

# ROLDAN, S.A. - Stainless Steels

**FACTORY**

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**HEAD OFFICE**

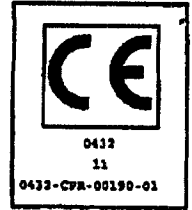
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## INSPECTION CERTIFICATE

3.1  
 EN 10204




TÜVRheinland<sup>®</sup>  
**CERT**  
 ISO 9001



CERTIFICATE N°	2015/006349	DATE	2/04/2015	SHEET	1	DELIVERY NOTE N°	2015/001150
GRADE	EOLDAMAX-339 EN10.088.3 ( 1.4401/1.4404. )						
DIMENSIONS	41.27 mm.						
LENGTH	3.100 mm.	TOLERANCE	ISO h10				
PRODUCT	[31] Round bar, annealed, smooth turned, polished						
REQUIREMENTS	EN 10.088.3	CUSTOMER ORDER	49395700				
TENSILE TEST	EN ISO 6992-1						
ACCORDING TO	EN 10.272	EDITION	AD-2000 W2 AD-2000 W10				
INTERGRANULAR CORROSION	EN ISO 1651-2 SATISFACTORY						WITHOUT OBJECTIONS
SURFACE AND DIMENSIONS CONTROL	WITHOUT OBJECTIONS						Spektrometrical Identity Test: O.K.
IMPACT TEST, SAMPLE DIMENSIONS	EN ISO 148-1						MATERIAL FREE FROM RADIOACTIVITY EN 10.088.5

ORDER N°	WORKS N°	MARKS / BOX	HEAT NUMBER	SAMPLE	WEIGHT
PL02432 11		9 / RH15942	J1AW	J1AW	527
		10 / RH15944	J1AW	J1AW	463
		11 / RH15947	J1AW	J1AW	459

**PRODUCTION PROCESS**  
 EAF + AOD + CC

**TRADE MARK**  


**MARKING**  
 HEAT NUMBER  
 GRADE ( ACE-339 )

**INSPECTOR STAMP**  
**R3**

**QUALITY INSPECTOR**  
 JUAN JOSE ALVAREZ RODRIGUEZ

**QUALITY CONTROL REPRESENTATIVE**  
 Signature is not necessary according to EN 10.134

CAST	SAMPLE	SAMPLE DIMENSIONS mm.	Observ. T°	Rm MPa	Rp 0.2% MPa	Rp 1% MPa	Z %	A %		Agt %	IMPACT STRENGTH ISO-V (J)		HARDNESS HB	FATIGUE TEST	BEND TEST	CROSS SECTIONAL AREA mm²	kg / m
								Lo50	Lo100		20°C	-196°C					
J1AW	J1AW	30.00	20°C	589	353	408	70	83	88				162				
REQUIREMENTS	EN ISO 377			500	200	235	60				100	40	215				

CAST	CHEMICAL COMPOSITION %												
	C	P	S	Si	Mn	Cr	Ni	Mo	Ti	N	Cu	Co	
J1AW	0.0190	0.0330	0.0240	0.3720	1.3231	16.7900	10.5010	2.0220	0.0060	0.0460	0.3520	0.2340	
REQUIREMENTS	0.0300	0.0450	0.0300	1.0000	2.0000	16.5000	10.0000	2.0000		0.1100			

**OBSERVATIONS**  
 EN 10.088.3 - 1.4401/1.4404. AISI 316/316L. UNS S31600/S31603.  
 ASTM A-182. ASTM A-193. ASTM A-276. ASTM A-479. ASME SA-182. ASME SA-193. ASME SA-479.  
 ASTM A-262 practice "B". NACE MR0175 & MR0183.

<b>OTHER TEST RESULTS</b>	1.050 °C AND WATERCOOLED	<b>REQUIREMENTS</b>	TRD100 TRB100, AD-2000-W2-W10, DGR197/23/BC (FRD)
<b>HEAT TREATMENT</b>			

**FLOW TECHNOLOGY LTD**  
 TEST CERTIFICATE  
 VERIFIED TRUE  
 COPY OF ORIGINAL

F11654  
 3/4" BSP All Swivel Tee 10K