



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 _ 60 / 7020004333

Date 01.04.2017

Product: Cold Rolled Annealed, Skinpassed & Oiled								Chemical Composition & Mechanical Properties												Remarks		
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
				(mm)				%	%	%	%	%	%	%	%	MPa	MPa	%	µm	mm		HRB
Specification : ASTM A_1008 CS_B		MIN		----->				-	-	-	-	-	-	-	-	140	-	30.00	0.70			
		MAX		----->				0.1000	0.600	0.0350	0.030	-	-	1.0000	-	275	-	-	1.60	-	-	-
B350898	G356852000	1.210	X	1219.0	X	Coil	10.810	10.895	0.028	0.200	0.010	0.013	0.013	0.060	0.0036	221	352	43.70	1.03	50MM	Pass	51.00
C350893	G351472000	1.210	X	1219.0	X	Coil	10.715	10.800	0.033	0.190	0.010	0.016	0.011	0.060	0.0038	216	350	43.70	0.88	50MM	Pass	50.00
C350893	G351471000	1.210	X	1219.0	X	Coil	10.560	10.645	0.033	0.190	0.010	0.016	0.011	0.060	0.0038	216	350	43.70	0.88	50MM	Pass	50.00
C350893	G351332000	1.210	X	1219.0	X	Coil	10.710	10.790	0.033	0.190	0.010	0.016	0.011	0.060	0.0038	229	355	44.90	0.85	50MM	Pass	52.00
F706271	G355392000	1.210	X	1219.0	X	Coil	10.465	10.550	0.036	0.210	0.008	0.011	0.010	0.045	0.0036	205	337	45.50	1.60	50MM	Pass	50.00
F706271	G355391000	1.210	X	1219.0	X	Coil	11.710	11.800	0.036	0.210	0.008	0.011	0.010	0.045	0.0036	205	337	45.50	1.60	50MM	Pass	50.00
A350911	G354212000	1.210	X	1219.0	X	Coil	10.170	10.260	0.034	0.220	0.010	0.008	0.010	0.056	0.0039	222	347	43.70	1.44	50MM	Pass	50.00
A350911	G354211000	1.210	X	1219.0	X	Coil	11.230	11.320	0.034	0.220	0.010	0.008	0.010	0.056	0.0039	222	347	43.70	1.44	50MM	Pass	50.00
C350899	G350391000	1.210	X	1219.0	X	Coil	10.685	10.765	0.036	0.180	0.010	0.016	0.013	0.057	0.0039	225	350	44.10	0.75	50MM	Pass	52.00
C350899	G350392000	1.210	X	1219.0	X	Coil	10.930	11.015	0.036	0.180	0.010	0.016	0.013	0.057	0.0039	225	350	44.10	0.75	50MM	Pass	52.00
C350893	G350811000	1.210	X	1219.0	X	Coil	10.530	10.610	0.033	0.190	0.010	0.016	0.011	0.060	0.0038	228	349	44.30	1.03	50MM	Pass	51.00
C350893	G350812000	1.210	X	1219.0	X	Coil	10.765	10.850	0.033	0.190	0.010	0.016	0.011	0.060	0.0038	228	349	44.30	1.03	50MM	Pass	51.00
B350892	G350871000	1.210	X	1219.0	X	Coil	10.545	10.630	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	221	355	43.90	0.80	50MM	Pass	50.00
B350892	G350872000	1.210	X	1219.0	X	Coil	10.720	10.805	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	221	355	43.90	0.80	50MM	Pass	50.00
B350898	G350961000	1.210	X	1219.0	X	Coil	10.560	10.640	0.028	0.200	0.010	0.013	0.013	0.060	0.0036	211	339	45.10	0.82	50MM	Pass	50.00
A350890	G353102000	1.210	X	1219.0	X	Coil	10.845	10.930	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	231	355	45.00	0.76	50MM	Pass	50.00
B350892	G352292000	1.210	X	1219.0	X	Coil	10.790	10.870	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	227	352	44.10	0.92	50MM	Pass	53.00



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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
									%	%	%	%	%	%	%	MPa	MPa	%	µm	mm	HRB		
									Specification : ASTM A_1008 CS_B								MIN	----->	-	-	-	-	-
								-----		0.1000	0.600	0.0350	0.030	-	-	1.0000	275	-	-	1.60	-	-	-
								MAX	----->														
B350892	G352291000	1.210	X	1219.0	X	Coil	10.630	10.710	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	227	352	44.10	0.92	50MM	Pass	53.00	
C350893	G351331000	1.210	X	1219.0	X	Coil	10.555	10.640	0.033	0.190	0.010	0.016	0.011	0.060	0.0038	229	355	44.90	0.85	50MM	Pass	52.00	
A350890	G353101000	1.210	X	1219.0	X	Coil	10.545	10.630	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	231	355	45.00	0.76	50MM	Pass	50.00	
A350890	G347971000	1.210	X	1219.0	X	Coil	10.325	10.400	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	218	342	44.30	1.35	50MM	Pass	50.00	
B350892	G358331000	1.210	X	1219.0	X	Coil	10.530	10.605	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	218	341	46.70	1.28	50MM	Pass	50.00	
B350892	G349631000	1.210	X	1219.0	X	Coil	11.025	11.100	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	219	348	44.40	1.11	50MM	Pass	50.00	
B350892	G349632000	1.210	X	1219.0	X	Coil	9.970	10.045	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	219	347	44.00	1.11	50MM	Pass	50.00	
B350892	G358332000	1.210	X	1219.0	X	Coil	10.770	10.850	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	218	341	46.70	1.28	50MM	Pass	50.00	
A350890	G348142000	1.210	X	1219.0	X	Coil	10.005	10.085	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	203	338	44.80	0.70	50MM	Pass	50.00	
B350892	G349741000	1.210	X	1219.0	X	Coil	10.645	10.730	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	213	349	44.00	1.19	50MM	Pass	50.00	
B350892	G349742000	1.210	X	1219.0	X	Coil	10.640	10.720	0.036	0.190	0.010	0.017	0.008	0.056	0.0040	213	349	44.00	1.19	50MM	Pass	50.00	
A350890	G348141000	1.210	X	1219.0	X	Coil	11.055	11.130	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	203	338	44.80	0.70	50MM	Pass	50.00	
A350890	G349172000	1.210	X	1219.0	X	Coil	10.785	10.865	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	227	345	46.60	1.00	50MM	Pass	50.80	
A350890	G349171000	1.210	X	1219.0	X	Coil	10.500	10.580	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	227	345	46.60	1.00	50MM	Pass	50.80	
A350890	G348052000	1.210	X	1219.0	X	Coil	9.290	9.370	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	206	340	45.20	0.83	50MM	Pass	51.00	
A350890	G348051000	1.210	X	1219.0	X	Coil	11.185	11.265	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	206	340	45.20	0.83	50MM	Pass	51.00	
A350890	G347972000	1.210	X	1219.0	X	Coil	10.515	10.595	0.030	0.180	0.010	0.007	0.017	0.052	0.0038	218	342	44.30	1.35	50MM	Pass	50.00	



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Total Weight in Metric Tonnes	361.710	364.495
Total no of Batches	34	

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

<p>Commercial Invoice : 7020004333</p> <p>Sales Contract Number : 4626</p> <p>Product: : PRIME COLD ROLLED STEEL COILS, SKINPASSED, MATTE FINISH, OILED with Trimmed Edge</p> <p>Process Route : BOF-LHF-CCM-HSM-PLTCM-CAL- APL</p>	<p>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</p>	<p>T x W x T = Thickness x Width x Length, Chemistry = Ladle Sample Analysis, 1MPa = 1N/mm², YS = Yield Strength, UTS = Ultimate Tensile Strength, EL = %ge Elongation on Standard Gauge Length GSM = Grams per Square Meter Oil Type : Quaker or FUCHS</p>		<p>Certified By</p> <p><i>A Jindal</i> (ANVISH JINDAL)</p>
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