

Astrup MDS

Duplex

Material Description

Hot rolled/ forged stainless bar steel
Annealed, straightened
Peel turned and polished

Quality

SAF 2205 / EN 1.4462 /
UNS S31803/S32205 / F51

Chemical composition

C %	Si %	Mn %	Cr %	Mo %	Ni %	P %	S %	N %	PREn
			22,0	3,0	4,5			0,08	≥ 30
0,03	1,0	2,0	23,0	3,5	6,5	0,03	0,015	0,22	

Mechanical properties

Yield strenght Rp 0,2% (N/mm ²)	Tensile strenght Rm (N/mm ²)	Elongation A5 %	Contraction Z %	Impact value Kv/J (-40 °C)	Hardness HRC	Hardness HB
Min 450	Min 650	Min 25	-	Min 45 avg.		
	Max 880			Min 35 Single	Max 28	Max 270

Technical requirements

X2CrNiMoN 22-5-3
ASTM A182-11A (Chemical composition and mechanical properties only)
ASTM A479-11
ASTM A276-10
NORSOK M650, M630 MDS D47
M630 MDS D44 (Chemical composition and mechanical properties only).
NACE MR0175/ISO 15156-3: 2009
Acc. to PED 97/23/EC
Corrosion test acc. to ASTM G48A, 25 °C/24H.
Intergranular corrosion test acc. to ASTM A262 PR.E
Ferrite acc. to ASTM E562: 35-55%
Heat treatment: Solution treated 1020 °C min, water quenched
Ultrasonic test acc. to EN 10228-4 / ASTM A388 ≥75MM
Micrographic photo X500

Certificate

Acc to EN 10204/3.1

Form of supply

Lengths from 3-7 meter, depending on diameter.
Max weight per subject: 5000 kg

Marking

Astrup purchase number.
Each bar to be marked or hard stamped with charge number, quality and dimension.