

Holder Plate

Technical Datasheet

Chemistry

Comparable Standard: ~AISI 4130

Typical Analysis %	C	Mn	Si	Cr	Mo	S	P
Min.	0.27	0.90	0.15	0.60	0.15	0.040	0.035
Max.	0.33	1.30	0.35	0.90	0.25		

Description

Holder Plate is a modified AISI-4130 material specifically designed holder steel for molds and dies. It can be welded easily due to the low carbon content. It is a low alloy steel with high strength, toughness and hardenability, and usually used in quenched and tempered condition.

Characteristics

Good weldability
Excellent machinability

Welding

All common arc welding processes may be used, but preheating to 300°F - 550°F is required to prevent cracking. The preheating interpass temperature depends on the section thickness.

Applications

Automotive parts, Oil and Gas industry, Aerospace

- Frames for Plastic Molds
- Mold Bases for Die Cast Dies
- Bases for Stamping Dies
- Bases for Trim Dies

Physical Properties

Density: 0.285 lbs/in³ (room temperature)

Coefficient of Thermal Expansion	$\frac{70^{\circ}\text{F} - 200^{\circ}\text{F}}{7.0 \times 10^{-6} / ^{\circ}\text{F}}$	$\frac{70^{\circ}\text{F} - 600^{\circ}\text{F}}{7.25 \times 10^{-6} / ^{\circ}\text{F}}$	$\frac{70^{\circ}\text{F} - 800^{\circ}\text{F}}{7.5 \times 10^{-6} / ^{\circ}\text{F}}$
Thermal Conductivity	$\frac{70^{\circ}\text{F}}{202 \text{ Btu/in/ft}^2/\text{hr/}^{\circ}\text{F}}$	$\frac{400^{\circ}\text{F}}{209 \text{ Btu/in/ft}^2/\text{hr/}^{\circ}\text{F}}$	$\frac{750^{\circ}\text{F}}{216 \text{ Btu/in/ft}^2/\text{hr/}^{\circ}\text{F}}$

Mechanical Properties

Typical Values at Room Temperature

Yield Strength	Tensile Strength	Elongation %
110 KSI	130 KSI	20

General Note

All statements regarding the properties or utilization of the materials or products mentioned are for the purpose of description only. Guarantees regarding the existence of certain properties or a certain utilization are only valid if agreed upon in writing.



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NORTH AMERICAN DISTRIBUTION

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