



# STEEL LIMITED

Vijayanagar Works, PO: Vidyanagar, Village : Tornagallu, Dist: Bellary, Karnataka-583275, INDIA

Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai-400051.

## MILL TEST CERTIFICATE (According to EN 10204 - 3.1)

TO,  
DUFERCO S.A.  
SWITZERLAND, 690000  
CH

TC No 2016-17 / 0400603524 \_ 100 / 7020004333

Date 01.04.2017

Product: Cold Rolled Annealed, Skinpassed & Oiled							Chemical Composition & Mechanical Properties													Remarks			
							C	Mn	S	P	Si	Al	N	YS	UTS	EL	Ra	GL	Bend Test		Hard		
							%	%	%	%	%	%	%	MPa	MPa	%	µm	mm		HRB			
Specification : ASTM A_1008 CS_B		MIN	----->			-	-	-	-	-	-	-	140	-	30.00	0.70							
		-----				0.1000	0.600	0.0350	0.030	-	-	1.0000	275	-	-	1.60							
		MAX	----->																				
Cast/Heat No.	Coil No.	T	X	W	X	L	Net Wt.	Gross Wt.	C	Mn	S	P	Si	Al	N	YS	UTS	EL	Ra	GL	Bend Test	Hard	Remarks
		(mm)							%	%	%	%	%	%	%	MPa	MPa	%	µm	mm		HRB	
C350373	G334111000	0.760	X	1219.0	X	Coil	9.300	9.375	0.035	0.180	0.010	0.015	0.009	0.060	0.0040	229	360	43.10	1.20	50MM	Pass	50.00	
B350336	G331861000	0.760	X	1219.0	X	Coil	10.735	10.815	0.035	0.200	0.008	0.017	0.014	0.050	0.0040	220	357	42.80	1.23	50MM	Pass	50.00	
B350336	G331862000	0.760	X	1219.0	X	Coil	10.925	11.005	0.035	0.200	0.008	0.017	0.014	0.050	0.0040	220	357	42.80	1.23	50MM	Pass	50.00	
C350373	G334112000	0.760	X	1219.0	X	Coil	9.460	9.540	0.035	0.180	0.010	0.015	0.009	0.060	0.0040	229	360	43.10	1.20	50MM	Pass	50.00	
B350336	G341162000	0.760	X	1219.0	X	Coil	11.000	11.075	0.035	0.200	0.008	0.017	0.014	0.050	0.0040	213	358	43.00	1.23	50MM	Pass	50.00	
B350336	G341161000	0.760	X	1219.0	X	Coil	10.735	10.815	0.035	0.200	0.008	0.017	0.014	0.050	0.0040	213	358	43.00	1.23	50MM	Pass	50.00	
Z350338	G337532000	0.760	X	1219.0	X	Coil	10.930	11.015	0.035	0.220	0.008	0.014	0.010	0.058	0.0038	201	348	43.50	0.84	50MM	Pass	50.00	
Z350338	G337531000	0.760	X	1219.0	X	Coil	10.690	10.770	0.035	0.220	0.008	0.014	0.010	0.058	0.0038	201	348	43.50	0.84	50MM	Pass	50.00	
B350336	G336482000	0.760	X	1219.0	X	Coil	11.030	11.115	0.035	0.200	0.008	0.017	0.014	0.050	0.0040	225	359	41.50	1.05	50MM	Pass	51.00	
B350336	G336481000	0.760	X	1219.0	X	Coil	10.660	10.740	0.035	0.200	0.008	0.017	0.014	0.050	0.0040	225	359	41.50	1.05	50MM	Pass	51.00	
C350373	G336462000	0.760	X	1219.0	X	Coil	9.490	9.570	0.035	0.180	0.010	0.015	0.009	0.060	0.0040	236	359	42.90	1.31	50MM	Pass	50.00	
C350373	G336461000	0.760	X	1219.0	X	Coil	9.265	9.340	0.035	0.180	0.010	0.015	0.009	0.060	0.0040	236	359	42.90	1.31	50MM	Pass	50.00	
<b>Total Weight in Metric Tonnes</b>							<b>124.220</b>	<b>125.175</b>															
<b>Total no of Batches</b>							<b>12</b>																



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SWITZERLAND, 690000  
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TC No 2016-17 / 0400603524 \_ 100 / 7020004333

Date 01.04.2017

We hereby certify that the material described herein have been tested and inspected with satisfactory results in accordance with the requirements of the above specification.

This is to certify that the above mentioned product produced & supplied by JSW Steel Ltd do not contain any radio active element higher than the natural level

The product or packing material does not contain any hazardous substances as per ROHS

Commercial Invoice : 7020004333  
Sales Contract Number : 4626  
Product: : PRIME COLD ROLLED STEEL  
COILS, SKINPASSED, MATTE  
FINISH, OILED  
with Trimmed Edge  
Process Route : BOF-LHF-CCM-HSM-PLTCM-CAL-  
APL

Legend: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace,  
CCM = Continuous Casting Machine, HSM = Hot Strip Mill, CPL =  
Continuous Pickling Line, CRM = Cold Rolling Mill, ECL = Electrolytic  
Cleaning Line, BAF = Batch Annealing Furnace, SPM = Skin Pass Mill, RCL =  
Recoiling Cum Inspection Line, APL = Automatic Packaging Line, PLTCM =  
Pickling Cum Tandem Mill,  
CGL = Continuous Galvanizing line CAL = Continuous Annealing Line, CTL =  
Cut to Length, HRS = HR Slitters, HTL = HR Cut to Length

T x W x T = Thickness x Width x Length, Chemistry = Ladle Sample Analysis,  
1MPa = 1N/mm<sup>2</sup>, YS = Yield Strength, UTS = Ultimate Tensile Strength, EL =  
%ge Elongation on Standard Gauge Length  
GSM = Grams per Square Meter  
Oil Type : Quaker or FUCHS

Certified By

*A Jindal*  
(ANVISH JINDAL)