

CD22842B

ASA PO 777 86 WO 5897 CPA 6 FOE 80

52 pcs + 50 pcs  
4/13/11  
JCC

CO 74649  
1 of 2



**CARRS STAINLESS STEELS**

A Division of ELG Haniel Metals Ltd.  
Wadsley Bridge, Sheffield, S6 1LL, England

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Purchaser - Besteller - Acheteur  ASA Alloys Div of CSM ULC 20 Challenger Crescent Sherwood Park Alberta T8H 2R1 Canada	Inspection Certificate: Abnahmeprüfzeugnis: Certificat de reception:	DIN 50049 3.1 EN 10204	Cert No: Zeugnis Nr: Cert No:	133215	Date: Datum: Date:	21/02/13
	Customer Order No: Kundenbestellnummer: No. de Commande Client:	P028593	Product Description - Beschreibung des Erzeugnisses - Description du Produit: 9in Dia. x 8800lbs Electric Melt & Vacuum Degassed Stainless Steel Solution Annealed Forged ASTM A182/ASTM A479 316 Nace MR0175:2003			
	Our Order No: Unsere Auftr.-Nr: notre Comm. No:	49886  W138265/00	8455 LB 3834 Kgs.			

OK  
4/9/13

Chemical Analysis - Chemische Analyse - Analyse Chimique													
Cast No Schmelznummer No. de Coulee	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Co	N		
Heat# CD22842B	.029	.46	1.48	.035	.012	16.88	2.07	10.42	.35	.21	.048		

Heat Treatment - Wärmebehandlung - Traitement Thermique: Solution annealed @ 1060 C for 5 hours & Water Quenched

Mechanical Properties - Mechanische Eigenschaften - Caracteristiques Mechanique										
Test No Probe Nr No. d'Essai	Test dimension Probenmessung Dimension	Proof Stress Streckgrenze Limite d'Elasticite	Rp	Tensile strength Zugfestigkeit Resistance a la traction	Rm	Elong % A Bruchdehnung % Allongement %	Red of Area % Bruchdehnung % Striction %	Impact Kerbschlagzähigkeit Resilience	Hardness Härte Durete	
231627	251MM	L	263 MPa	296 MPa	540 MPa	68 %	79 %		134 HB	1
231627	251MM	Tr	254 MPa	284 MPa	535 MPa	68 %	68 %	164 J 165 J 176 J	RT	

Remarks - Bemerkungen - Remarques  
 Ultrasonically tested to ASTM A388 and found satisfactory  
 Inter-crystalline corrosion test to ASTM A262:E satisfactory  
 Inter-crystalline corrosion test to BS EN ISO 3651-2 Satisfactory  
 Grain size to ASTM E112 - 2  
 No welding performed  
 No contact with Mercury or radioactive elements  
 Macrostructure see attached sheet - 167325  
 Material produced by ELG Carrs Stainless Steels in the United Kingdom  
 Hardness Rockwell B = 75



The material detailed has been manufactured and tested in accordance with the Quality Assurance system ISO 9001:2008 and the requirements of the specification/ order.

Signed: *C Ryall*  
 Chris Ryall - Quality Manager



Approved signatory for ELG Carrs Stainless Steels

COPY

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mc

	TECHNICAL REPORT No. 167325	 0963
Metals Technology (Testing) Ltd 6 Finchwell Close Handsworth Sheffield S13 9DF	Tel: 0114 243 7271 Fax: 0114 243 7288 office@metalsstechnology.co.uk	Page 1 of 1 Our Ref: GRT/SK Date 19/02/2013

METALLURGICAL EXAMINATION OF 1.4404 MATERIAL

Introduction

A sample 251mm diameter segment, 1.4404 material was received for macroexamination. The sample was identified as cast number CD22842B and supplied under covering order number PR3440 W138265/00

Work Carried Out

1. Macroexamination.

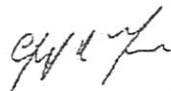
Results

1. Macroexamination

A transverse sample was prepared to 60 grit finish and was then hot etched in a 50% HCL solution for 20 minutes at approximately 80°C.

The sample appeared sound and homogeneous with no evidence of any deleterious segregation.

Reported by:-



Mr G R Tinker

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Circulation:	Mr D Greaves & M.T.T. Archive
Address:	Carrs Stainless Steels, Wadsley Bridge, Sheffield, S6 1LL
Steel Grade:	1.4404
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