

MILD STEEL ER70S6

Description

Mild steel ER70S6 presents a versatile and widely used material. Comprised mainly of iron, with small additions of manganese and silicon, it is known for its affordability, ease of use, and general-purpose applications. ER70S6 is favored for its excellent weldability and compatibility with various welding processes. While not as corrosion-resistant as stainless steel, it's suitable for a wide range of manufacturing needs, from automotive and construction to industrial and general fabrication. In 3D metal printing, ER70S6 facilitates the production of sturdy and cost-effective components, making it a valuable choice for projects where high strength and a budget-friendly material are prerequisites.

Benefits

- Affordability
- Weldability
- Versatility
- General-Purpose Applications
- Ease of Use
- Sturdy Components

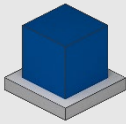
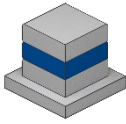
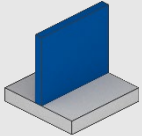
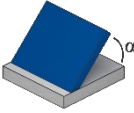
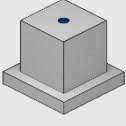
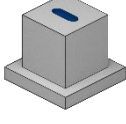
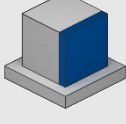
Application

- Construction
- Automotive
- Aerospace
- Energy
- Oil and gas
- Infrastructure

Data sheet

	Units	Print direction	Mild steel ER70S6
DIN	-	-	-
Wire diameter	mm	-	1.0
Density	g/cm ³	-	7.8
Ultimate tensile Strength	MPa	XY	598 ± 5
		XZ	525 ± 12
Yield strength	MPa	XY	484 ± 8
		XZ	402 ± 37
Elongation at break	%	XY	71 ± 1
		XZ	15 ± 9
Hardness Vickers	HV	-	175

Technical specifications

	Description		Standalone Printer (M450)	Robot Integration
Maximum dimensions	Largest printable size		145 x 168 x 430 mm ³	3000 x 3000 x 2500 mm ³
Min feature size in z-direction	Print layer height		0.6 – 1.2 mm	0.6 – 1.2 mm
Minimum Wall Thickness	Smallest wall thickness available for printing		2.0 mm (smaller possible on request)	2.0 mm (smaller possible on request)
Unsupported Overhang	Minimum angle at which a wall can be printed without requiring support		>70°	>70° standard 0° when two external axes are used
Holes	Minimum diameter available for printing holes		2.0 mm (smaller possible on request)	2.0 mm
Slot width	Minimum width of a slot		1.2 mm	1.2 mm
General Tolerances	Expected tolerance (dimensional accuracy)		± 0,5% With a minimum of 0,5 mm (smaller possible on request)	± 0,5% With a minimum of 0,5 mm (smaller possible on request)