

51257



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CERTIFICATE OF QUALITY AND MATERIAL TESTING

INSPECTION CERTIFICATE N. AC/ 0861 DATE : 01/03/12
 according to EN 10204.3.1

FIRM :
 ORDER : 160858 ORDER CONFIRMATION : 110716

HEAT	N. of PCS	MATERIAL DESCRIPTION	MATERIAL GRADE
51257	2	ROUND FORGED TURNED BAR 24"	316L RoHS DFARS-225.1 AMS 5648K AMS 5653F ASTM A479/A479M-04 ASTM A473-01 ASTM A276-04a NACE Std-MR0175-99 ASME SA-336/SA-336M ASME SA-479/SA-479M ASTM A484/A484M-08b AMS QQS-763-B ASTM A314 ASME SA 965

H.T. CONDITION: Solution annealed at 1900 deg F minimum + water quenched

HEAT ANALYSIS

C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Sn
0,021	1,78	0,29	0,022	0,0268	16,81	10,28	2,05	0,286	
Ca	Al	V	Ti	W	Ta	As	Co	Nb	Pb
B	N	Zr	Sb	Fe	PRE	Ferrite (%)ASTM E562	Grain size ASTM E112		
	0,079						5		

TEST RESULTS ON ACTUAL BAR PROLONGATION

Temp. [°C]	Direction	R _{p0.2} [KSI]	R _m [KSI]	A [%]	Z [%]	KV (10 x 10 mm) [J]	HB
RT	T	39,8	81,0	60,0	65,9		146

Steelmaking process E.A.F. + AOD refining
 No welding performed on material
 Material free from Mercury contamination
 Material inspected with a gamma spectrometer and with no radioactive contamination beyond the limits provided for by the EU-Radiation Protection 122-part 1, when relevant
 Mechanical tests performed according to ASTM A370 (tensile 0.5" x 2" gage specimen) + ASTM E10
 Corrosion test according to ASTM A262 Pr. E satisfactory performed
 Chemical analysis and mechanical properties according to ASTM A182/A182M-04 ASME SA-182/SA-182M
 Chemical analysis according to ASTM A193/A193M-08a - ASTM A320/A320M-08 (316) - ASME SA320/SA320M02 (316) - ASME SA193/SA193M-08 - ASTM A580
 Mechanical test results reported for info only

SURVEYORS

CUSTOMER INSPECTION

ITALFOND S.p.A.

Quality Assurance

[Handwritten signature and stamp]

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