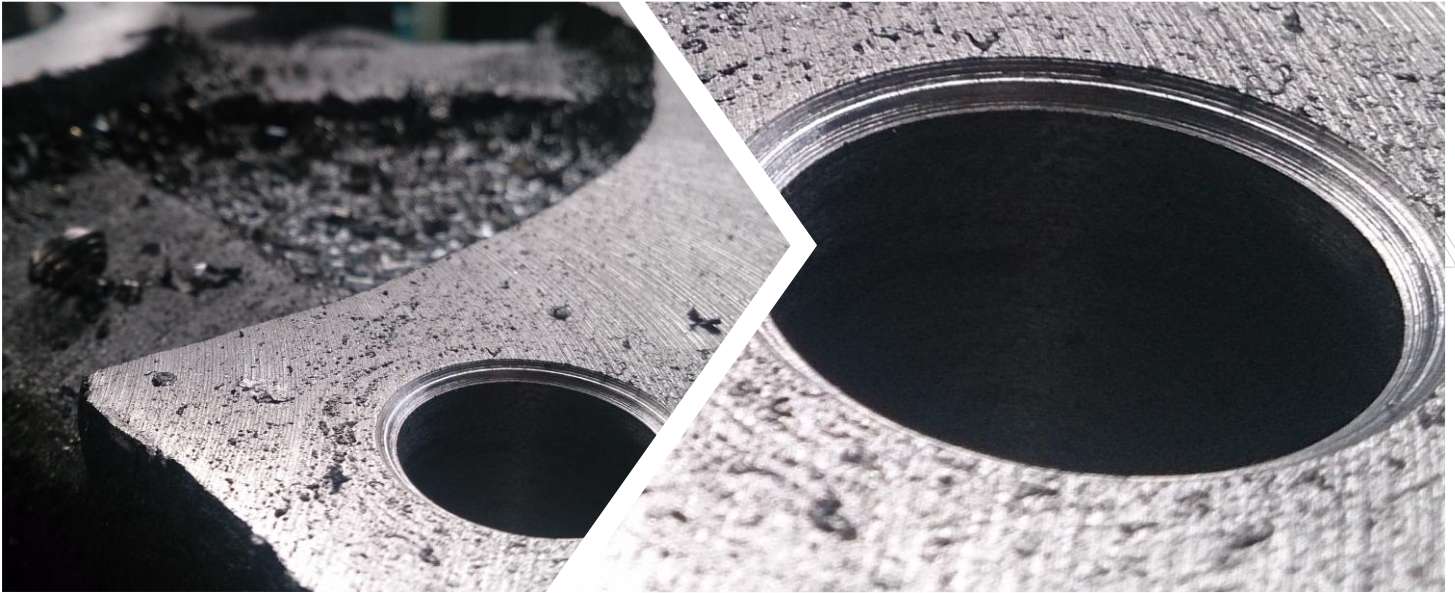


Mild Steel



Generic Data :

Technical Name	Mild Carbon Steel
Process	Machining
Accuracy	(+/-)150 μm
Maximum Build Size	400x400x300 mm

Mild Steel is an iron alloy containing a small percentage of carbon. Also called plain-carbon steel and low-carbon steel, it is now the most common form of steel because it is cheap in consideration to the material properties it possesses. Mild steel contains approximately 0.05–0.25% carbon.

Characteristics

- + Toughness, resilience
- + Good hardness
- + Efficient malleability
- + Great affordability
- Not suitable for food packaging
- Aluminium is counterpart in automotives because of less weight
- Limitation To Heat Treatment
- Comparatively Less Stronger than other steels

Applications

- ✓ Gaskets
- ✓ Vessel linings
- ✓ Pump interiors, washers
- ✓ Wire and cable wrap
- ✓ Piping, tubing and vessels

Material Properties	Value	Unit	Standard Test Method
Density	7.87	g/cm ³	ASTM DATA
Natural Color	Dark blue-gray	-	-
Mechanical Properties			
Tensile Strength	370	MPa	ASTM DATA
Ultimate Tensile Strength	440	MPa	ASTM DATA
Elongation at Break	15	%	ISO DATA
Charpy notched impact strength	31.7	J	ISO DATA
Izod Impact notched (23°C)	45.7	J	ASTM DATA
Hardness, Rockwell B	71	-	-
Thermal Properties			
Thermal Conductivity	47.7	W/m-K	Annealed; ASTM DATA
Vicat Softening Temperature	1510	°C	-