

HARDFACE NM14-G

CLASSIFICATION

EN 14700 T Fe9

DESCRIPTION

- Tubular wire for gas shielded metal arc hardfacing
- Austenitic manganese steel type alloy used for build up and reinforcing manganese steel castings and wear components
- Excellent work hardening properties. The degree of work hardening is dependent on the amount of impact on the rebuilt component
- Chromium and nickel free variant of Hardface NM-O
- The deposit has the same colour as manganese steel

APPLICATIONS

Hardface NM14-G deposits a “Hadfield” manganese steel type alloy. It is designed for rebuilding 14 % manganese steel parts. Austenitic manganese steels must be kept cool during welding. Do not preheat. Use intermittent or staggered weld runs and ensure interpass temperature is kept as low as possible. Deposit can be multi-layered.

Examples

Reclaiming crusher jaws and rolls, gyratory mantles, blow bars, swing hammers, manganese dredge components such as buckets and tumblers, railroad sections, bucket teeth and lips, dragline manganese steel shackles and repair of defects in manganese steel castings

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Fe
1.00	14.00	0.50	Bal

Structure: austenite

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-Layer deposit:

As welded 200 HB

Work hardened: 46 HRc

CONDITIONS OF USE

Current type

DC (+)

Shielding gas

EN ISO 14175

M12 / M13 / M20 / M21

OPERATING CONDITIONS

Diameter [mm]	Amperage [A]	Voltage [V]	Stick-out [mm]	Gas flow [l/min]
1.2	100 - 300	24 - 32	12 - 25	10 - 20
1.6	150 - 300	24 - 32	12 - 25	10 - 20
2.0	200 - 400	24 - 32	12 - 30	10 - 20
2.4	250 - 450	24 - 32	12 - 30	10 - 20

Recovery: > 95 %

WELDING POSITIONS

Hardface NM14-G, up to \varnothing 1.6 mm, is suitable as well for downhand as for positional welding by adapting transfer mode and welding parameters as for solid wires.

STANDARD DIAMETERS (mm)

1.2, 1.6, 2.0, 2.4

Other diameters: please consult us

PACKAGING

Diameter	≤ 2.4 mm		≥ 2.4 mm
Standard packaging [EN ISO 544]	Spool : BS 300	Coil : B 450	Drum
Weight	15 kg	25 kg	Up to 330 kg