

1 pc

HT# 44160

Tel. (+39).030.6829911
Fax. (39).030.6820818
Via Industriale. 1 - 28021 BAGNOLO MELLA (BS) ITALY

ITALFOND

CERTIFICATE OF QUALITY AND MATERIAL TESTING

INSPECTION CERTIFICATE N.

ACI 0571

DATE : 31/01/08

according to EN 10204.3.1

FIRM :

ORDER :

P993885 423

ORDER CONFIRMATION : 070371

HEAT	N. of PCS	MATERIAL DESCRIPTION	MATERIAL GRADE
44160	2	FORCED ROLIND PEELED BAR 16" DIA	316/316L

H.T. CONDITION: Solution annealed 1050°C + water quenched

HEAT ANALYSIS

C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Sn
0,022	1,80	0,38	0,027	0,024	18,95	10,20	2,03	0,281	
Ca	Al	V	Ti	W	Ta	As	Co	Nb	Pb
B	N	Zr	Sb	Fe	PRE	ferrite (%)	Grain size	ASTM E112	
	0,061						8/4		

TEST RESULTS ON ACTUAL BAR PROLONGATION

Temp. [°C]	Direction	Rp0.2 [KSI]	Rm [KSI]	A [%]	Z [%]	KV (10 X 10 mm) [J]	HB
RT	T	42,1	81,2	45,2	64,8		165

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
 Material according to: ANI MA276 - A479 - ASME SA479 - QQS 763 - AMS 3648 - AMS 5653
 Corrosion test according to ASTM A262 Part B satisfactory performed

SURVEYORS

CUSTOMER INSPECTION

ITALFOND Sp.A.
 Quality Assurance
 GARANZIA QUALITÀ

E16370 P10P2

44160



ITALFOND

Tel. (39) (030) 6829911
Fax. (39) (030) 6820818
Via Industriale, 1 - 25021 BAGNOLO MELLA (BS) ITALY

CERTIFICATE OF QUALITY AND MATERIAL TESTING

MACROGRAPHIC EXAMINATION

INSPECTION CERTIFICATE N.

MA/ 0571

DATE : 31/01/08

according to EN 10204.3.1

FIRM :

ORDER : P99B885 423

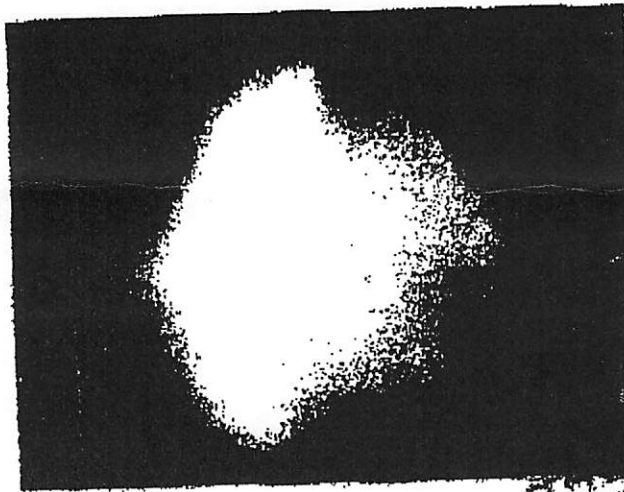
ORDER CONFIRMATION: 070371

HEAT	N. of PCS	MATERIAL DESCRIPTION	MATERIAL GRADE
44160	2	FORGED ROUND PEELED BAR 16" DIA	316/316L

H.T CONDITION : Solution annealed 1050°C + water quenched

MACROGRAPHIC EXAMINATION

Etching: boiling mixture 50% HCl - Water



RESULT: Free from macroscopic defects

SURVEYORS

CUSTOMER INSPECTION

ITALFOND S.p.A.

The metallurgical

ITALFOND

and Caporello

GARANZIA QUALITÀ

P 2 of 2