



AMA FC 13Mn

DIN 8555
EN 14700

MF 7-GF-250-KP
T Fe9

properties:

AMA FC 13Mn is a basic flux cored wire and the weld metal is crack-free and matches the base metal. The hardness of the weld metal increases with cold working. Its weld metal suitable for parts subject to impact wear. In order to maintain weld toughness, manganese steels must be welded as cold as possible.

Typical All Weld Analysis:

Gas	C	Mn	Si	Cr
C1	1	13.5	1	0.5

Shielding gas: DIN EN 439 C1 (100% CO₂)

Typical All Weld Metal Hardness:

3-layer deposit:

Gas	Brinell Hardness	As welded
C1	HB	200-300

Operating Conditions:

Diameter (mm)	Stick-out (mm)	Voltage (V)	Current (A)
1.60	15-20	24-28	220-270

Packaging:

Diameter (mm)	Spool (KG)
1.60	15

other weight & sizes are produced upon customers request.

Applications:

Rebuilding 14% manganese steel castings - Repairing railway frogs and crossings

Considerations:

All work-hardened base material and previously deposited material should be removed prior to applying a new deposit. No preheat is required on austenitic manganese steels although a preheat of between 150-200°C may be necessary on carbon and low steels to prevent heat affected zone cracking.

Stringer beads are preferred to avoid excessive heat build up in the base material.

After each welding pass, a weld hammering operation is performed to eliminate internal stresses, distortions, and possible cracks.