

C175987



COGNE ACCIAI SPECIALI S.p.a.

ITALY - 11100 AOSTA - VIA PARAVERA, 16  
TEL +39.0165.3021 - FAX +39.0165.302296  
CAP. SOC. 100.000.000 EUR INT. VERS.  
C.F. 02187360967  
VAT: IT00571320076 - R.E.A. n. AO-50474

Company with management systems IGO  
approved and certified according to ISO 9001,  
ISO/TS 16949 e ISO 14001.

INSPECTION CERTIFICATE 3.1 (EN 10204:2004)  
DOCUMENT NUMBER 2017006883  
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CUSTOMER: COGNE SPECIALTY STEEL USA, INC  
CUSTOMER'S ORDER: P039482  
MANUFACTURER'S WORKS: AOSTA, VIA PARAVERA 16 - ITALY  
PRODUCER OF THE DOC: QUALITY DEPARTMENT  
MANUFACTURER'S WORKS ORDER NO: 25215686 /70 MARK OF THE MANUFACTURER: COGNE  
DISPATCH NOTE: 81100709 /10 WEIGHT: 15,630.51  
THE CERTIFIED PRODUCTS ARE COMPLYING TO THE PURCHASE ORDER

INTERNAL SPEC: AMSQQS763  
PRODUCT: 60028 LMS MACHINED ROUND BARS TOLERANCE: + 0,1182 - 0  
SURFACE FINISH: 1X Hot Finished  
PRODUCT DELIVERY CONDITION: RS SOLUTION ANNEALED  
PRODUCT DIMENSIONS (Inch): 18.750 LENGTH (inch) 00098 /00118  
GRADE: AISI 316/316L - UNS31600/31603 INTERNAL GRADE: 316L 4  
IDENTIFICATION HEAT NO: 602334 IDENTIFICATION LOT NO: 051850  
MARKING OF THE PRODUCT: 316L TEST PIECE N: 185

REFERENCE NORMS: ASTM A276/276M(16), ASTM A479/A479M(16), ASTM A484/A484M(16), ASTM A193/A193M(16) B8MCL1, ASME SA276(15), ASME SA479(15), ASME SA484(15), ASME SA193(15) B8MCL1, AMS5653H, AMS5648L, AMS-QQS-763D2015, NACE MR0175/ISO15156-3(15), NACE MR0103 2015, NORSOK M630 MDS S01 Rev5, EN 10272(07).

REFERENCE NORMS FOR CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES: ASTM A182/A182M(15)/ASME SA182(15), ASTM A314/A314M(15)/ASME SA320(15), ASTM A320/A320M(15A)/ASME SA320 (15) B8MCL1, EN 10222-5(2000).

AISI 316/316L UNS S31600/S31603, EN 1.4401/1.4404.

SOLUTION TREATED AT 1050°C / 1 min x mm / WATER.

STEELMAKING EAF + AOD

QTC ON PROLONGATION OF BARS TESTS AT MID RADIUS (CENTER POS. FOR SIZES <2 INCHES).

HOT FORGED

REDUCTION RATIO 5.4  
INITIAL STATUS 0.0

CHEM. COMP. (%W/W) - LADLE ANALYSIS ACCORDING TO ASTM E1019-A751-E1086-E415-A580

Control lot No. - Weight	:020000662626	-	82,594	KG								
ELEMENTS OBTAINED	C	Si	Mn	P	S	N	Cr	Mo	Ni	Cu		
ELEMENTS OBTAINED	0.020	0.45	1.90	0.030	0.0009	0.076	16.95	2.04	10.18	0.35		
	Co											
	0.10											

HARDNESS TEST IN AS DELIVERY CONDITION

Control lot No. - Weight :020000670603 - 15,020 KG  
SPECIFICATION ASTM A370-E10 HARDNESS TEST HRC TESTING METHOD: 10/3000  
OBTAINED 21

IMPACT TEST IN AS DELIVERY CONDITION

Control lot No. - Weight :020000670603 - 15,020 KG  
SPECIFICATION EN ISO 148-1-KV2 DIRECTION OF THE TEST PIECE: T  
TYPE OF TEST PIECE KV  
TEST TEMPERATURE °C 196-  
MEASUREMENT UNIT J  
OBTAINED 120 91 119

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GRAIN SIZE  
Control lot No. - Weight :020000670603 - 15,020 KG  
SPECIFICATION OBTAINED 1 2 ASTME112 --

HARDNESS TEST  
Control lot No. - Weight :020000670603 - 15,020 KG  
SPECIFICATION OBTAINED 163 ENISO6506 HARDNESS TEST HB TESTING METHOD:

TENSILE TEST  
Control lot No. - Weight :020000670603 - 15,020 KG  
SPECIFICATION OBTAINED ASTMA370-E8-0.5"SPEC DIRECTION OF THE TEST PIECE: T

MEASUREMENT UNIT	TS KSI	YS KSI	RA %	EL4 %
OBTAINED	80	36	81.3	4,0 D 64.6

SURFACE CONTROL BY VISUAL INSPECTION: SATISFACTORY.  
DIMENSIONAL CONTROL ACCORDING TO ASTM A484: SATISFACTORY.  
ULTRASONIC TEST ACCORDING TO ASTM A388 FBH 8 (FBH11 FOR SIZES >400 MM): SATISFACTORY.  
MARKING: PRODUCER LOGO, MATERIAL NO, HEAT NO, LOT NR.  
ALL THE NORMS MENTIONED ARE INTENDED IN THEIR LATEST REVISION AT THE DATE OF ISSUE OF THIS DOCUMENT.  
COUNTRY OF ORIGIN: ITALY, THE MATERIAL COMPLIES WITH FAR DFARS 252.225-7009 ALT 1.  
THE MATERIAL IS FREE OF ANY MERCURY, MERCURY COMPOUNDS AND OR RADIUM CONTAMINATION AT TIME OF SHIPMENT AND WAS PRODUCED WITHOUT USING OZONE DEPLETING SUBSTANCES OF CLASS I AND II.  
THE ABOVE ARE TRUE AND CORRECT RESULTS OF TESTS ON SAMPLES OF THE MATERIAL. RESULTS ARE CONFORM TO THE SPECIFICATION(S) APPLICABLE AND ARE RECORDED.  
THE RECORDING OF FALSE, FICTIOUS OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS DOCUMENT MAY BE PUNISHABLE AS A FELONY UNDER U.S. FEDERAL STATUTES.  
THE PRODUCT SATISFIES CE DIRECTIVES: 2011/65 (ROHS2) - 2000/53 - 2002/95 (RoHS) - 2003/11 - 2005/618 AND PED 2014/68/EU.

DATE 13.02.2017

CRISTINA DE PASQUALE MV (QUALITY CERTIFICATOR) - ELECTRONICALLY GENERATED CERTIFICATE

-Cogne