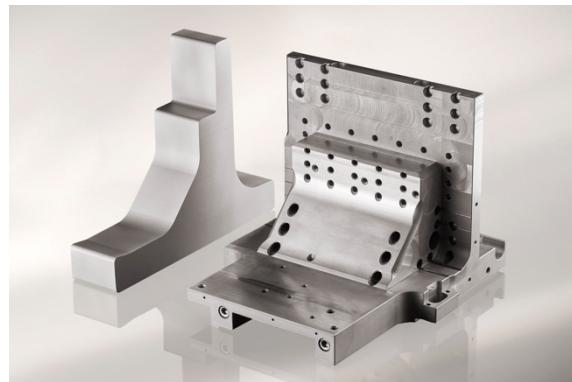


Dispal® S225

The physical and mechanical properties depend on geometry and the production process. All mechanical properties are preliminary minimal values (average minus 3 Sigma) taken from specimen Ø30mm and for all other geometries only for reference.



Physical properties (at 20°C)

Property	Unit	Value
Density	g/cm³	2.58 ± 5%
Electrical conductivity	MS/m	11.8 ± 0.5
	%IACS	20.3 ± 0.9

Coefficient of thermal expansion

Property	Unit	Value
CTE-value 20 to 100°C	10-6/K	15.1 ± 0.5
CTE-value 20 to 200°C	10-6/K	16.0 ± 0.5
CTE-value 20 to 300°C	10-6/K	17.0 ± 0.5

Thermal conductivity

Temperature (°C)	30	100	200	300	400
Value (W/mK)	126.6	120.0	115.0	110.4	103.7

Thermal data

Solidus temperature = (570.2 ± 3)°C

Liquidus temperature = (900.0 ± 3)°C

Mechanical properties

Heat treatment condition F and O: (minimum values)

Property	Unit	Temperature				
		20°C	150°C	200°C	250°C	300°C
Tensile strength, Rm	MPa	218	180	154	116	97
Yield strength, Rp0,2	MPa	128	105	86	71	60
Elongation, A5	%	1.0	1.9	2.0	3.2	5.9
Young's modulus, E	GPa	86	77	66	65	64
Hardness	HV30	85	-	-	-	-

Exemplary values

Heat treatment condition F (mean values)

Shear modulus, G = 39 – 34 GPa

Poisson's ratio, μ = 0,264 – 0,274