

Formaplast 160 is an alloy with an excellent combination of thermal conductivity hardness and mechanical resistance. Suitable especially for blow molds, injection and extrusion Plastics where is needed an high thermal exchange, mechanical resistance to compression and wear resistance.

### Chemical Composition

Nichel	6,5 ÷ 7,5 %
Silicon	1,5 ÷ 2,5 %
Chrome	0,6 ÷ 1,2 %
Copper	Balance

### Typical Mechanical Properties

	reference values	
Hardness	24 ÷ 30	Hrc
Hardness	250 ÷ 290	HB
Tensile Strenght	860	N/mm <sup>2</sup>
Yeld strenght 0,2%	725	N/mm <sup>2</sup>
Elongation A5	7	%
Elastic Modulus	130	Gpa

### Advantages / Benefits

Plastic injection mold inserts  
 Inserts for blow molds  
 Plastics processing  
 Slips  
 Bearings

### Physical Properties

	reference values	
Elctric Conductivity	min 25	%IACS
Elctric Conductivity	min 18	m/Ω mm <sup>2</sup>
Thermal Conductivity 20 °C	130	W/m °K
Thermal Conductivity 100°C	160	W/m °K
Coeff. Thermal Expansion	17,5	ppm/°C
Specific Heat <small>(Heat Capacity)</small> 100°C	410	J/kg°K
Melting points	870-980	°C
Density	8,70	g/cm <sup>3</sup>

### The complete line

at 20°C

FormaPlast	105	106	W/m°K
FormaPlast	105 <sup>LH</sup>	130	W/m°K
FormaPlast	160	130	W/m°K
FormaPlast	200	217	W/m°K
FormaPlast	240	208	W/m°K
FormaPlast	340	337	W/m°K