

<b>Technical data sheet</b>  <small>011121MBA</small>	<b>Cored welding Wire</b>  <b>HARDFACE AP-G</b>	
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#### CLASSIFICATION

EN 14700: T Fe9

#### DESCRIPTION

- Flux cored wire for gas shielded metal arc hardfacing
- Austenitic deposit with excellent work hardening properties
- Highly resistant to impact and high pressures

#### APPLICATIONS

HARDFACE AP-G produces an austenitic, non-magnetic weld deposit which has excellent work hardening properties. The degree of work hardening is dependent on the amount of impact on the rebuilt component. It is used for rebuilding components exposed to severe impacts or heavy loads and can be welded on ferritic and austenitic steels including "Hadfield" manganese steel.

It forms an excellent buffer layer prior to hardfacing with high chromium cast iron. The deposit can be multi-layered without limit.

#### Examples

Railway frogs and crossings, hydraulic press pistons, crushing equipment subjected to heavy shock, hammers, dredge pumps and all components where a work-hardening deposit is desirable.

#### TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Fe
0.4	16	0.5	14	Bal.

Structure: austenite

#### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit:

As welded: 210 – 240 HB (20 - 25 HRc)

Work hardened: 45 – 55 HRc

#### CONDITIONS OF USE

Current type	Shielding gas	
DC+	EN ISO 14175	M12: Ar + 0.5 – 5% CO <sub>2</sub>
		M21: Ar + 15 – 25% CO <sub>2</sub>

Gas flow rate: 15 – 25 l/min.

#### OPERATING CONDITIONS

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.2	100 – 300	220	16 – 32	28	12 – 25	15
1.6	150 – 300	250	16 – 32	29	12 – 25	20
2.0	200 – 400	300	16 – 32	29	12 – 30	25
2.4	250 – 450	350	16 – 32	29	12 – 30	25

Recovery: 95%

#### WELDING POSITIONS

Flat, half up, half down, All positions

HARDFACE AP-G, up to Ø 1.6 mm, is suitable as well for downhand as for positional welding by adapting transfer mode and welding parameters as for solid wires.

#### PACKAGING

Diameter	≤ 2.4 mm	≥ 2.4 mm	
Standard packaging	EN ISO 544: BS 300 spool	B 450 coil	Drum
Weight	15 kg	25 kg	Up to 330 kg

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.