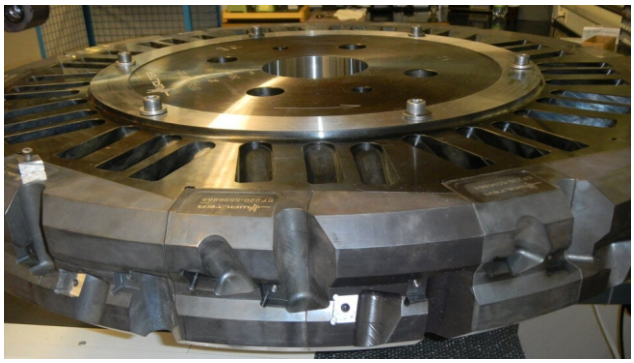
SME G15

SPECIAL ELECTRODE WITH A HIGH SPEED STEEL DEPOSIT



Alloy Basis

Cr, Mo, W, V

Characteristics :

SME G15 is a basic coated electrode with excellent arc stability producing smooth regular beads and easily removable slag. This electrode delivers a high-quality tool steel deposit that is tough, hard, wear- and oxidation-resistant and free from cracks and porosity.

Typical Application

This electrode is ideally used for the repair and manufacture of cold and hot cutting tools, trimming dies, broaches, punching tools, drills, milling tools, hot dies, shear blades and similar high-performance tooling.

Mechanical Properties

Hardness:
As welded: 58 - 62 HRC
Work Hardened: 60-66 HRC
After Annealed :24-32 HRC

Welding Current : AC, DCEP

Size (Ø mm)	3.15	4.00	5.00
Current (amps)	90 - 110	120 - 140	150 - 200

Availability:

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

Note on Usage:

Clean the weld metal surface by grinding. Preheat larger and intricate sections to 300–600 °C and maintain this temperature during welding. Chip slag between passes and peen heavy deposits to minimize residual stresses. Use SME A06 as a buffer layer and limit the buildup to three layers. After welding, cool the part slowly in an oven or under asbestos.

Heat treatment:

Annealing for 4 hours at 820 °C, hardening at 1180–1230 °C followed by oil quenching and tempering for 2 hours at 540–560 °C."