



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717606739-

2

DATE : 17.01.2025

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J2+N / E350C

Impact Temp.(°C) : -20

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDTT	Remarks	
							1				2					Longitudinal														
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA																
							(MPa)	(MPa)	5.65Va		(MPa)	(MPa)	5.65Va			1	2	3	AVG		1	2	3	AVG						
Specified Requirement						Min	355	490	22	---	355	490	22	---	≤25-2T, >25-NA	---				27	---	---	---	---	25	---	---	---	---	---
						Max	---	630	---	---	---	630	---	---		---				---	---	---	---	---	---	---	---	---	---	---
1	24LP1615A1	F985421	48.00	2777	14151	14.807	406	566	27	---	413	572	26	---	---	233	202	196	210	---	54	57	56	56	---	---	---	---	---	
2	24LP1617A1	F985416	48.00	2777	14151	14.807	472	593	23	---	430	575	27	---	---	243	212	213	223	---	58	63	60	60	---	---	---	---	---	

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.220	1.600	0.025	0.025	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	F985421	0.160	1.430	0.002	0.015	0.290	0.022	0.239	0.008	0.015	0.002	0.035	0.001	0.035	0.0048	0.0023	0.0002	0.052	0.247	0.270	7.29	0.42	0.25
	F985416	0.162	1.430	0.002	0.015	0.312	0.022	0.239	0.008	0.014	0.002	0.036	0.001	0.033	0.0038	0.0021	0.0003	0.052	0.247	0.270	8.68	0.42	0.25

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.220	1.600	0.025	0.025	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	F985421	0.158	1.414	0.002	0.015	0.286	0.022	0.235	0.008	0.015	0.002	0.034	0.001	0.034	0.0047	0.0023	0.0002	0.051	0.243	0.266	7.23	0.41	0.24
	F985416	0.160	1.414	0.002	0.015	0.307	0.022	0.235	0.008	0.014	0.002	0.035	0.001	0.033	0.0037	0.0021	0.0003	0.051	0.243	0.266	8.92	0.42	0.25

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011. CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CML-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO. PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Furnace Normalized
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per : EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table - 1,2,3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS :Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test,Sat : Satisfactory,WBBT-Weld bead bend test YS*≤16-355, 16<≤40-345, 40<≤63=335,63<≤80=325, CE**= 0.47 for >30 mm



(Quality Assurance & Control Dept)



AUTHORISED SIGNATORY



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717603408

DATE : 17.01.2025

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J2+N / E350C

Impact Temp.(°C) : -20

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDTT	Remarks				
							1				2					Longitudinal																	
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA							1	2	3	AVG	1	2	3			AVG			
							(MPa)	(MPa)	5.65va		(MPa)	(MPa)	5.65va																				
Specified Requirement						Min	355	490	22	---	355	490	22	---	≤25-2T, >25-NA	---				27	---	---	---	---	25	---	---	---	---	---			
						Max	---	630	---	---	---	630	---	---		---				---	---	---	---	---	---	---	---	---	---	---			
1	24LP1306A1	F985421	48.00	2777	14051	14.703	406	566	27	---	413	572	26	---	---	233	202	196	210	---	54	57	56	56	---	---	---	---	---				
2	24LP1307A1	F985427	48.00	2777	14051	14.703	427	565	27	---	390	565	27	---	---	300	318	331	316	---	55	51	58	55	---	---	---	---	---				

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.220	1.600	0.025	0.025	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	F985421	0.160	1.430	0.002	0.015	0.290	0.022	0.239	0.008	0.015	0.002	0.035	0.001	0.035	0.0048	0.0023	0.0002	0.052	0.247	0.270	7.29	0.42	0.25
	F985427	0.156	1.460	0.002	0.014	0.296	0.023	0.237	0.008	0.014	0.002	0.035	0.001	0.035	0.0045	0.0021	0.0002	0.051	0.245	0.269	7.78	0.42	0.25

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.220	1.600	0.025	0.025	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	F985421	0.158	1.414	0.002	0.015	0.286	0.022	0.235	0.008	0.015	0.002	0.034	0.001	0.034	0.0047	0.0023	0.0002	0.051	0.243	0.266	7.23	0.41	0.24
	F985427	0.154	1.444	0.002	0.014	0.292	0.023	0.233	0.008	0.014	0.002	0.034	0.001	0.034	0.0041	0.0021	0.0002	0.050	0.241	0.265	7.73	0.42	0.24

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011. CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CML-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO. PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Furnace Normalized
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per : EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table - 1,2,3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS :Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test,Sat : Satisfactory,WBBT-Weld bead bend test YS*≤16-355, 16<≤40-345, 40<≤63=335,63<≤80=325, CE**= 0.47 for >30 mm



(Quality Assurance & Control Dept)



AUTHORISED SIGNATORY



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717483580
DATE : 30.12.2024

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J0+N / E350B0

Impact Temp.(°C) : 0

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDT	Remarks					
							1				2					Longitudinal					123AVG				123AVG									
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA																				
							(MPa)	(MPa)	5.65Va		(MPa)	(MPa)	5.65Va																					
Specified Requirement						Min	355	490	22	---	355	490	22	---	≤25-2T, >25-NA	27				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
						Max	---	630	---	---	---	630	---	---		---				---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1	24LP0374A1	B035295	34.80	2692	14151	10.407	429	574	29	---	408	556	27	---	---	47	42	62	50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2	24LP0375A1	A035072	34.80	2692	14151	10.407	421	555	29	---	425	550	29	---	---	292	320	267	293	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
3	24LP0492A1	A035268	14.40	2982	11539	3.890	416	560	27	---	423	563	26	---	OK	207	211	210	209	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4	24LP0492A2	A035268	14.40	2982	11539	3.890	416	560	27	---	423	563	26	---	OK	207	211	210	209	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	24LP0885A2	A035270	12.80	2981	11539	3.456	417	558	28	---	423	559	27	---	OK	172	121	175	156	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	24LP0892A1	B035276	15.20	2982	12725	4.528	405	572	26	---	411	574	25	---	OK	166	176	121	154	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
7	24LP0892A2	B035276	15.20	2982	12725	4.528	405	572	26	---	411	574	25	---	OK	166	176	121	154	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035295	0.152	1.410	0.003	0.017	0.192	0.015	0.007	0.011	0.021	0.004	0.026	0.000	0.049	0.0060	0.0010	0.0000	0.051	0.018	0.033	8.17	0.39	0.23
	A035072	0.162	1.360	0.003	0.018	0.196	0.024	0.009	0.011	0.022	0.002	0.027	0.001	0.045	0.0050	0.0010	0.0000	0.051	0.020	0.045	9.00	0.40	0.24
	A035268	0.153	1.360	0.002	0.018	0.213	0.024	0.008	0.014	0.022	0.002	0.026	0.001	0.036	0.0060	0.0010	0.0000	0.050	0.022	0.047	6.00	0.39	0.23
	A035268	0.153	1.360	0.002	0.018	0.213	0.024	0.008	0.014	0.022	0.002	0.026	0.001	0.036	0.0060	0.0010	0.0000	0.050	0.022	0.047	6.00	0.39	0.23
	A035270	0.170	1.355	0.002	0.018	0.204	0.021	0.007	0.010	0.022	0.002	0.027	0.001	0.050	0.0050	0.0010	0.0000	0.051	0.017	0.039	10.00	0.40	0.25
	B035276	0.155	1.410	0.002	0.017	0.230	0.019	0.008	0.016	0.019	0.005	0.025	0.001	0.049	0.0060	0.0010	0.0000	0.049	0.024	0.044	8.17	0.40	0.24
	B035276	0.155	1.410	0.002	0.017	0.230	0.019	0.008	0.016	0.019	0.005	0.025	0.001	0.049	0.0060	0.0010	0.0000	0.049	0.024	0.044	8.17	0.40	0.24

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035295	0.149	1.396	0.003	0.017	0.189	0.015	0.007	0.011	0.021	0.004	0.026	0.000	0.049	0.0060	0.0010	0.0000	0.051	0.018	0.033	8.14	0.39	0.23
	A035072	0.159	1.348	0.003	0.018	0.192	0.024	0.009	0.011	0.022	0.002	0.027	0.001	0.044	0.0050	0.0010	0.0002	0.051	0.020	0.045	8.98	0.39	0.24
	A035268	0.150	1.346	0.002	0.018	0.209	0.024	0.008	0.014	0.022	0.002	0.026	0.001	0.035	0.0059	0.0010	0.0001	0.050	0.022	0.047	5.93	0.38	0.23
	A035268	0.150	1.346	0.002	0.018	0.209	0.024	0.008	0.014	0.022	0.002	0.026	0.001	0.035	0.0059	0.0010	0.0001	0.050	0.022	0.047	5.93	0.38	0.23
	A035270	0.167	1.343	0.002	0.018	0.200	0.021	0.007	0.010	0.022	0.002	0.027	0.001	0.049	0.0049	0.0010	0.0002	0.051	0.017	0.039	10.00	0.40	0.24
	B035276	0.152	1.397	0.002	0.017	0.226	0.019	0.008	0.016	0.019	0.005	0.025	0.001	0.048	0.0059	0.0010	0.0001	0.049	0.024	0.044	8.14	0.39	0.23
	B035276	0.152	1.397	0.002	0.017	0.226	0.019	0.008	0.016	0.019	0.005	0.025	0.001	0.048	0.0059	0.0010	0.0001	0.049	0.024	0.044	8.14	0.39	0.23

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011.
CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CM/L-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO.
PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Normalized rolled
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table 1, 2, 3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS : Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test, Sat : Satisfactory, WBBT-Weld bead bend test YS*=t≤16-355, 16<t≤40-345, 40<t≤63=335, 63<t≤80=325, CE**= 0.47 for t>30 mm

(Quality Assurance & Control Dept)

AUTHORISED SIGNATORY



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717479971
DATE : 30.12.2024

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J0+N / E350B0

Impact Temp.(°C) : 0

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDTT	Remarks
							1				2					Longitudinal													
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA															
							(MPa)	(MPa)	5.65Va		(MPa)	(MPa)	5.65Va			1	2	3	AVG		1	2	3	AVG					
Specified Requirement						Min	355	490	22	---	355	490	22	---	≤25-T, >25-NA	---	---	27	---	---	---	---	---	---	---	---	---	---	
						Max	---	630	---	---	---	630	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	
1	24LP0594A1	E983636	33.60	2980	14051	11.044	394	533	29	---	422	551	26	---	---	315	302	283	300	---	---	---	---	---	---	---	---	---	---
2	24LP0632A1	A036588	21.50	2980	14151	7.117	434	537	31	---	428	531	32	---	OK	224	194	199	206	---	---	---	---	---	---	---	---	---	---
3	24LP0753A1	B036315	22.00	2980	14051	7.231	403	541	30	---	396	517	28	---	OK	371	340	336	349	---	---	---	---	---	---	---	---	---	---
4	24LP0754A1	B036315	22.00	2980	14051	7.231	403	541	30	---	396	517	28	---	OK	371	340	336	349	---	---	---	---	---	---	---	---	---	---
5	24LP1459A1	B036313	24.50	2980	14151	8.110	403	534	29	---	400	543	23	---	OK	388	413	364	388	---	---	---	---	---	---	---	---	---	---

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	E983636	0.160	1.400	0.003	0.015	0.204	0.030	0.009	0.006	0.014	0.002	0.025	0.001	0.031	0.0042	0.0024	0.0004	0.041	0.015	0.046	7.38	0.40	0.24
	A036588	0.156	1.370	0.004	0.018	0.183	0.014	0.005	0.010	0.017	0.005	0.027	0.001	0.045	0.0070	0.0020	0.0000	0.049	0.015	0.030	6.43	0.39	0.23
	B036315	0.164	1.350	0.001	0.015	0.186	0.022	0.007	0.010	0.017	0.005	0.026	0.001	0.045	0.0050	0.0010	0.0000	0.048	0.017	0.040	9.00	0.40	0.24
	B036315	0.164	1.350	0.001	0.015	0.186	0.022	0.007	0.010	0.017	0.005	0.026	0.001	0.045	0.0050	0.0010	0.0000	0.048	0.017	0.040	9.00	0.40	0.24
	B036313	0.157	1.370	0.001	0.015	0.204	0.019	0.008	0.012	0.021	0.005	0.026	0.001	0.050	0.0050	0.0010	0.0000	0.052	0.020	0.040	10.00	0.39	0.23

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	E983636	0.158	1.386	0.003	0.015	0.202	0.030	0.009	0.006	0.014	0.002	0.025	0.001	0.031	0.0042	0.0024	0.0004	0.041	0.015	0.046	7.38	0.40	0.24
	A036588	0.159	1.377	0.004	0.018	0.187	0.014	0.005	0.010	0.017	0.005	0.028	0.001	0.046	0.0070	0.0020	0.0002	0.050	0.015	0.030	6.48	0.39	0.24
	B036315	0.161	1.338	0.001	0.015	0.183	0.022	0.007	0.010	0.017	0.005	0.026	0.001	0.044	0.0049	0.0010	0.0002	0.048	0.017	0.040	8.98	0.39	0.24
	B036315	0.161	1.338	0.001	0.015	0.183	0.022	0.007	0.010	0.017	0.005	0.026	0.001	0.044	0.0049	0.0010	0.0002	0.048	0.017	0.040	8.98	0.39	0.24
	B036313	0.160	1.377	0.001	0.015	0.208	0.019	0.008	0.012	0.021	0.005	0.027	0.001	0.051	0.0051	0.0010	0.0001	0.053	0.020	0.040	10.00	0.40	0.24

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011.
CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CML-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO.
PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Normalized rolled
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per : EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table - 1,2,3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS :Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test,Sat : Satisfactory,WBBT-Weld bead bend test YS*≤16-355, 16<≤40-345, 40<≤63=335,63<≤80=325, CE**= 0.47 for >30 mm

(Quality Assurance & Control Dept)

AUTHORISED SIGNATORY



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717470789
DATE : 29.12.2024

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J0+N / E350B0

Impact Temp.(°C) : 0

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDTT	Remarks	
							1				2					Longitudinal					123AVG				123AVG					
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA																
							(MPa)	(MPa)	5.65Va		(MPa)	(MPa)	5.65Va																	
Specified Requirement						Min	355	490	22	---	355	490	22	---	≤25-2T, >25-NA	---	27	---	---	---	---	---	---	---	---	---	---			
						Max	---	630	---	---	---	630	---	---		---	---	---	---	---	---	---	---	---	---	---				
1	24LP0593A1	B035052	33.00	2980	14051	10.847	431	539	30	---	446	548	29	---		350	315	339	335	---	---	---	---	---	---	---	---			
2	24LP0923A1	A036646	25.60	2980	14051	8.415	425	550	29	---	416	542	30	---		224	216	200	213	---	---	---	---	---	---	---	---			
3	24LP0944A1	B036326	24.50	2980	14151	8.110	422	537	28	---	412	552	28	---	OK	419	389	373	394	---	---	---	---	---	---	---	---			
4	24LP0996A1	A036646	24.90	2980	14051	8.185	425	550	29	---	416	542	30	---	OK	224	216	200	213	---	---	---	---	---	---	---	---			
5	24LP1294B1	A035275	17.50	2980	14051	5.752	443	555	28	---	427	541	30	---	OK	271	318	295	295	---	---	---	---	---	---	---	---			

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035052	0.158	1.350	0.004	0.016	0.195	0.028	0.043	0.015	0.016	0.002	0.026	0.001	0.050	0.0050	0.0010	0.0000	0.044	0.058	0.087	10.00	0.39	0.24
	A036646	0.164	1.370	0.001	0.015	0.195	0.028	0.007	0.014	0.018	0.005	0.025	0.001	0.050	0.0060	0.0010	0.0000	0.048	0.021	0.050	8.33	0.40	0.24
	B036326	0.155	1.370	0.002	0.012	0.188	0.020	0.008	0.011	0.019	0.005	0.026	0.001	0.047	0.0050	0.0010	0.0000	0.050	0.019	0.040	9.40	0.39	0.23
	A036646	0.164	1.370	0.001	0.015	0.195	0.028	0.007	0.014	0.018	0.005	0.025	0.001	0.050	0.0060	0.0010	0.0000	0.048	0.021	0.050	8.33	0.40	0.24
	A035275	0.161	1.365	0.002	0.018	0.204	0.015	0.007	0.011	0.021	0.004	0.026	0.001	0.048	0.0060	0.0020	0.0000	0.051	0.018	0.034	8.00	0.39	0.24

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035052	0.156	1.335	0.004	0.016	0.192	0.028	0.042	0.015	0.016	0.002	0.026	0.001	0.049	0.0049	0.0010	0.0000	0.044	0.057	0.086	10.00	0.39	0.23
	A036646	0.162	1.355	0.001	0.015	0.192	0.028	0.007	0.014	0.018	0.005	0.025	0.001	0.049	0.0051	0.0010	0.0000	0.048	0.021	0.050	8.31	0.40	0.24
	B036326	0.158	1.377	0.002	0.012	0.192	0.020	0.008	0.011	0.019	0.005	0.027	0.001	0.048	0.0051	0.0010	0.0002	0.051	0.019	0.040	9.41	0.39	0.24
	A036646	0.162	1.355	0.001	0.015	0.192	0.028	0.007	0.014	0.018	0.005	0.025	0.001	0.049	0.0059	0.0010	0.0000	0.048	0.021	0.050	8.31	0.40	0.24
	A035275	0.158	1.351	0.002	0.018	0.200	0.015	0.007	0.011	0.021	0.004	0.026	0.001	0.047	0.0059	0.0020	0.0000	0.051	0.018	0.034	7.97	0.39	0.23

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011. CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CM/L-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO. PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Normalized rolled
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per : EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table - 1,2,3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS :Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test,Sat : Satisfactory,WBBT-Weld bead bend test YS*≤16-355, 16<≤40-345, 40<≤63=335,63<≤80=325, CE**= 0.47 for >30 mm

(Quality Assurance & Control Dept)

AUTHORISED SIGNATORY



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717472719
DATE : 29.12.2024

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J0+N / E350B0

Impact Temp.(°C) : 0

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDTT	Remarks
							1				2					Longitudinal													
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA															
							(MPa)	(MPa)	5.65Va		(MPa)	(MPa)	5.65Va			1	2	3	AVG		1	2	3	AVG					
Specified Requirement						Min	355	490	22	---	355	490	22	---	≤25-2T, >25-NA	---				27	---	---	---	---	---	---	---	---	---
						Max	---	630	---	---	---	630	---	---		---				---	---	---	---	---	---	---	---	---	---
1	24LP0366A1	B035370	33.00	2980	14051	10.847	430	535	27	---	422	531	28	---	---	281	266	243	263	---	---	---	---	---	---	---	---	---	---
2	24LP0522A1	A034379	17.50	2980	14051	5.752	396	511	29	---	397	514	31	---	OK	194	228	221	214	---	---	---	---	---	---	---	---	---	---
3	24LP0543A1	B036311	21.50	2980	14151	7.117	409	536	24	---	426	552	28	---	OK	342	327	348	339	---	---	---	---	---	---	---	---	---	---
4	24LP0685A1	A036351	24.50	2980	14051	8.053	413	548	24	---	423	548	27	---	OK	247	223	265	245	---	---	---	---	---	---	---	---	---	---
5	24LP0693A1	A036588	24.50	2980	14151	8.110	434	537	31	---	428	531	32	---	OK	224	194	199	206	---	---	---	---	---	---	---	---	---	---

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035370	0.135	1.430	0.003	0.015	0.208	0.022	0.011	0.011	0.026	0.003	0.034	0.001	0.055	0.0050	0.0020	0.0000	0.063	0.022	0.045	11.00	0.38	0.22
	A034379	0.147	1.360	0.004	0.011	0.182	0.016	0.005	0.009	0.017	0.004	0.026	0.001	0.042	0.0050	0.0020	0.0000	0.047	0.014	0.031	8.40	0.38	0.22
	B036311	0.162	1.370	0.001	0.017	0.197	0.028	0.011	0.020	0.021	0.005	0.026	0.001	0.050	0.0060	0.0010	0.0000	0.052	0.031	0.060	8.33	0.40	0.24
	A036351	0.160	1.360	0.003	0.012	0.194	0.020	0.007	0.010	0.020	0.005	0.025	0.001	0.044	0.0050	0.0010	0.0000	0.050	0.017	0.038	8.80	0.39	0.24
	A036588	0.156	1.370	0.004	0.018	0.183	0.014	0.005	0.010	0.017	0.005	0.027	0.001	0.045	0.0070	0.0020	0.0000	0.049	0.015	0.030	6.43	0.39	0.23

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035370	0.134	1.416	0.003	0.015	0.206	0.022	0.011	0.011	0.026	0.003	0.034	0.001	0.054	0.0049	0.0020	0.0000	0.063	0.022	0.045	11.02	0.38	0.21
	A034379	0.150	1.367	0.004	0.011	0.186	0.016	0.005	0.009	0.017	0.004	0.027	0.001	0.043	0.005	0.0020	0.0000	0.048	0.014	0.031	8.43	0.38	0.23
	B036311	0.159	1.358	0.001	0.017	0.193	0.027	0.011	0.020	0.021	0.005	0.026	0.001	0.049	0.0059	0.0010	0.0001	0.052	0.031	0.059	8.31	0.39	0.24
	A036351	0.157	1.348	0.003	0.012	0.191	0.020	0.007	0.010	0.020	0.005	0.025	0.001	0.043	0.0049	0.0010	0.0001	0.050	0.017	0.038	8.78	0.39	0.23
	A036588	0.159	1.377	0.004	0.018	0.187	0.014	0.005	0.010	0.017	0.005	0.028	0.001	0.046	0.0071	0.0020	0.0002	0.050	0.015	0.030	6.48	0.39	0.24

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011. CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CML-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO. PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Normalized rolled
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per : EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table - 1,2,3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS :Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test,Sat : Satisfactory,WBBT-Weld bead bend test YS*≤16-355, 16<≤40-345, 40<≤63=335,63<≤80=325, CE**= 0.47 for >30 mm

(Quality Assurance & Control Dept)

AUTHORISED SIGNATORY



Anjar Works

MILL TEST CERTIFICATE

JSW Steel Limited

SURVEY NO - 659, VILLAGE - VARSAMEDI, TA. - ANJAR (KUTCH) GUJARAT INDIA - 370110



TEST CERTIFICATE NO. : JSW/PCMD/717485008
DATE : 30.12.2024

CUSTOMER : MOUNTING RENEWABLE POWER LIMITED

SPECIFICATION : EN 10025-2 : 2019 / IS 2062 : 2011

UT STD. : EN10160 S2 E3

P. O. NO. : MRPL STEEL 2024 IN P Date - 24.10.2024

GRADE : S355J0+N / E350B0

Impact Temp.(°C) : 0

Sr. No.	Plate / Coil No.	Heat No.	Thk (MM)	Width (MM)	Length (MM)	Weight (MT)	Mechanical Properties (Transverse Tensile)								Bend (Transverse)	CHARPY V-NOTCH IMPACT TEST (Joules)				Grain size (ASTM E112)	Z - Direction Test (Through Thickness)				Y Groove Crackability Test			NDTT	Remarks	
							1				2					Longitudinal					123AVG				123AVG					
							YS*	UTS	%EL	%RA	YS*	UTS	%EL	%RA																
							(MPa)	(MPa)	5.65Va		(MPa)	(MPa)	5.65Va			1	2	3	AVG		1	2	3	AVG						
Specified Requirement						Min	355	490	22	---	355	490	22	---	<25-2T, >25-NA	---				27	---	---	---	---	---	---	---	---	---	---
						Max	---	630	---	---	---	630	---	---		---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1	24LP0383A1	B035276	32.50	2980	14051	10.683	399	554	27	---	405	572	26	---	---	236	241	259	245	---	---	---	---	---	---	---	---	---	---	
2	24LP0631A1	A036588	21.50	2980	14151	7.117	434	537	31	---	428	531	32	---	OK	224	194	199	206	---	---	---	---	---	---	---	---	---	---	
3	24LP0650B1	B035105	15.20	2982	12725	4.528	434	569	27	---	423	562	22	---	OK	208	233	257	233	---	---	---	---	---	---	---	---	---	---	
4	24LP0696B1	B035065	17.00	2421	14048	4.539	422	549	25	---	407	551	26	---	OK	217	220	168	202	---	---	---	---	---	---	---	---	---	---	
5	24LP0737A1	A036646	25.60	2980	14051	8.415	425	550	29	---	416	542	30	---	---	224	216	200	213	---	---	---	---	---	---	---	---	---	---	
6	24LP0817B1	A035215	15.60	2982	13436	4.907	451	569	28	---	436	567	27	---	OK	156	142	129	142	---	---	---	---	---	---	---	---	---	---	

Chemical Composition (%)

HEAT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035276	0.155	1.410	0.002	0.017	0.230	0.019	0.008	0.016	0.019	0.005	0.025	0.001	0.049	0.0060	0.0010	0.0000	0.049	0.024	0.044	8.17	0.40	0.24
	A036588	0.156	1.370	0.004	0.018	0.183	0.014	0.005	0.010	0.017	0.005	0.027	0.001	0.045	0.0070	0.0020	0.0000	0.049	0.015	0.030	6.43	0.39	0.23
	B035105	0.157	1.350	0.003	0.018	0.201	0.030	0.009	0.010	0.018	0.005	0.030	0.004	0.050	0.0060	0.0010	0.0000	0.053	0.019	0.053	8.33	0.39	0.23
	B035065	0.150	1.370	0.004	0.018	0.189	0.029	0.014	0.009	0.022	0.002	0.028	0.006	0.050	0.0060	0.0010	0.0000	0.052	0.023	0.058	8.33	0.39	0.23
	A036646	0.164	1.370	0.001	0.015	0.195	0.028	0.007	0.014	0.018	0.005	0.025	0.001	0.050	0.0060	0.0010	0.0000	0.048	0.021	0.050	8.33	0.40	0.24
	A035215	0.156	1.366	0.002	0.018	0.203	0.018	0.007	0.008	0.020	0.004	0.026	0.001	0.045	0.0060	0.0010	0.0000	0.050	0.015	0.034	7.50	0.39	0.23

PRODUCT ANALYSIS	Heat No.	C	Mn	S	P	Si	Cr	Ni	Cu	Ti	V	Nb	Mo	Al	N	Ca	B	Nb+Ti+V	Cu+Ni	Cr+Mo+Cu+Ni	Al/N	CE**	Pcm
Specified Requirement	Min	---	---	---	---	---	---	---	---	---	---	---	---	0.020	---	---	---	---	---	---	---	---	---
	Max	0.200	1.600	0.030	0.030	0.550	---	---	0.550	---	---	---	---	---	0.0120	---	---	0.250	---	---	---	0.45	---
	B035276	0.152	1.397	0.002	0.017	0.226	0.019	0.008	0.016	0.019	0.005	0.025	0.001	0.049	0.0060	0.0010	0.0001	0.049	0.024	0.044	8.14	0.39	0.23
	A036588	0.159	1.377	0.004	0.018	0.187	0.014	0.005	0.010	0.017	0.005	0.028	0.001	0.046	0.0070	0.0020	0.0002	0.050	0.015	0.030	6.48	0.39	0.24
	B035105	0.154	1.337	0.003	0.018	0.197	0.029	0.009	0.010	0.018	0.005	0.029	0.004	0.049	0.0059	0.0010	0.0000	0.052	0.019	0.052	8.31	0.39	0.23
	B035065	0.147	1.358	0.004	0.018	0.186	0.028	0.014	0.009	0.022	0.002	0.027	0.006	0.049	0.0059	0.0010	0.0001	0.051	0.023	0.057	8.31	0.38	0.22
	A036646	0.162	1.355	0.001	0.015	0.192	0.028	0.007	0.014	0.018	0.005	0.025	0.001	0.049	0.0059	0.0010	0.0000	0.048	0.021	0.050	8.31	0.40	0.24
	A035215	0.160	1.373	0.002	0.018	0.208	0.018	0.007	0.008	0.020	0.004	0.027	0.001	0.046	0.0061	0.0010	0.0002	0.051	0.015	0.034	7.54	0.39	0.24

IT IS CERTIFIED THAT THE MATERIAL DESCRIBED ABOVE FULLY CONFIRM TO EN 10025-2:2019 & EQUIVALENT TO IS 2062:2011.
CHEMICAL COMPOSITION & MECHANICAL PROPERTIES OF THE PRODUCT AS TESTED IN ACCORDANCE WITH THE SCHEME OF TESTING AND INSPECTION CONTAINED IN BIS CERTIFICATION MARKS LICENCE NO. CM/L-7945703 ARE AS INDICATED ABOVE AGAINST EACH ORDER NO.
PLEASE REFER TO EN 10025-2:2019 & IS 2062:2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS.

Note :

- 1) Test Certificate confirms to EN 10204 : 2004 Type 3.1
- 2) Process Route : SLAB (BOF-LHF-RH-CCM-Fully Killed(Al&Si Killed))-Hot Rolling.
- 3) Supply Condition : Normalized rolled
- 4) Mechanical Properties are certified at Room Temperature unless specified.
- 5) Ultrasonic Test are satisfactory as per : EN10160 S2 E3
- 6) Dimensions are satisfactory as per EN10029:2010 Class B, Table - 1,2,3
- 7) Surface condition as per EN10163-2 Class B, Subclass-3,
- 8) Weight calculation for plates is as per Theoretical Calculation

Legend : YS : Yield Strength, UTS :Ultimate Tensile Strength, EL : % Elongation, RA : Reduction in Area, Thk : Thickness, NDTT: Nil Ductility Transition Test, Min : Minimum, Max : Maximum, NA: Not Applicable, S: Simulated Post-weld Heat Treatment Test,Sat : Satisfactory,WBBT-Weld bead bend test YS*=t≤16-355, 16<t≤40-345, 40<t≤63=335,63<t≤80=325, CE**= 0.47 for t>30 mm

(Quality Assurance & Control Dept)

AUTHORISED SIGNATORY