EREĞLİ DEMİR ve ÇELİK FABRİKALARI T.A.Ş.
OUTSTANDING CAPITAL : 3.500.000.000 TL
PRODUCTION PLANT : ISDEMIR

TEST CERTIFICATE
EN 10204 : 2004 TYPE 3.1

DATE :23/10/2017
CERTIFICATE NO :71643141
PAGE NO : 1

CUSTOMER :MARINHO STEEL TRADING
ORDER NO :78603357709
DIMENSIONS, mm : 10.000 X 1500 X C
STANDARD & GRADE :EN 10025-2-2004 S275JR (ERDEMİR 4244)
PRODUCT TYPE & DEFINITION :RKK:HOT ROLLED COIL WITH MILL EDGE

PRODUCT INFORMATIONS					MECHANICAL PROPERTIES								CHEMICAL COMPOSITION, CAST ANALYSIS %									
TICKET NO	WEIGHT (MT)	HEAT NO	COIL or PLATE NO	P.S or P.P	TENSILE TEST SAM POS	YIELD STRENGTH N/MM2	TENSILE N/MM2	% EL A5	BEND TEST	Ag or BH VAL.	r VAL.	Y/T or n VAL.	HARD NESS	IMPACT TEST, joule POSITION : 1 2 3 AVR	TEM 'C	HIGH TEMP 'C YIELD N/MM2	C %	MN %	P %	S %	SI %	AL %	CU %	CR %	NI %	MO %	CEQ %
																	V %	NB %	TI %	N PPM						
0357876428	20,550	17116866	1175941390000		TT	294.2	440.3	34									0.135	0.996	0.012	0.011	0.016	0.041	0.056	0.030	0.040	0.002	0.314
																	0.000	0.000	0.000	46							
0357876813	20,620	17116866	1175941410000		TT	291.3	461.9	29									0.135	0.996	0.012	0.011	0.016	0.041	0.056	0.030	0.040	0.002	0.314
																	0.000	0.000	0.000	46							
0357877239	20,590	17116866	2175941380000		TT	294.2	440.3	34									0.135	0.996	0.012	0.011	0.016	0.041	0.056	0.030	0.040	0.002	0.314
																	0.000	0.000	0.000	46							
0357877314	20,430	17116866	2175941400000		TT	291.3	461.9	29									0.135	0.996	0.012	0.011	0.016	0.041	0.056	0.030	0.040	0.002	0.314
																	0.000	0.000	0.000	46							
0357877619	20,590	17338067	2175944350000		TT	302.0	478.6	33									0.168	1.164	0.015	0.008	0.016	0.024	0.053	0.027	0.040	0.003	0.375
																	0.000	0.000	0.000	50							

ONIRAM,LDA
DEP.QUALIDADE
RECEPÇÃO
DATA 2018/02/16 RUBRICA

WE(THE MANUFACTURER) HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY THE BASIC OXYGEN PROCESS AND TESTED IN ACCORDANCE WITH THE RULES OF EN 10025-2-2004 S275JR (ERDEMİR 4244) WITH SATISFACTORY RESULTS.

EREĞLİ DEMİR VE ÇELİK FABRİKALARI METALURJİ LABORATUVARI
KAMİL TANRIVER
CHIEF ENGINEER OF METALURGY LAB.

EREĞLİ DEMİR VE ÇELİK FABRİKALARI METALURJİ LABORATUVARI
KAMBER AYGÖREN
COLD PRODUCTS QUALITY METALURGY MANAGER

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

NOTE: T:Top, M:Middle, E:End, T:Transverse, L:Longitudinal, P.S:Piece of Slice, P.P:Piece of Plate