

CALVERT CITY STEEL MILL 1035 SHAR-CAL ROAD CALVERT CITY KY 42029 USA (270) 395-3100

Chemical and Physical Test Report **MADE IN UNITED STATES**

Y-072202

SHIP TO GERDAU CORSA SAPI DE CV TRANSPORTE DE GAS ROAN SA ZVP 16-603-717 ESCOBEDO, NL

INVOICE TO GERDAU CORSA S A P I DE CV KM 3 CARRETERA MEXICO-CD SAHAGUN S/N SAHAGUN, HG 43990

SHIP DATE 02/16/12

CUST. ACCOUNT NO 60340764

PRODUCED IN: CALVERT CITY

SHAPE + SIZE A8 X 8 X 5/8		GRAD	E	SPEC	SPECIFICATION													SĀ	SALES ORDER		CUST P.O. NUMBER			
				ASTM	ASTM A572-50 TYPE 2-07, A709 GR50/345												110	1106811-04		4500092030-04				
HEAT I.D.	C	Mn	P	S	SI	Cu	Ni	Cr	Мо	v	Nb	Sn	CEqv			1		T	T					
Y017789	.14	1.00	.005	.019	.32	.22	.08	.06	.020	.030	<.008	.010	.402					1						_

Mechanical Test:

Yield 51000 PSI, 351.63 MPA

Tensile: 72000 PSI, 496.42 MPA %El: 23.0/8in, 23.0/203.2mm Corrosion Index: 4.92

Mechanical Test:

Customer Requirements CASTING: STRAND CAST

Yield 51000 PSI, 351.63 MPA

Tensile: 73000 PSI, 503.32 MPA %EI: 24.0/8ln, 24.0/203.2mm Corresion Index: 4.92

Customer Requirements CASTING: STRAND CAST

PRODUCED IN: CALVERT CITY

SHAPE + SIZE A8 X 8 X 5/8		GRAD	Ξ	SPECI	SPECIFICATION													18	SALES ORDER			CUST P.O. NUMBER			
		A572-50T2		ASTM	ASTM A572-50 TYPE 2-07, A709 GR50/345												1	1106811-04		450	4500092030-04				
HEAT I.D.	С	Mn	Р	S	Şì	Cu	Ni	Cr	Mo	V	Nb	Sn	C Eqv						-	T		Г		501 - (100 h c = 0	
Y0 17792	.14	.98	.005	.018	.27	.25	.08	.06	.022	.026	<.008	.011	392						_	1					

Mechanical Test:

Yield 52000 PSI, 358.53 MPA Tensile: 73000 PSI, 503.32 MPA %EI: 24.0/8in, 24.0/203.2mm Corrosion Index: 5.14

Customer Requirements CASTING: STRAND CAST

Mechanical Test:

Yield 53000 PSI, 365.42 MPA Tensile: 74000 PSI, 510.21 MPA %EI: 25.0/8in, 25.0/203.2mm Corrosion Index: 5.14

Customer Requirements CASTING: STRAND CAST

Customer Notes

NO WELD REPAIRMENT PERFORMED. STEEL NOT EXPOSED TO MERCURY. This material, including the billets, was melted and manufactured in the United

States of America

Bhaskar Yelamanchili Quality Director

Gerdau

THE ABOVE FIGURES ARE CERTIFIED CHEMICAL AND PHYSICAL TEST RECORDS AS CONTAINED IN THE PERMANENT RECORDS OF COMPANY.

Metallurgical Services Manager CALVERT CITY STEEL MILL

Seller warrants that all material furnished shall comply with specifications subject to standard published manufacturing variations. NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, ARE WADE BY THE SELLER, AND SPECIFICALLY EXCLUDED ARE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, In no event shall seller be liable for indirect, consequential or punitive damages arising out of or related to the materials surnished by seller.

Any claim for damages for materials that do not conform to specifications must be made from buyer to seller immediately after delivery of same in order to allow the seller the opportunity to inspect the material in question.