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CERTIFICATE OF QUALITY AND MATERIAL TESTING

INSPECTION CERTIFICATE N. AC/ 0099 DATE : 11/01/07
 according to EN 10204.3.1

FIRM : THYSSENKRUPP MATERIALS.NA - SOUTHFIELD (USA)
 ORDER : CL7975 ORDER CONFIRMATION : 060476

HEAT	N. of PCS	MATERIAL DESCRIPTION	MATERIAL GRADE
42621	2	Forged Round Peeled bar 13" dia	316/316L

H.T. CONDITION: Solution annealed 1050°C (14h) + water quenched

HEAT ANALYSIS

C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Sn
0,021	2,00	0,23	0,029	0,022	17,11	10,16	2,02	0,293	
Ca	Al	V	Ti	W	Ta	As	Co	Nb	Pb
B	N	Zr	Sb	Fe	PRE	Ferrite (%)		Grain size ASTM E112	
	0,084								

TEST RESULTS ON ACTUAL BAR PROLONGATION

Temp. [°C]	Direction	Rp _{0.2} [KSI]	Rm [KSI]	A [%]	Z [%]	KV (10 X 10 mm) [J]	HB
RT	T	46,2	73,2	46,4	61,1		184

Steelmaking process E.A.F. + AOD refining
 No welding performed on material
 Material free from Mercury contamination
 Mechanical tests performed according to ASTM A370 (tensile 0.5" x 2" gage specimen) + ASTM E10
 According to: ASTM A276 - A479 - AMS 5648 - AMS 5653

SURVEYORS

CUSTOMER INSPECTION

ITALFOND S.p.A.
 Quality Assurance

ITALFOND S.p.A.
 stainless steel
 GASTALIA GUARITA