



GERDAU AÇOMINAS S.A.  
ROD MG 443 KM 7 SN FAZENDA DO CADETE  
OURO BRANCO MG  
36420-000 BRAZIL

# MILL TEST / QUALITY CERTIFICATE

CUSTOMER FAF PRODUTOS SIDERURGICOS S.A		CUSTOMER ORDER FAF 19-05-2017		SALES ORDER 5193632-000024		DIMENSIONS 45,000mm x 2000mm x 12000mm		PAGE 1/1
PRODUCT Plate			EDGE TYPE Cut edge			DELIVERY CONDITION Normalizing Rolling		DATE 08.12.2017
SPECIFICATION EN 10025-2:2004 - S355J2+N								DOCUMENT NUMBER 0003933E17

Gerdau S.A. certifies that the material herein described is in accordance with the applicable technical specifications. As mutual protection for customer and supplier, this certificate is considered as confidential and can not be transcribed or reproduced without the written authorization of Gerdau S.A.

PLATE #	WEIGHT (MT)	HEAT	SAMPLE	PLATE #	WEIGHT (MT)	HEAT	SAMPLE	PLATE #	WEIGHT (MT)	HEAT	SAMPLE
3705417201 (*)	8.478	28093384	28093384012	3705728001	8.478	27093421	27093421021	3705818501 (*)	8.478	27093746	27093746004

CHEMICAL COMPOSITION				CHEMICAL COMPOSITION				CHEMICAL COMPOSITION								
HEAT	C(%)	Mn(%)	Si(%)	P(%)	S(%)	Al T(%)	Cr(%)	Cu(%)	Ti(%)	Mo(%)	Nb(%)	Ni(%)	V(%)	B(%)	Ca(%)	N(%)
27093421	0.15	1.41	0.21	0.017	0.006	0.025	0.01	0.01	0.012	0.00	0.034	0.01	0.044	0.0002	0.0001	0.0067
27093746	0.16	1.39	0.22	0.013	0.007	0.035	0.02	0.01	0.014	0.01	0.035	0.01	0.044	0.0005	0.0000	0.0067
28093384	0.16	1.50	0.19	0.018	0.005	0.026	0.03	0.01	0.011	0.01	0.032	0.01	0.046	0.0001	0.0001	0.0055

TENSILE TEST				TENSILE TEST				TENSILE TEST				TENSILE TEST			
SAMPLE	DIRECTION	POSITION	YS(RE)(MPa)	TS(RT)(MPa)	YS/TS	ELONG/ALARG(%)	SAMPLE	DIRECTION	POSITION	TEMP/TEMP(C)	IND EN/EN IND(J)	IND EN/EN IND(J)	IND EN/EN IND(J)	AVG EN/EN MD(J)	
27093421021	Transversal	1/4 Width / Ancho	375	514	0.73	28.0	27093421021	Longitudinal	1/4 Width / Ancho	-20	136	179	180	165	
27093746004	Transversal	1/4 Width / Ancho	388	534	0.73	23.0	27093746004	Longitudinal	1/4 Width / Ancho	-20	133	98	130	120	
28093384012	Transversal	1/4 Width / Ancho	434	547	0.79	28.0	28093384012	Longitudinal	1/4 Width / Ancho	-20	235	201	214	217	

TENSILE TEST		CHARPY IMPACT TEST	
GUAGE LENGTH/LONGITUD DE REFERENCIA:	L0: 5,65 x (S0%)	SPEC SIZE/DIM MUESTRA:	10X10mm - V2mm

ABBREVIATIONS		ABBREVIATIONS		ABBREVIATIONS		ABBREVIATIONS		ABBREVIATIONS	
IND EN/EN IND	Mother Plate Individual Energy	YS/RE	Yield Point Average Energy	TS/RT	Tensile Strength	YS/TS	Elastic Ratio	ELONG/ALARG	Elongation

UT 18.6.01683  
G227375(22)  
**ONIRAM, LDA**  
DEP. QUALIDADE  
RECEPÇÃO

DATA 20/08/2014 RUBRICA [Signature]

REMARKS  
CEQ2 = C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15  
Product Type: Hot Rolled Structural Steel Products  
EC Certificate of Conformity N°0038/CPR/2006008/A  
Declaration of Performance: N° G003/16  
Harmonised Standard: EN 10025-1:2004  
Essential Characteristics: Tensile / Yield / Impact Strengths and Weldability:  
S355J2, Durability, regulated substance - No Performance Determined  
Intended Uses: Building Construction or Civil Engineering  
Tolerance on Dimensions acc. to EN 10029 Tab 1 Cl B, Tab 3, Tab 4 Cl N - Type L  
Surface Quality according to EN 10163-2 Class B - Subclass 3.  
Mill Test Certificate according to EN 10204-3.1  
Ultrasonic testing according to EN 10160 Class S1E1.

FAF - Produtos Siderurgicos, S.A.  
Departamento de Qualidade



QUALITY ASSURANCE  
SURVEYOR  
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