

# CHROMECORE 414-S

## CLASSIFICATION

EN 14700 T Fe7

## DESCRIPTION

- Tubular wire for submerged arc hardfacing
- The alloy has high hardness and excellent wear and galling resistance
- Ferritic-martensitic stainless steel weld deposit with excellent resistance to thermal fatigue

## APPLICATIONS

Chromecore 414-S is used as a cladding alloy for rebuilding various steel mill rolls subject to repetitive thermal stresses, corrosion and metal-to-metal wear.

### Examples

Typical applications include cladding of continuous caster rolls and certain rolls used in hot rolling applications.

## TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Fe
0.04	0.80	0.60	13.0	4.10	0.50	Rest

Structure: martensite + ferrite

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-Layer deposit: as welded 38 - 42 HRc

## CONDITIONS OF USE

Current type	Shielding	
DC (+)	WAF 325 or WAF 385	
FLUX DESCRIPTION	WAF 325	WAF 385
Classification	EN 760: S A FB 1 65 DC H5	EN 760: S A AB 2 65 DC H5
Redrying	2 hours at 250°C ± 50°C	
Packaging	bags (25 kg)	

## OPERATING CONDITIONS

Diameter	Amperage [A]	Voltage [V]	Stick-out [mm]
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[mm]	Range	Optimum	Range	Optimum	Range	Optimum
1.6	150 - 300	250	26 - 32	30	15 - 30	25
2.0	200 - 350	280	26 - 32	30	20 - 50	25
2.4	200 - 450	350	26 - 32	30	25 - 50	30
2.8	250 - 550	400	28 - 32	30	25 - 50	30
3.2	300 - 650	450	28 - 32	30	25 - 50	30

Recovery: 95 %

#### WELDING POSITIONS

Flat

#### STANDARD DIAMETERS (mm)

1.6, 2.0, 2.4, 2.8, 3.2

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