



# 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 \_ 120 / 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	
A350911	G359592000	0.610	X	1219.0	X	Coil	10.895	10.985	0.034	0.220	0.010	0.008	0.010	0.056	0.0039	235	360	42.70	0.76	50MM	Pass	50.00	
A350911	G359591000	0.610	X	1219.0	X	Coil	10.610	10.690	0.034	0.220	0.010	0.008	0.010	0.056	0.0039	235	360	42.70	0.76	50MM	Pass	50.00	
C350899	G349211000	0.610	X	1219.0	X	Coil	10.140	10.220	0.036	0.180	0.010	0.016	0.013	0.057	0.0039	272	375	41.00	1.10	50MM	Pass	51.00	
C350899	G349212000	0.610	X	1219.0	X	Coil	10.675	10.755	0.036	0.180	0.010	0.016	0.013	0.057	0.0039	256	375	41.00	1.10	50MM	Pass	51.00	
B350919	G349511000	0.610	X	1219.0	X	Coil	9.975	10.055	0.039	0.190	0.010	0.017	0.006	0.057	0.0040	218	354	42.10	0.99	50MM	Pass	51.00	
B350919	G349512000	0.610	X	1219.0	X	Coil	10.255	10.340	0.039	0.190	0.010	0.017	0.006	0.057	0.0040	218	354	42.10	0.99	50MM	Pass	51.00	
C350373	G343232000	0.610	X	1219.0	X	Coil	10.430	10.505	0.035	0.180	0.010	0.015	0.009	0.060	0.0040	260	360	42.80	1.12	50MM	Pass	50.00	
C350373	G343231000	0.610	X	1219.0	X	Coil	10.580	10.660	0.035	0.180	0.010	0.015	0.009	0.060	0.0040	260	360	42.80	1.12	50MM	Pass	50.00	
Z350372	G339892000	0.610	X	1219.0	X	Coil	10.775	10.860	0.028	0.170	0.010	0.012	0.010	0.049	0.0036	253	367	41.60	0.94	50MM	Pass	50.00	
A350909	G350351000	0.610	X	1219.0	X	Coil	10.565	10.650	0.032	0.220	0.010	0.014	0.008	0.060	0.0040	227	364	46.90	0.95	50MM	Pass	44.00	
A350909	G350352000	0.610	X	1219.0	X	Coil	10.290	10.370	0.032	0.220	0.010	0.014	0.008	0.060	0.0040	226	363	46.00	0.95	50MM	Pass	50.00	
Z350372	G339891000	0.610	X	1219.0	X	Coil	10.580	10.660	0.028	0.170	0.010	0.012	0.010	0.049	0.0036	253	360	41.60	0.94	50MM	Pass	50.00	
<b>Total Weight in Metric Tonnes</b>							<b>125.770</b>	<b>126.750</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 \_ 120 / 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)