



GLASS'87 ESR PREMIUM

Glass'87 ESR PREMIUM is special grade of Varzene Metal. This grade is improved from 1.4057. Glass'87 ESR PREMIUM supplies longer mold life with its extra fine structure. Glass'87 ESR PREMIUM has 4 repeated heat treatment that includes ESR which supplies very clean microstructure. By this microstructure, it supplies perfect mechanical properties that classical 1.4057

Glass'87 ESR PREMIUM

Cr	Mn	Si	C	P	S	Fe	Ni
15,5 - 17,0	max 1,0	max 1,0	0,12 - 0,22	max 0,04	max 0,015	balance	1,5 - 2,5

***** Glass'87 ESR PREMIUM has nearly same analyse with 1.4057. With min %2,4 Ni content, it supplies more available preoperties for glass molds.

density (kg/dm³) 7.70

electrical resistivity at 20 °C (Ω mm² /m) 0.70

magnetizability yes

thermal conductivity at 20 °C (W/m K) 25

specific heat capacity at 20 °C (J/kg K) 460

thermal expansion (K⁻¹)

20 – 100 °C: 10.0 x 10⁻⁶

20 – 200 °C: 10.5 x 10⁻⁶

20 – 300 °C: 10.5 x 10⁻⁶

20 – 400 °C: 10.5 x 10⁻⁶

	Yield Strength (Mpa) (20 C)	Tensile Strength (Mpa) (20 C)	Elongation A5 (%)	Hardness (Vickers)
Annealed	520	< 950	15 - 20	< 290
Qench Hardened	1000	1500	3	430