| Technical data sheet<br>011121MBA | Cored welding wire<br># HARDFACE AP-S | Welding Alloys |
|---|---|---|

## CLASSIFICATION

EN 14700: T Fe9

## DESCRIPTION

- Tubular wire for submerged arc hardfacing
- Ductile austenitic, non-magnetic, work-hardenable deposit
- Welding under a flux blanket eliminates the emission of toxic fumes, particularly hexavalent chromium

## APPLICATIONS

HARDFACE AP-S produces an austenitic 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 high impact or heavy loads and can be welded on ferritic and austenitic steels including “Hadfield” manganese steel. The deposit can be multi-layered without limit

***Examples***

Railway frogs, railway wheels, pulleys, capstans, excavator teeth, crusher rolls, steel mill rolls, hammers, and all components for which a work hardening deposit is desirable.

## TYPICAL ALL-WELD METAL ANALYSIS

| C | Mn | Si | Cr |
|---|---|---|---|
| 0.4 | 15 | 1 | 14 |

Structure: austenite

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit:

As welded: 200 – 240 HB (20 - 25 HRc)

Work hardened: 45 – 55 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 [mm] | Current [A] | | Voltage [V] | | Stick-out [mm] | |
|---|---|---|---|---|---|---|
| | Range | Optimum | Range | Optimum | Range | Optimum |
| 2.4 | 200 - 450 | 350 | 26 - 30 | 30 | 25 - 40 | 30 |
| 2.8 | 250 - 550 | 400 | 28 - 32 | 30 | 25 - 40 | 30 |
| 3.2 | 300 - 650 | 500 | 28 - 32 | 30 | 25 - 40 | 30 |

Recovery : 95 %

Current type/polarity: DC+

## WELDING POSITIONS

Flat

## PACKAGING

| Diameter | ≥ 2.4 mm | |
|---|---|---|
| Standard packaging | B 450 coil | Drum |
| Weight | 25 kg | Up to 330 kg |

Other packaging and other diameters: please consult us