



COGNE ACCIAI SPECIALI S.p.a.  
 "Socio Unico"  
 11100 AOSTA - VIA PARAVERA 16  
 TEL. +39 0165 3021 - FAX +39 0165 302296  
 CAP. 11020 00000 EUR INT. VERS.  
 VAT: IT00571320476 C.F. 02197389887  
 REG. IMP. ACO09 - 7234 REA 56474



800563

INSPECTION CERTIFICATE 3.1 (EN 10204:2004)  
 (A03) DOCUMENT NUMBER 2008031157  
 PAGE 1/2

(A06) CUSTOMER : ASA ALLOYS INC.  
 (A07) CUSTOMER'S ORDER : P014444  
 (A01) MANUFACTURER'S WORKS : AOSTA, VIA PARAVERA 16 - ITALY  
 (A05) PRODUCER OF THE DOC: QUALITY DEPARTMENT  
 (A08) MANUFACTURER'S WORKS ORDER NO: 25086980 /190 (A04) MARK OF THE MANUFACTURER : COGNE  
 (A09) DISPATCH NOTE : 80497569 /10 (B14) WEIGHT : 4,664.90

SPECIFICATION :  
 (B01) PRODUCT : CAS-A  
 (B04) PRODUCT AS-DELIV. CONDIT: 23910 SPE FORGED ROUGHPEELED -1X ROUND BARS RSTD  
 (B15) PRODUCT DIMENSIONS (INCH) : RS SOLUTION TREATED  
 (B02) STEEL GRADE TYPE : 12.000  
 (B08) HEAT NUMBER : 316/316L IMCO316L  
 (B06) MARKING OF THE PRODUCT : 800563  
 (B16) LENGTH (INCH) : 00118 /00236  
 INTERNAL GRADE : F316L 1.4404  
 (B07) LOT NUMBER : 516440  
 TEST PIECE N. : 644

THE MATERIAL MEETS THE REQUIREMENTS OF ASTM A182/A182M-05 F316/F316L.  
 THE MATERIAL MEETS THE REQUIREMENTS OF ASTM A276-06, A479/A479M-05TP F316 AND F316L.  
 THE MATERIAL MEETS THE REQUIREMENTS OF ASTM A193/A193M-06 B8M.  
 MATERIAL PRODUCED ACCORDING TO PED 97/23/CE  
 THE MATERIAL MEETS THE REQUIREMENTS OF ASTM A484/484M-05  
 THE MATERIAL MEETS THE REQUIREMENTS OF ASME SA182/SA182M (05)  
 THE MATERIAL MEETS THE REQUIREMENTS OF ASME SA479/SA479M-05, TP 316L  
 MATERIAL CORRESPOND TO AMS 5648/02

(C71) CHEMICAL COMPOSITION - LADLE ANALYSIS ACCORDING ASTM E1019-E1086-E415

Ref.	C	Si	Mn	P	S	N	Cr	Mo	Ni	Cu
020000294382	0.018	0.330	1.800	0.036	0.025	0.083	16.900	2.000	10.140	0.400
OBTAINED	0.170									

HARDNESS TEST IN AS DELIVERED CONDITION  
 Ref. 020000297151  
 SPECIFICATION ENISO6506  
 OBTAINED 167.0  
 HARDNESS TEST HB

TENSILE TEST IN AS DELIVERY CONDITION  
 Ref. 020000297151  
 SPECIFICATION EN 10002  
 MEASUREMENT UNIT RM RP02 Z AL2  
 OBTAINED KSI KSI % %  
 81.80 49.46 52.00 4,0 D  
 55.00

(C02) DIRECTION OF THE TEST PIECE: T

E16703 P 1078



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 11100 AOSTA - VIA PARAVERA, 16  
 TEL. +39.0165.3021 - FAX +39.0165.302298  
 CAP. SOC. 80.000.000 EUR INT. VERS.  
 VAT: IT025715220078 C.F. 02187060007  
 REG. IMP. A0002 - 7234 REA 50474



INSPECTION CERTIFICATE 3.1 (EN 10204:2004)  
 (A03) DOCUMENT NUMBER 2008031157  
 PAGE 2/2

GRAIN SIZE  
 Ref. 020000297151  
 SPECIFICATION ASTME112 --  
 OBTAINED 0

THE MATERIAL MEETS THE REQUIREMENTS OF SS 14 23 48  
 ULTRASONIC TEST AT 100% : SATISFACTORY  
 VISUAL INSPECTION OF SURFACE AND MEASURE OF DIMENSIONS: O.K.  
 NO WELDING WITH FILLER METAL OR SPICING HAS BEEN PERFORMED ON THIS PRODUCT  
 MATERIAL IS FREE OF MERCURY CONTAMINATION  
 100% ANTIMIX-UP TEST CARRIED OUT  
 HEAT TREATMENT: SOLUTION TREATED 1050 DEGREES CELSIUS MAINTAINED FOR  
 MINIMUM PERIOD OF 30 MINUTES FOR INCH AND WATER QUENCHED.  
 THE TEST CORROSION IS IN AGREEMENT WITH ASTM A262/02a P.E  
 MATERIAL CORRESPOND TO AMS 5653E/02  
 MICRO AND MACRO STRUCTURE TESTED: GOOD  
 THE MATERIAL MEETS THE REQUIREMENTS OF THE A.M. SPECIFICATION  
 THE MATERIAL MEETS THE REQUIREMENTS OF SAE AMS QQS 763/03  
 STEELMAKING AEF + AOD  
 THE MATERIAL MEETS THE REQUIREMENTS OF  
 2000/53/EC - 2002/95/EC - 2003/11/EC - 2005/618/EC  
 QUALITY SYSTEM CERTIFIED BY I.G.Q ACCORDING TO UNI EN ISO  
 9001:2000 - ISO/TS 16949:2002 (THE LAST ONLY FOR HOT ROLLED-PEELED-  
 GROUND, STAINLESS STEEL BARS AND ATOMIZED METALLIC POWDERS).

2008

(Z01) DATE 29.05.2008

REY GRAZIA CF (QUALITY CERTIFICATOR) - ELECTRONICALLY GENERATED CERTIFICATE