



HI-ALLOY HF506

RESISTANT TO HIGH IMPACT AND MODERATE ABRASION

DESCRIPTION: Hi-Alloy HF506 is a high chromium, high manganese, nickel bearing alloy used for building up and joining austenitic manganese steel, low alloy quenched and tempered steel, and all carbon steels. Its highly alloyed deposits are extremely tough and shock resistant. It is able to withstand extreme impact loading along with moderate abrasion. This electrode has excellent weldability in all positions and produces smooth even beads with very low spatter. Weld deposits will work harden rapidly. Deposits are not flame cuttable.

TYPICAL APPLICATIONS: Formulated for high impact environments such as rail frogs, switch points, crusher cones, hammers, grousers, bucket teeth, and most other applications where manganese steels are used. HF506 is also an excellent base for harder wear facing alloys.

PROCEDURES: Clean the base metal and remove all prior deposits of hardfacing material and fatigued base metal. **DO NOT PREHEAT.** Maintain a short to medium arc length while keeping it concentrated on the base metal. Avoid exceeding a 600° F interpass temperature. If excessive heat build up occurs, quenching with water is allowed.

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| SIZES AVAILABLE: | 1/8 | 5/32 | 3/16 |
| AMPERAGE RANGES: | 110-135 | 125-190 | 150-250 |
| POLARITY: | AC or DC Reverse | | |
| HARDNESS: | As Welded Up To Rockwell C 19 Work Hardens Up To Rockwell C 48 | | |
| TENSILE STRENGTH: | Up to 116,000 psi | | |
| YIELD STRENGTH: | Up to 89,000 psi | | |