Technical data sheet 011121MBA	Cored welding wire # CHROMECORE 421Cr-S	Welding Alloys

CLASSIFICATION

EN 14700: T Fe7

DESCRIPTION

- Tubular wire for submerged arc cladding steel mill rolls
- Martensitic stainless steel deposit alloyed with Ni and Mo
- The alloy offers good resistance to corrosion and thermal fatigue fire cracking
- Overlays exhibit relatively good ductility and uniform tempering response

APPLICATIONS

Hardfacing parts undergoing corrosion, erosion, abrasive wear and thermal shocks. Extensive use as a cladding alloy for rebuilding various steel mill rolls subject to repetitive thermal stresses, corrosion and metal-to-metal wear.
Typical applications include cladding of continuous caster rolls and certain rolls used in hot rolling applications. Preheat prior to welding and slow cooling after welding is often essential with this alloy. In some instances, stress relieving of the components is advisable.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo
0.06	0.9	0.7	13.5	4.3	1.0

Structure: martensite

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit-as welded: 40 - 46 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
3.2	300 - 650	500	28 - 32	32	25 - 40	30

Recovery: 95%
Preheat prior to welding and slow cooling afterwards are advisable. Stress relief after welding may also be necessary.

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