



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

**MILL TEST / QUALITY CERTIFICATE**

CUSTOMER FAF PRODUTOS SIDERURGICOS S A	CUSTOMER ORDER FAF 06-07-2017	SALES ORDER 364853-000013	PAGE 1 / 1
PRODUCT Plate	EDGE TYPE Cut edge	DIMENSIONS 50.000mm x 2000mm x 8000mm	DATE 11.17.2017
SPECIFICATION EN 10025-2:2004 - S355J2-N	DELIVERY CONDITION Normalizing Rolling	DOCUMENT NUMBER 0004885E17	

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.

**PACKAGES**

PLATE #	WEIGHT (MT)	HEAT	SAMPLE	PLATE #	WEIGHT (MT)	HEAT	SAMPLE	PLATE #	WEIGHT (MT)	HEAT	SAMPLE
3706033601 (*)	4,710	2808-4035	2808-4035025	3706178401	4,710	2808-4035	2808-4035025	3706178402	4,710	2808-4035	2808-4035025
3706033602 (*)	4,710	2808-4035	2808-4035026	3706178402	4,710	2808-4035	2808-4035025	370718601 (*)	4,710	2808-1179	2808-1179023
			2808-4035026					370718602	4,710	2808-1179	2808-1179023

**CHEMICAL COMPOSITION**

HEAT	CE (%)	MN (%)	SI (%)	P (%)	S (%)	AL (%)	C (%)	CU (%)	NI (%)	TR (%)	MO (%)	Nb (%)	N (%)	V (%)	B (%)	CA (%)	N (%)
2808-1179	0.16	1.40	0.20	0.010	0.006	0.026	0.01	0.01	0.03	0.012	0.00	0.023	0.01	0.048	0.0004	0.0000	0.0046
2808-4035	0.15	1.43	0.20	0.016	0.007	0.024	0.01	0.02	0.03	0.014	0.01	0.027	0.01	0.045	0.0004	0.0000	0.0046
2808-1179	0.42																
2808-4035	0.40																

**TENSILE TEST**

SAMPLE	DIRECTION	POSITION	YS/RE (MPa)	TS/RT (MPa)	YS/TS	ELONG/ALARG (%)	CHARPY IMPACT TEST	YS/TS	Elastic Ratio	ELONG/ALARG	Elongation	TEMP/TEMP (°C)	TEMP/TEMP	Temperature
28081179023	Transversal	1/4 Width / Ancho	426	556	0.77	28.0	28081179023	28.0	0.28	234	197	197	197	197
28084035025	Transversal	1/4 Width / Ancho	364	511	0.71	27.0	28084035026	27.0	0.28	194	188	197	197	197

**TENSILE TEST**

CHARPY IMPACT TEST	TS/RT	YS/TS	Elastic Ratio	ELONG/ALARG	Elongation	TEMP/TEMP (°C)	TEMP/TEMP	Temperature
10x10mm - V2mm								

**ABBREVIATIONS**

IND ENEM IND	Individual Energy	YS/RE	AVG ENEM MD	Yield Point Average Energy	TS/RT	Tensile Strength	YS/TS	Elastic Ratio	ELONG/ALARG	Elongation	TEMP/TEMP	Temperature

UT: 18.L. 00535  
 GR 25247(185)  
**ONIRAM, LDA**  
 DEP. QUALIDADE  
 RECEPCÃO

DATA 20/02  
 RUBRICA

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



QUALITY ASSURANCE

SUPERVISOR

KENJI CAMRY  
 CREIA 4236

**REMARKS**  
 CE02 = Cokelat/Gelahan/95-104-CQ/175  
 Product Type: Hot Rolled Structural Steel Products  
 EC Certificate of Conformity: N° 01/01/2004/01/2004  
 Declaration of Performance: N° 01/01/2004/01/2004  
 Harmonized Standard: EN 10025-2:2004  
 Essential Characteristics: Tensile / Yield / Impact Strength and Weldability:  
 S355J2, Usability, regulated substance - No performance Determined  
 Intended Use: Building Construction or Civil Engineering  
 Tolerances on Dimensions acc. to EN 10029 Tab. 1 Cl. 6, Tab. 3, Tab. 4 Cl. N - Type L  
 Surface Quality according to EN 10163-2 Class B, Subclass 3.  
 Ultrasonic testing according to EN 10160 Class B, Subclass 3.  
 Mill Test Certificate according to EN 10204-2.1  
 All radiation sources are verified and controlled.  
 All scrap used at Gerdau Ouro Branco is internally prevented.  
 We certify that this material is free of contamination by radiation.