SME G191

HIGH TENSILE, AUSTENITIC MANGANESE STEEL WITH EXCELLENT RESISTANCE TO IMPACT AND WORK HARDENING CAPABILITY.

Alloy Basis

Mn, Cr, Mo

Characteristics :

SME G191 posses a high deposition efficiency and the weld deposit shows stable austenitic structure and scattered carbides The weld deposit is work hardening & crack-free. This unique deposit gives high tensile strength, toughness and wear resistant properties against impact, abrasion, deformation.

Typical Application

This electrode is used for welding of bullet proof armour steel, joining dissimilar steels such as high Manganese steel and carbon steel. Ideal alloy for surfacing castings of Hadfield steel. surfacing Manganese Steel, rail points and crossings, frogs, switches, etc. Rebuilding 14% Manganese steel components (earth moving equipment).

Mechanical Properties

Hardness :
As welded 15 - 22 HRC
Work Hardened 35-45 HRC

Welding Current : AC, DCEP

Size (Ø mm)	3.15	4.00	5.00
Current (amps)	100 - 130	120 - 160	160 - 200

Availability:

Standard Size: 5.0, 4.0, 3.15 in 350 mm length
Packing: 2 kg.

Procedure

Clean the weld metal surface by wire brush from grease, oil, fatigue material. do not preheat manganese steels, Maintained short to medium arc length. on manganese steel keep the bead length 75 t0 100 mm at a time. Interpass temperature should be maintained below 150 degrees. skip welding is recommended of large parts peening while hot reduces residual stresses. cool slowly.