Bill To: GERDAU CORSA S A P I DE CV KM 3 CARRETERA MEXICO-CD SAHAGUN S/N HG SAHAGUN 43990 MΧ

Ship To: 1 GERDAU CORSA S A P I DE CV 402 GRAND CENTRAL BLVD MILO DISTRIBUTION CENTER LAREDO TX

Order Date:11/29/2011 PO No:4500085476 Mill Order No:3963328 Load No:1413736 Manifest No:2107522

CERTIFIED MATERIAL TEST REPORT GERDAU AMERISTEEL

GERDAU AMERISTEEL

Midlothian Mill 300 Ward Road Midlothian, TX 76065 (972)775-8241

SPECIFICATIONS

W 18 X 60# / W460 X 89

78045

SIZE

992/572-50

LENGTH 40 FT / 12.192 M

Nb

CE

PRODUCT WF BEAMS

ASTM A6-09, A992-06a, A572-07

Μ'n

HEAT NO: 22614330

CHEMICAL ANALYSIS P S Si Cu CrMo V Νi Sn Αl

.07 1.03 .012 .019 .27 .42 .09 .13 .029 .008 .004 .002 .019 .31

US

GRADE

PHYSICAL PROPERTIES

Yield Strength		Tensile Strength		Specimen Area		Elor	ngation	Bend Test	ROA
KSI	MPa	KSI	MPa	Sq In	Sq cm	ક	Gage Length	Dia. Result	
54.2	373.7	69.8	481.3	0.995	6.42	24.1	8 In 200	mm	
54.2	373.7	69.3	477.8	1.009	6.51	24.8	8 In 200	mm	

TENSILE TEST RATIOS

YLD/TENS TENS/YLD YLD/TENS TENS/YLD

.78 1.29 .78 1.28

All manufacturing processes of this product, including electric arc MELTING and continuous CASTING, occurred in the U.S.A. CMTR complies with EN 10204 3.1

"I hereby certify that the contents of this report are correct and accurate. All tests and operations performed by this material manufacturer or its sub-contractors, when applicable, are in compliance with the requirements of the material specifications and applicable purchaser designated requirements."

Tom L. Harrington: Quality Assurance Manager

Signed:

Notary Public (if applicable)

Date:

Bill To: GERDAU CORSA S A P I DE CV KM 3 CARRETERA MEXICO-CD SAHAGUN S/N

Ship To: 1 GERDAU CORSA S A P I DE CV 402 GRAND CENTRAL BLVD MILO DISTRIBUTION CENTER LAREDO TX

Order Date:11/29/2011 PO No:4500085476 Mill Order No:3963328 Load No:1413736 Manifest No:2107522

CERTIFIED MATERIAL TEST REPORT

GERDAU AMERISTEEL Midlothian Mill

G GERDAU AMERISTEEL

300 Ward Road Midlothian, TX 76065

(972)775-8241

SIZE

HG

MX

W 18 X 60# / W460 X 89

78045

CRADE 992/572-50

US

40 FT / 12.192 M

LENGTH

PRODUCT WF BEAMS

ASTM A6-09, A992-06a, A572-07

HEAT NO: 22614350

SPECIFICATIONS

SAHAGUN

43990

CHEMICAL ANALYSIS

C Mn P S Cu Νi CrМо Al Nb Sn CE .08 .014 .014 .26 .42 .10 .13 .033 .009 .004 .021 .31 .96 .002

PHYSICAL PROPERTIES

Yield Strength		Tensile Strength		Specimen Area		Elongation			Bend Test	ROA
KSI	MPa	KSI	MPa	Sq In	Sq cm	ે	Gage Ler	ngth	Dia. Result	
55.6	383.3	72.0	496.4	1.001	6.46	26.0	8 In	200 mm		
55.2	380.6	71.5	493.0	1.013	6.54	25.4	8 In	200 mm		

TENSILE TEST RATIOS

YLD/TENS TENS/YLD YLD/TENS TENS/YLD

.77 1.3 .77 1.29

All manufacturing processes of this product, including electric arc MELTING and continuous CASTING, occurred in the U.S.A. CMTR complies with EN 10204 3.1

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Date: Dec. 13, 2011 Signed: Date:

Tom L. Harrington: Quality Assurance Manager

Notary Public (if applicable)

2 of Page:

Bill To:
GERDAU CORSA S A P I DE CV
KM 3 CARRETERA MEXICOCD SAHAGUN S/N
SAHAGUN HG

Ship To: 1 GERDAU CORSA S A P I DE CV 402 GRAND CENTRAL BLVD

MILO DISTRIBUTION CENTER

PO No:4500085476
Mill Order No:3963328
Load No:1413736
Manifest No:2107522

Order Date:11/29/2011

CERTIFIED MATERIAL TEST REPORT GERDAU AMERISTEEL

GA GERDAU AMERISTEEL

CE

.29

Midlothian Mill
300 Ward Road
Midlothian, TX 76065
(972)775-8241

SPECIFICATIONS

43990

W 18 X 60# / W460 X 89

LAREDO

78045

MX

SIZE

LENGTH 40 FT / 12.192 M PRODUCT WF BEAMS

ASTM A6-09, A992-06a, A572-07

HEAT NO: 22614360

C Mn ₽ S Si Cu Ni CrMo Sn Al Nb .017 .007 .002 .004 .023 .011 .28 .32 .09 .12 .031 .08 .90

TX

US

GRADE

992/572-50

PHYSICAL PROPERTIES

CHEMICAL ANALYSIS

				·						
Yield Strength		Tensile Strength		Specimen Area		Elongation			Bend Test	ROA
KSI	MPa	KSI	MPa	Sq In	Sq cm	96	Gage Len	gth	Dia. Result	용
55.6	383.3	72.1	497.1	0.991	6.39	24.0	8 In	200 mm		
56.0	386.1	71.7	494.4	0.983	6.34	25.6	8 In	200 mm		

TENSILE TEST RATIOS

YLD/TENS TENS/YLD YLD/TENS TENS/YLD

.77 1.3 .78 1.28

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Signed Date: Dec. 13, 2011
Tom L. Harrington: Quality Assurance Manager

Signed:
Notary Public (if applicable)

Date:____

Page:

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Bill To: GERDAU CORSA S A P I DE CV KM 3 CARRETERA MEXICO-CD SAHAGUN S/N

CO- 402 G MILO: HG LARED MX 78045

Ship To: 1
GERDAU CORSA S A P I DE CV
402 GRAND CENTRAL BLVD
MILO DISTRIBUTION CENTER
LAREDO TX

Order Date:11/29/2011
PO No:4500085476
Mill Order No:3963328
Load No:1413736
Manifest No:2107522

CERTIFIED MATERIAL TEST REPORT GERDAU AMERISTEEL

GERDAU AMERISTEEL

Midlothian Mill
300 Ward Road
Midlothian, TX 76065
(972)775-8241

SIZE

W 18 X 60# / W460 X 89

GRADE 992/572-50

US

LENGTH 40 FT / 12.192 M PRODUCT WF BEAMS

ASTM A6-09, A992-06a, A572-07

HEAT NO: 22621340

SPECIFICATIONS

SAHAGUN

43990

340 CHEMICAL ANALYSIS

C Mn P S Si Νi Cr Mo snAl Nb CE .08 .87 .014 .043 .23 .44 .10 .12 .036 .011 .002 .003 .021 .29

PHYSICAL PROPERTIES

Yield Strength		Tensile Strength		Specimen Area		Elongation			Bend Test	ROA
KSI	MPa	KSI	MPa	Sq In	Sq cm	જ	Gage Ler	ngth	Dia. Result	
52.4	361.3	70.3	484.7	0.990	6.39	24.6	8 In	200 mm		
54.8	377.8	72.3	498.5	0.988	6.37	24.5	8 In	200 mm		

TENSILE TEST RATIOS

YLD/TENS TENS/YLD YLD/TENS TENS/YLD

.75 1.34 .76 1.32

All manufacturing processes of this product, including electric arc MELTING and continuous CASTING, occurred in the U.S.A. CMTR complies with EN 10204 3.1

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Signed Date: Dec. 13, 2011
Tom L. Harrington: Quality Assurance Manager

Signed:

Notary Public (if applicable)

Date:_____

Page: 5 of

Bill To: GERDAU CORSA S A P I DE CV KM 3 CARRETERA MEXICO-CD SAHAGUN S/N

HG MX Ship To: 1
GERDAU CORSA S A P I DE CV
402 GRAND CENTRAL BLVD
MILO DISTRIBUTION CENTER
LAREDO TX

Order Date:11/29/2011
PO No:4500085476
Mill Order No:3963328
Load No:1413736
Manifest No:2107522

CERTIFIED MATERIAL TEST REPORT

GERDAU AMERISTEEL Midlothian Mill

GERDAU AMERISTEEL

1 300 Ward Road Midlothian, TX 76065 (972)775-8241

SIZE

W 18 X 60# / W460 X 89

GRADE 992/572-50

US

LENGTH 40 FT / 12.192 M PRODUCT WF BEAMS

ASTM A6-09, A992-06a, A572-07

HEAT NO: 2261540M

SPECIFICATIONS

SAHAGUN

43990

C Mn Р S Si CuΝi crМо .035 .08 .88 .013 .23 .34 .09 .12 .031

78045

CHEMICAL ANALYSIS

.002

.003

sn

.007

Al Nb CE

.29

.019

PHYSICAL PROPERTIES

Yield Strength		Tensile Strength		Specimen Area		Elongation			Bend Test	ROA		
KSI	MPa	KSI	MPa	Sq In	Sq cm	%	Gage Ler	ngth	Dia. Result	%		
53.7	370.2	71.2	490.9	0.988	6.37	25.8	8 In	200 mm				
54.7	377.1	70.8	488.1	1.010	6.52	26.4	8 In	200 mm	•			

TENSILE TEST RATIOS

YLD/TENS TENS/YLD YLD/TENS TENS/YLD

.75 1.33 .77 1.29

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igned: ______Date: Dec. 13, 2011
Tom L. Harrington: Quality Assurance Manager

Signed:

Notary Public (if applicable)

Date:____

Page:

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