

IT# 702281

CA20730A 1/2



COGNE ACCIAI SPECIALI S.p.A.

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SOCIETA' PER AZIENDA EUROPEA S.p.A.  
C.F. 03774990100 EUR INT. VERB.  
VAT. IT00571320076 - R.E.A. n. AO-50474

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

INSPECTION CERTIFICATE 3.1 (EN 10204:2004)  
DOCUMENT NUMBER 2018004530  
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CUSTOMER: COGNE SPECIALTY STEEL USA, INC  
P041762

CUSTOMER'S ORDER: AOSTA, VIA PARAVERA 16 - ITALY  
MANUFACTURER'S WORKS: QUALITY DEPARTMENT

PRODUCER OF THE DOC: MARK OF THE MANUFACTURER: COGNE  
MANUFACTURER'S WORKS ORDER NO: 25227801 / 10  
DISPATCH NOTE: 81176261 / 10 WEIGHT: 19,764.11

INTERNAL SPEC: THE CERTIFIED PRODUCTS ARE COMPLYING TO THE PURCHASE ORDER  
AMSQQS763

PRODUCT: LMA MACHINED ROUND BARS TOLERANCE: + 0,197 - 0  
SURFACE FINISH: 1X Hot Finished

PRODUCT DELIVERY CONDITION: RS SOLUTION ANNEALED  
PRODUCT DIMENSIONS (Inch): 23.500

GRADE: AISI 316/316L - UNS31600/31603 LENGTH (inch) 00071 / 00079  
IDENTIFICATION HEAT NO: 702281 INTERNAL GRADE: 316L 4  
MARKING OF THE PRODUCT: 316L IDENTIFICATION LOT NO: 425080  
TEST PIECE N: 508

REFERENCE NORMS: ASTM A276/276M(16), ASTM A479/A479M(16), ASTM A484/A484M(16), ASTM A193/A193M(16) B8MCL1, ASME SA276(16), ASME SA479(16), ASME SA484(16), ASME SA193(16) 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  
OTC 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 : 020000714596 -	90,711	KG																		
ELEMENTS OBTAINED	C	0.018	Si	0.42	Mn	1.86	P	0.027	S	0.0005	N2	0.080	Cr	16.78	Mo	2.05	Ni	10.07	Cu	0.37
ELEMENTS OBTAINED	Co		Co																	

HARDNESS TEST IN AS DELIVERY CONDITION  
Control lot No. - Weight : 020000714955 -  
SPECIFICATION 21  
ASTMA370-E10 15,720 KG  
HARDNESS TEST HRC TESTING METHOD: 10/3000

IMPACT TEST IN AS DELIVERY CONDITION  
Control lot No. - Weight : 020000714955 -  
SPECIFICATION EN ISO 148-1-KV2 15,720 KG  
TYPE OF TEST PIECE KV 196-  
TEST TEMPERATURE °C J  
MEASUREMENT UNIT 98 110 104  
OBTAINED

DIRECTION OF THE TEST PIECE: I

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GRAIN SIZE  
Control lot No. - Weight : 020000714955 - 15,720 KG  
SPECIFICATION --  
OBTAINED 0 1 ASTM E112

HARDNESS TEST  
Control lot No. - Weight : 020000714955 - 15,720 KG  
SPECIFICATION - EN ISO 6506  
OBTAINED 163  
HARDNESS TEST HB TESTING METHOD:

TENSILE TEST  
Control lot No. - Weight : 020000714955 - 15,720 KG  
SPECIFICATION - ASTM A370-E8-0.5" SPEC  
DIRECTION OF THE TEST PIECE: T  
MEASUREMENT UNIT TS YS RA EL4  
OBTAINED KSI KSI % %  
80 45 79.9 4,0 D  
66.4

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 LAST REVISION AT THE DATE OF ISSUE OF THIS DOCUMENT.  
COUNTRY OF ORIGIN: ITALY, THE MATERIAL COMPLEIES 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 26.01.2018

MORABITO ROSA CF (QUALITY CERTIFICATOR) - ELECTRONICALLY GENERATED CERTIFICATE

-Cogne