

Technical Data Sheet

CHROME CORE 414DN-O

Martensitic stainless steel -> Flux cored wire for Self-shielded Flux Cored Arc Welding (FCAW-S)

1 GENERAL INFORMATION

EN 14700: T Z Fe7

- Nitrogen-containing 13% chromium martensitic stainless steel deposit with cobalt addition for optimised corrosion resistance
- The deposit resists corrosion, stress corrosion, erosion, galling, thermal shocks and thermal fatigue
- Extensively used as a cladding alloy for rebuilding steel mill rolls subject to repetitive thermal stresses, corrosion and metal-to-metal wear



Continuous casting rolls, hot-rolling mills, steam turbines, valve seats, etc.

Abrasion	████	████	████	████	████
Impact	████	████	████	████	████
Metal-metal	████	████	████	████	████
Corrosion	████	████	████	████	████
Temperature	████	████	████	████	████

2 ALL WELD METAL PROPERTIES

CHEMICAL ANALYSIS [%]

C	Mn	Si	Cr	Ni	Mo	N	Co	V	W
0.05	1.2	0.8	13.5	4.5	0.5	0.07	2.0	0.5	0.8

HARDNESS

40-45 HRC (as welded, three-layers)

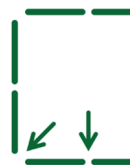
3 RECOMMENDED WELDING PARAMETERS

Diameter [mm]	Welding Position	Polarity	Current [A]	Voltage [V]	Stick-out [mm]
1.6	PA / 1G or 1F	DC+	200 - 300	25 - 29	25 ± 5
2.0	PA / 1G or 1F	DC+	220 - 330	26 - 30	25 ± 5
2.4	PA / 1G or 1F	DC+	250 - 350	26 - 30	30 ± 5
2.8	PA / 1G or 1F	DC+	350 - 450	27 - 31	30 ± 5
3.2	PA / 1G or 1F	DC+	400 - 500	28 - 32	30 ± 5

WELDING PROTECTION

Self-shielded

WELDING POSITION



4 PACKAGING OPTIONS

Diameter [mm]	1.6 - 2.4	2.4 - 3.2	2.4 - 3.2
Standard packaging (EN ISO 544)	BS 300 spool	B 450 coil	Drum
Weight [kg]	15	25	Up to 330

Other packaging requirements: please consult us