

# **Chemical and Physical Test Report**

#### Made and Melted In USA

384 OLD GRASSDALE RD NE CARTERSVILLE GA 30121 USA

**CUSTOMER: GERDAU CORSA S A P I DE CV** 

SHAPE + SIZE GRADE				SPEC	IFICAT														SA	LES Ö	RDER		UST P	O. NUN	/BER
C12 X 20.7#		A36/44		ASTM	A36-08	, ASTI	M A572	GR50	-07,CS	A G40.2	21-04 4	14W, A	STM A7	09 GR	50-10										
HEAT I.D.	C	Mn	P	S	Si	Cu	Ni	Cr	Мо	V	Nb	В	N	Sn	Al	Ti	Ca	Zn	C Eqv			Γ''		Т	
G120912	.09	1.13	.007	.019	.27	.23	.08	.03	.024	.034	.001	.0010	.0100	.020	.000	.00100	.00000		.38						

Mechanical Test: **Customer Requirements** 

Yield 55000 PSI, 379.21 MPA Tensile: 71200 PSI, 490.91 MPA %EI: 22.2/8in, 22.2/200MM

CASTING: STRAND CAST

Yield 54700 PSI, 377.14 MPA Tensile: 71200 PSI, 490.91 MPA %EI: 21.1/8in, 21.1/200MM

SHAPE + SIZE GRADE				SPEC	IFICAT	ION					•								- 5	SALES O	RDER	C	UST P.O	MUM .C	BER
C12 X 20.7#		A36/5	7250X	ASTM	A36-08	3, A529	GR50-0	5,A572	2GR50		A:G40	.21 440	V/50W												
HEAT I.D.	С	Mn	P	S	Si	Cu	Ni	Cr	Мо	V	Nb	В	N	Sn	Al	Ti	Ca	Zn	C Ec	Įν					
G120912	.09	1.13	.007	.019	.27	.23	.08	.03	.024	.034	.001	.0010		.020	.000	.00100	.00000	.00100	.38	1					-

Mechanical Test:

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Yield 55000 PSI, 379.21 MPA Tensile: 71200 PSI, 490.91 MPA %EI: 22.2/8in, 22.2/200MM

Mechanical Test:

**Customer Requirements** 

**CASTING: STRAND CAST** 

Yield 54700 PSI, 377.14 MPA Tensile: 71200 PSI, 490.91 MPA %EI: 21.1/8in, 21.1/200MM

CASTING: STRAND CAST **Customer Requirements** 

All manufacturing processes including melt and cast, occurred in USA, MTR complies with EN10204 3.1B

Bhaskar Yalamanchili

**Quality Director** 

Gerdau

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

Metallurgical Services Manager CARTERSVILLE 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 MADE 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 furnished 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.



CARTERSVILLE STEEL MILL 384 OLD GRASSDALE RD NE CARTERSVILLE GA 30121 USA

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### Made and Melted in USA

### CUSTOMER: GERDAU CORSA S A P I DE CV

SHAPE + SIZE GRADE		E	SPEC	IFICA1	TION													SA	LES O	RDER	TC	UST P.O. NUMBI	ĒR	
C12 X 20.7#		A992		ASTM A992-06A												•						<del>-</del>		
HEAT I.D.	C	Mn	Р	S	Si	Çu	Ni	Cr	Мо	V	Nb	В	N	Sn	Al	Ti	Ca	Zn	C Eqv	Γ		T		
G120912	.09	1.13	.007	.019	.27	.23	.08	.03	.024	.034	.001	.0010	.0100	.020	.000	.00100	.00000	.00100	38		·			

Mechanical Test: Yield 55000 PSI, 379.21 MPA Tensile: 71200 PSI, 490.91 MPA %EI: 22.2/8in, 22.2/200MM

Mechanical Test: Yield 54700 PSI, 377.14 MPA Tensile: 71200 PSI, 490.91 MPA %EI: 21.1/8in, 21.1/200MM

Customer Requirements CASTING: STRAND CAST

SHAPE + SIZE GRADE			ÞΕ	SPEC	IFICAT								,						SA	LES O	RDER	(	CUST P.	O. NUM	BER
C12 X 20.7#		A36/57	7250X	ASTM	A36-08	3, A529	GR50-0	05,A57	2GR50	-07, CS	A:G40	.21 44	V/50W												
HEAT I.D.	С	Mn	Р	S	Si	Cu	Ni	Cr	Мо	V	Nb	В	N	Sn	Al	Ti	Ca	Zn	C Eqv	[			<u> </u>		
G120918	.08	1.14	.008	.016	.28	.25	.07	.03	.023	.033	.001	.0010	.0090	.009	.000	.0010	0.0020	0.00200							

Mechanical Test: Yield 54900 PSI, 378.52 MPA Tensile: 71600 PSI, 493.66 MPA %EI: 22.7/8in, 22.7/200MM

Mechanical Test: Yield 57300 PSI, 395.07 MPA Tensile: 73100 PSI, 504.01 MPA %EI: 23.6/8in, 23.6/200MM

Customer Requirements CASTING: STRAND CAST

All manufacturing processes including melt and cast, occurred in USA. MTR complies with EN10204 3.1B

Bhaskar Yalamanchili

Quality Director

Gerdau

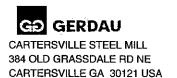
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Metallurgical Services Manager
CARTERSVILLE STEEL MILL

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## **Chemical and Physical Test Report**

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### CUSTOMER: GERDAU CORSAS A PIDE CV

SHAPE + SIZE GRADE SPECIFICATION SALES ORDER CUST P.O. NUMBER C12 X 20.7# ASTM A36-08, ASTM A572 GR50-07, CSA G40.21-04 44W, ASTM A709 GR50-10 A36/44/572 HEAT I.D. С Mn Р Cu Ni Сr Mo ٧ Nb В N Sn ΑI Ti Ca Zn C Eqv G120919 .08 1.14 .007 .021 .27 .25 .08 .03 .020 .034 <.008 .0010 .0089 .010 .000 .00100 .00000 .00200 .37

Mechanical Test: Yield 55100 PSI, 379.9 MPA Tensile: 72700 PSI, 501.25 MPA %EI: 21.9/8in, 21.9/200MM

Mechanical Test: Yield 55600 PSI, 383.35 MPA Tensile: 72800 PSI, 501.94 MPA %EI: 24.4/8in, 24.4/200MM

SHAPE + SIZE		GRAD	E	SPEC	IFICAT	ION	•			"									SA	LES O	RDER	CUST P	O. NUM	BER .
C12 X 20.7#		A36/57		ASTM	A36-08	3, A529	GR50-0	05,A57	2GR50-	-07, CS	A:G40.	21 44	V/50W											
HEAT I.D.	C	Mn	P	S	Si	Cu	Ni	Cr	Мо	٧	Nb	В	N	Sn	Al	Ti	Ca	Zn	C Eqv					
G120919	.08	1.14	.007	.021	.27	.25	.08	.03	.020	.034	<.008	.0010	.0089	.010	.000	.00100	.00000	.00200	.37		1			

Mechanical Test: Yield 55600 PSI, 383.35 MPA Tensile: 72800 PSI, 501.94 MPA %EI: 24.4/8in, 24.4/200MM

Customer Requirements CASTING: STRAND CAST

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