

# CHROME CORE 414N-S

## CLASSIFICATION

EN 14700 T Fe7

## DESCRIPTION

- Tubular wire for submerged arc cladding steel mill rolls
- Nitrogen-containing 13% Cr martensitic stainless steel weld deposit optimised for corrosion resistance
- The alloy has high hardness and excellent wear and galling resistance
- Ferritic-martensitic stainless steel weld deposit with excellent resistance to thermal fatigue

## APPLICATIONS

Extensively used as a cladding alloy for rebuilding various steel mill rolls subject to repetitive thermal stress, corrosion and metal-to-metal wear. Typical applications include cladding of continuous caster rolls and certain rolls used in hot rolling applications, steam turbine components, valve seats, valve gates, valve wedges, safety valves etc..

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3 layers deposit: as welded 42 - 46 HRc

## CONDITIONS OF USE

### Current type

DC (+)

### Shielding

WAF 325

## OPERATING CONDITIONS

| Diameter<br>[mm] | Amperage [A] |         | Voltage [V] |         | Stick-out [mm] |         |
|------------------|--------------|---------|-------------|---------|----------------|---------|
|                  | Range        | Optimum | Range       | Optimum | Range          | Optimum |
| 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    | 500     | 28 - 32     | 30      | 25 - 50        | 30      |

Recovery: 95%

## WELDING POSITIONS

Flat

## STANDARD DIAMETERS (mm)

2.4, 2.8, 3.2

Other diameters: please consult us

| PACKAGING                       |                |              |              |
|---------------------------------|----------------|--------------|--------------|
| Diameter                        | 2.4 mm         | 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 |