



AMTEC TUBULAR TUNGSTEN HARDSURFACING

GAS ROD OR ELECTRODE DC REVERSE

General Characteristics

Amtec Tube Tungsten is an extremely wear and abrasion resistant macrocrystalline tungsten carbide arc and gas rod. This product is designed for the ultimate wear resistance caused by abrasion, and has a uniform microstructure, meaning that the carbide particles do not sink in the weld metal, but stay uniform throughout the deposit from top to bottom. The gas rod is in a very hard alloy steel matrix tube that has excellent flow and a smooth, medium bead profile. The arc electrode has a dipped coating that leaves slag free deposits with unusually high wear resistance. Both the arc and gas rods have a 60% tungsten content, which gives the highest wear resistance available.

Procedure

Clean the weld zone of all contaminants. The surface to be hardsurfaced should be relatively smooth and uniform. Old hardsurfacing deposits should be removed prior to new deposits being put on, otherwise the deposit may break out. Keep rods and electrodes dry, as moisture can cause porosity. It is necessary to preheat high carbon and alloy steels to 500°F to help avoid under-bead cracking and failure by spalling. Normally a tungsten deposit will exhibit cross checking. This is desirable as a means of stress relief.

Application

Used to hard surface mixer blades/paddles, conveyor sprockets, impellers, tamping tools, pulverizing hammers, feed screws, pug mill knives, mill guides, Muller plows, dozer blades, dragline buckets, slurry pumps, scraper blades, cultivator tines, earth boring augers, oil field bits, ditch cutters and tillage tools. Can be used successfully on any part that is subject to extreme abrasion without impact. This product takes very little impact.

| | | | |
|----------------------------------|---------------------------------------|--|--|
| Hardness (RC) (Matrix) | 58-62 | | |
| Tungsten Carbide Hardness | 88-92 Rockwell A or 9-10 Moh's | | |
| Wear Coefficient | 0.2% | | |

| | | | |
|------------------------|-------------|-------------|-------------|
| Diameter (Inch) | 1/8 | 5/32 | 3/16 |
| (mm) | 3.25 | 4.0 | 5.0 |

| | | | |
|-----------------------|---------------|----------------|----------------|
| Amps (approx.) | 80-110 | 115-130 | 155-185 |
|-----------------------|---------------|----------------|----------------|

CONFIDENTIAL INFORMATION
Subject to change without notice

Tip Color – Plain
No Imprint