

CD24607

C117154



CARRS STAINLESS STEELS

A Division of ELG Haniel Metals Ltd.

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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 réception:	DIN 50049 3.1 EN 10204	Cert No: Zeugnis Nr: Cert No:	140804	Date: Datum: Date:	30/10/14
	Customer Order No: Kundenbestellnummer: No. de Commande Client:	P033771	Product Description - Beschreibung des Erzeugnisses - Description du Produit: 13in Dia. x 8812lbs 7837 LB 3555 Kgs.			
	Our Order No: Unsere Auftr.-Nr. notre Comm. No:	53179 W144529/00	Stainless Steel Solution Annealed Forged 316/316L - ASA - MS2 rev A ASTM A182:14, A276:13a, A479:13b - F316/F316L 316/316L ASME SA182-LE, SA479-LE - F316/F316L 316/316L NACE MR0175-09/ISO 15156 API 6A / ISO 10423 ED20			

Chemical Analysis - Chemische Analyse - Analyse Chimique

Cast No Schmelznummer No. de Couteau	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	Co	N										
CD24607	.029	.45	1.14	.035	.017	16.49	2.12	10.4	.36	.19	.047										

Heat Treatment - Wärmebehandlung - Traitement Thermique

Solution annealed @ 1060 C for 4Hrs and water quenched

Mechanical Properties - Mechanische Eigenschaften - Caractéristiques Mécaniques

Test No Probe Nr No. d'Essai	Test dimension Probendimension Dimension		Proof Stress Streckgrenze Limite d'Elasticité		Tensile strength Zugfestigkeit Résistance à la traction	Elong % A Bruchdehnung % Allongement % Le 60 40		Red of Area % Z Bruchminderung % Striction %		Impact Kerbschlagzähigkeit Résistance	Hardness Härte Duro
			0.2%	1.0%							
287093	13" Dia	L	34.1 ksi	38.7 ksi	75 ksi	67 %	76 %				142 HB

Remarks - Bemerkungen - Remarques

Ultrasonically tested to ASTM A388 and found satisfactory
 Intercrystalline corrosion test to ASTM A262:E satisfactory
 Grain size to ASTM E112 -
 Material produced by ELG Carrs Stainless Steels in the United Kingdom

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:
 Chris Ryall - Quality Manager

Approved signatory for
 ELG Carrs Stainless Steels

