hardening | n.d. | |

TAB.4 - Investment casting parameters

| | | | |
|--|--------|-------|-------------------------|
| Premelting temperature | | 1100 | °C |
| Casting Temperature | Min: | 1050 | °C |
| | Max: | 1150 | °C |
| Water investment powder ratio | | 36-38 | % |
| Flask temperature | Min: | 450 | °C |
| | Max: | 700 | °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 |