High Quality Filler Metal for Plain-Carbon and Low-Alloy Steels

TigTectic® 66




TIG ROD

- High Ductility & Impact properties
- Excellent puddle control
- Dense, crack-resistant deposits

Castolin Eutectic®
Eutectic Castolin

DESCRIPTION:

TigTectic 66 is a medium strength filler rod excellent for the welding of plain carbon and low-alloy steels. Its properties allow.

TigTectic 66 to also be used as a buffer or scavenging layer and joining or repair of heat-treatable steels where matching properties or heat treatment response are not

TYPICAL APPLICATIONS:

- Medium pressure pipeline welding
- Railcar welding
- Auto body repairs
- Tank fabrications
- Pipe flanges
- Frame assemblies

TECHNICAL DATA:

Typical Tensile Strength: 75,000 psi 517 N/mm^2
Typical Yield Strength: 61,000 psi 420 N/mm^2
Typical Elongation: (1=5d) min. 25%
Current & Polarity: DCEN (-) or AC
Shielding Gas and Flows: 100% Ar @ 20 scfh.

WELD PARAMETERS:

Diameter	Amperage
1/16" (1.6mm)	100-145
3/32" (2.4mm)	140-170
1/8" (3.2mm)	150-200

Note: Amperage ranges provided are based on the diameter of the tungsten electrode. Thicker pieces require higher amperage value and ranges should be adjusted accordingly

PROCEDURES FOR USE:

Preparation: Clean weld area of scale and oxide. Remove grease and oil by using a suitable VOC-free solvent. Grind a lengthwise taper on the tungsten electrode and set so that about 1/8-in of the electrode protrudes passed the gas cup edge. Preheating is generally not needed when welding stainless steels. For hardenable tool steel verify preheat/interpass temperatures with an expert.

100% Argon backing gas is strongly recommended for full penetration welds.

Technique: Start the arc by using impulse high-frequency or by using a copper startblock. **Do not use a carbon block as this will contaminate the weld deposit!** Deposit stringer beads. **Do not weave more than 2x as wide beads can cause distortion.**

Post-welding: Allow work piece to cool.

HEALTH AND SAFETY:

Observe normal welding practices, respiratory protection and proper air flow pattern advised. For general welding practices, see AWS publications Z49.1 "Safety in Welding and Cutting and Allied Process". Welding is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before beginning welding operations. DO NOT operate welding equipment or use welding materials before you have thoroughly read the proper instruction manual(s).

Please refer to the Eutectic internet site for Material Safety Data Sheet (MSDS) information.

DISREGARDING THESE INSTRUCTIONS, AND/OR THE INSTRUCTIONS OF WELDING EQUIPMENT OR MATERIAL MANUALS, MAY BE HAZARDOUS TO YOUR HEALTH.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS

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