

CHROME CORE 4142N-O

CLASSIFICATION

EN 14700 T Fe7

DESCRIPTION

- Nitrogen bearing open arc wire for cladding of continuous casting rolls
- 2 layers technique to achieve required 414N-O composition on new rolls
- The alloy has high hardness and excellent wear and galling resistance
- Ferritic-martensitic stainless steel weld deposit with excellent resistance to thermal fatigue

APPLICATIONS

The fully martensitic microstructure provides outstanding tempering resistance, wear resistance, excellent response to thermal fatigue and stress corrosion cracking.

Extensively used as a cladding alloy for rebuilding various steel mill rolls subject to repetitive thermal stress, corrosion and metal-to-metal wear.

Examples

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 ANALYSIS

Structure: martensite + ferrite

This alloy is specially designed to achieve required 414N-O composition in 2 layers in new rolls

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 2 layers deposit: as welded 40 - 45 HRc

CONDITIONS OF USE

Current type

DC (+)

Shielding

Self shielded

OPERATING CONDITIONS

Diameter

Amperage [A]

Voltage [V]

Stick-out [mm]

[mm]	Range	Optimum	Range	Optimum	Range	Optimum
2.4	300 - 400	350	26 - 28	27	25 - 40	30

Recovery: 90%

WELDING POSITIONS

Flat, half up, half down

STANDARD DIAMETERS (mm)

2.4

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