

Technical data sheet <small>011121MBA</small>	Cored welding wire HARDFACE HW59-S	
-------------------------------------------------------------	---------------------------------------------------------	-------------------------------------------------------------------------------------

CLASSIFICATION

EN 14700: T Fe8

DESCRIPTION

- Tubular wire for submerged arc hardfacing, the deposit is modified tool steel composition
- Martensitic alloy used in applications where greater hardness of the weld metal is required up to 500°C
- Outstanding resistance to low stress abrasion with heavy impact and high compressive stresses

APPLICATIONS

- HARDFACE HW59-S is used for surfacing parts subjected to heavy compressive stresses and moderate abrasion or metal-to-metal wear, combined with mechanical and thermal shocks.
- Pre-heat is an essential requirement to prevent hot cracking. The level of preheat is a function of the size and geometry of the component to be hardfaced and its chemical composition. Large build-ups are recommended to be stress-relieved. Welding procedures may vary dependent on application, for further information please contact a Welding Alloys representative.

Examples

Refurbishing of steel mill rolls, crane wheels, hot work extrusion mandrels, crushing hammers, shear knives, pulleys, and winches

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo	W	V
0.35	1	0.5	6.5	1.2	1.2	0.35

Structure: martensite

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-layer deposit on mild steel: 54 – 57 HRc

Hardness – All Weld Metal: 55 – 60 HRc

FLUX DESCRIPTION

	WA FLUX 325	WA FLUX 385	WA FLUX 415	WA ULTRAFLUX
EN ISO 14174 class	S A AB 1 65	S A AF 2 64	S A FB 1 55	S A FB 1 55

OPERATING CONDITIONS

Diameter	Current [A]	Voltage [V]	Stick-out
	Range	Range	Range
2.4 mm	300 - 550	26 - 32	25 mm – 40 mm
3.2 mm	350 - 600	26 - 32	25 mm – 40 mm

Recovery: 95 %

Current type/polarity: DC+

WELDING POSITIONS

Flat

PACKAGING

Diameter	2.4-3.2 mm
Type	Drum
Weight	125 kg
	250 kg

Other packaging and other diameters: please consult us