

Material Data Sheet

(1379) - PtIr3%

1. Composition

Pt	97.00%
Ir	3.00%

2. Physical Properties

Melting range	1770-1770°C
Density	21.5 g/cm ³
Colour	platin
Young's Modulus	145 GPa

3. Mechanical Properties

Condition	cold worked	soft	after firing	hardened
Parameters	75% KV	1000°C/1h/Wasser		
Hardness HV5	135	95		
Tensile strength (Rm)	385 MPa	205 MPa		
0.2% Proof stress (Rp 0.2%)	385 MPa	105 MPa		
Elongation	4.8 %	45.8 %		

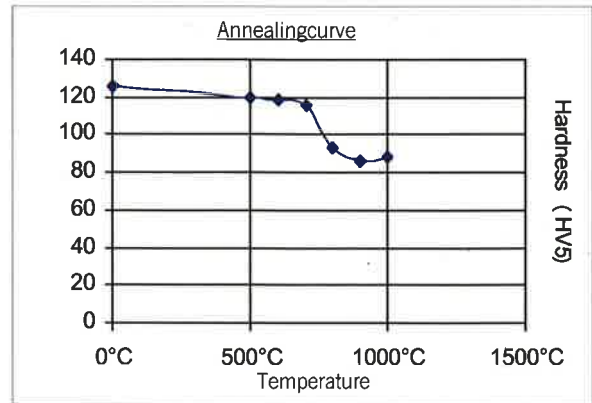
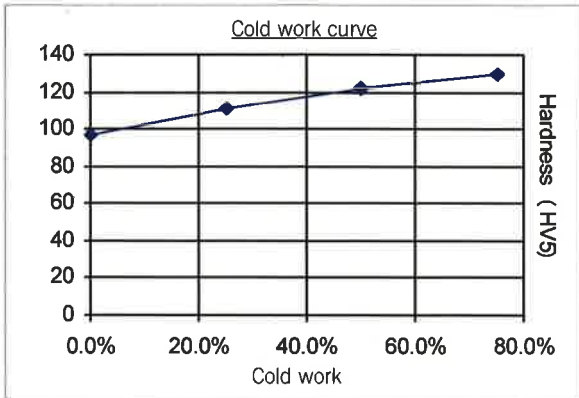
4. Handling

thermal treatments:	Up from 800°C recrystallisation begins. This alloy could not be hardened.
Surface-conditioning:	For any thermal treatments, the surface would not change even under oxygen ambient. A surface treatment with acid washing should therefore not be necessary.
Remarks	Application/indications: PtIr3% is a highly corrosion resistant, biocompatible alloy with medium mechanical strength. It is suitable for use in the medical field. Processing: The alloy is easily cold worked and is suitable as a material for a micro-mechanical manufacturing.

5. Certification

Manufacture and delivery are constantly monitored according to the quality management system standard according to ISO 9001.

6. Graphs



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