

## WIRBALIT® Tantalum

ASTM standards	ASTM B365
	ASTM B708
Ta (99,85%)	annealed / not annealed

**Tantalum** is a graphite gray shiny metal and can be used at high temperatures of up to 2,300 ° C.

### Advantages of tantalum:

- very high melting point
- very ductile and weldable
- very good corrosion resistance

		Ta - annealed	Ta - not annealed
Hardness	HV	80-100	<180-300
Tensile strength	N/mm <sup>2</sup>	280-330	<600-1.400
Elongation	%	20-35	2-20
Modulus of elasticity	kN/mm <sup>2</sup>	186	186
El. conductivity	Sm/mm <sup>2</sup>	8	8
E. resistance	Ωmm <sup>2</sup> /m	0,125	0,125
Thermal conductivity 293 K at 20 °C	W/Km	54,4	54,4
Thermal conductivity 1527 K at 20 °C	W/Km	74	74
Coefficient of linear thermal expansion (20° C - 300 °C)	10 <sup>-6</sup> K <sup>-1</sup>	6,5	6,5
Specific heat	J/gK	0,14	0,14
Density	g/cm <sup>3</sup>	16,6	16,6

### Available forms:

Semi-finished products (rods, sheets), drawing parts (according to customer specifications)

### Application areas:

Medical technology as implants or instruments, plant construction as shielding sheets, containers or components in furnace construction