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Durinox™ F12N is a weldable chromium containing utility stainless steel and is suitable for non-severe corrosive environments generally found in agricultural industries. This grade is a superior alternative to carbon steel and austenitic stainless steel (such as 304) in numerous applications notably those involving wet abrasive and/or corrosive conditions. Durinox™ F12N resists abrasion and corrosion in high heat and high steam areas and can last five times longer than carbon steel in many applications.

Typical example of the uses of Durinox™ F12N are:

- Storage tanks, bins, and hoppers
- Agricultural silos and cyclone
- Cane and bagasse carriers
- Chutes, diffuser parts and liners
- Vacuum pans
- Dryer
- Ducting
- Waste and water treatment plant

Durinox™ F12N

Durinox™ F12N adalah baja kromium tahan karat dengan sifat mampu las yang baik dan cocok untuk lingkungan korosi tidak berat yang umumnya terdapat pada industri pertanian dan perkebunan. Durinox™ F12N merupakan alternatif yang lebih baik dibandingkan baja karbon biasa dan baja tahan karat austenitik (seperti 304) di beberapa aplikasi – khususnya yang melibatkan kondisi abrasi dan/atau korosi basah. Durinox™ F12N tahan terhadap abrasi dan korosi pada area panas dan uap tinggi serta lima kali lebih tahan lama dibandingkan baja karbon biasa dalam banyak aplikasi.

Beberapa contoh umum penggunaan Durinox™ sebagai berikut:

- Storage tanks, bins, and hoppers
- Agricultural silos and cyclone
- Cane and bagasse carriers
- Chutes, diffuser parts and liners
- Vacuum pans
- Dryer
- Ducting
- Waste and water treatment plant

Sifat Mekanik / Mechanical Properties

Grade	Tensile Strength (MPa) min	Yield Strength (MPa) min	Elongation (%) min	Hardness Brinell (HB) min	Cold Bend Transverse direction Bend radius = 1T
F12N	455	275	18	220	-
SUS 304	515	250	40	200	180°
Mild Steel	375	250	20	180	180°

Komposisi Kimia / Chemical Composition (Max. % in Weight)

C	Mn	Si	P	S	Cr	Ni
0.03	1.50	1.00	0.025	0.005	10.5 - 12.5	0.3 - 1.0

Sifat Fisik / Physical Properties

Grade	Density (g/cm ³)	Average thermal expansion Coefficient from 0°C to		Thermal Conductivity 100°C (W.m.K)	Electrical resistivity nΩ.m	Specific Heat (J/kg.°K)	Young Modulus (GPa)
		100°C μ/m.°C	538°C μ/m.°C				
F12N	7.7	10.8	11.9	23	580	460	220
SUS 304	8.0	17.2	18.4	16.2	720	500	193
SUS 316	8.0	15.9	17.5	16.2	740	500	193
Mild Steel	7.8	12.2	14.3	57.8	142	-	-

Ketersediaan / Availability

Durinox™ F12N is available as hot rolled sheet and plates with no. 1 (as rolled) finish. Durinox™ F12N tersedia dalam bentuk lembaran dan pelat canai panas dengan permukaan no. 1 (as rolled).

Width / Lebar	Length / Panjang	Thickness / Ketebalan (mm)
1,500mm	6,000mm	1.6, 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 25

Other sizes and surface finish may be available upon request. Ukuran dan surface finish lainnya dapat tersedia sesuai permintaan.

