



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003085085
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.

(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP D	IMP JOULE	
Heat No.	Coil No.	Nominal Size (MM)	Min													250	410	5.65	23.00		2T					
Mother Coil		T X W X L UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410														
F943057	23116564	5.000 X 1250.0 X Coil P	22.590	0.1560	0.52	0.005	0.013	0.126	0.036	0.0045	0.025	0.248	Tr	371	478	5.65	32.64			Tr	2t	Pass	25.0	Ln	135	
Total Weight in Metric Tonnes			22.590	Grand Total of Coils/Pkt/Bundles/Slab									1													

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerences. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714189052
Invoice No. : 7105957816
GST Invoice No : 23VJ2900262312
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm2, YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



Authorized Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003086493
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.

(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP D	IMP JOULE				
Heat No.	Coil No.	Nominal Size (MM)	Min															250	410	5.65	23.00	2T							
Mother Coil	T	X	W	X	L	UD	Max																						
E943097	23116729	5.000 X 1250.0 X Coil P	22.890	0.1510	0.52	0.006	0.013	0.134	0.034	0.0045	0.021	0.242	Tr	387	503	5.65	36.00	Tr	2t	Pass	25.0	Ln	124						
Total Weight in Metric Tonnes			22.890	Grand Total of Coils/Pkt/Bundies/Slab											1														

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerances. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714198880
Invoice No. : 7105957878
GST Invoice No : 23VJ2900262327
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm², YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



Authorised Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003086494
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.
(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP	IMP JOULE	
Heat No.	Coil No.	Nominal Size (MM)	Min													250	410	5.65	23.00			2T				
Mother Coil		T X W X L UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410														
D943104	23116728	5.000 X 1250.0 X Coil P	22.970	0.1700	0.55	0.004	0.016	0.117	0.035	0.0042	0.026	0.267	Tr	379	487	5.65	30.80	Tr	2t	Pass	25.0	Ln	125			
Total Weight in Metric Tonnes			22.970	Grand Total of Coils/Pkt/Bundies/Slab												1										

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerences. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714198881
Invoice No. : 7105957810
GST Invoice No : 23VJ2900262326
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route :

BOF-ARS-LHF-CASTER

Legends:

BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm², YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel

Remarks :



Authorized Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003086489
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.
(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP	IMP DOULE
Heat No.	Coil No.	Nominal Size (MM)	Min													250	410	5.65	23.00		2T				
Mother Coil		T X W X L UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410													
F943057	23116721	5.000 X 1250.0 X Coil P	22.110	0.1560	0.52	0.005	0.013	0.126	0.036	0.0045	0.025	0.248	Tr		366	475	5.65	33.05		Tr	2t	Pass	25.0	Ln	128
Total Weight in Metric Tonnes			22.110	Grand Total of Coils/Pkt/Bundles/Slab										1											

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerences. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714198871
Invoice No. : 7105957876
GST Invoice No : 23VJ2900262319
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm2, YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



Authorized Signatory



JSW STEEL LIMITED

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Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003085088

To M/S. Zetwerk Manufacturing Business

ZETWERK MANUFACTURING BUSINESSES PV

BANGALORE - 560102 Region: 10

Date : 31.08.2023

SO No./ Item : 402018435 / 11

Product : HR STEEL COILS

PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.

(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP D	IMP JOULE	
Heat No.	Coil No.	Nominal Size (MM)	Min														250	410	5.65	23.00			2T			
Mother Coil		T X W X L UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410														
G943062	23116565	5.000 X 1250.0 X Coil P	22.830	0.1660	0.55	0.003	0.018	0.147	0.030	0.0043	0.023	0.263	Tr	375	490	5.65	31.41	Tr	2t	Pass	25.0	Ln	135			
Total Weight in Metric Tonnes			22.830	Grand Total of Coils/Pkt/Bundies/Siab												1										

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerences. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714189055
Invoice No. : 7105957273
GST Invoice No : 23VJ2900262316
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Laddle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Laddle sample analysis, 1Mpa = 1N/mm², YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



(Signature)
Authorised Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003086119
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.

(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP	IMP JOULE		
Heat No.	Coil No.	Nominal Size (MM)	Min														250	410	5.65	23.00	2T						
Mother Coil		T X W X L UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410															
E943097	23117031	5.000 X 1250.0 X Coil P	22.945	0.1510	0.52	0.006	0.013	0.134	0.034	0.0045	0.021	0.242	Tr	364	471	5.65	33.00	Tr	2t	Pass	25.0	Ln	135				
Total Weight in Metric Tonnes			22.945	Grand Total of Coils/Pkt/Bundies/Siab										1													

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerances. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714197023
Invoice No. : 7105957875
GST Invoice No : 23VJ2900262318
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm², YS = Yield Strength, UTS = Ultimate Tensile Strength, El % = Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



(Signature)
(Madhusudan R)
Authorised Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003086405
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.

(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP D	IMP JOULE			
Heat No.	Coil No.	Nominal Size (MM)	Min															250	410	5.65	23.00	2T						
Mother Coil	T	X	W	X	L	UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410												
E943097	23116730	5.000 X 1250.0 X Coil P	22.750	0.1510	0.52	0.006	0.013	0.134	0.034	0.0045	0.021	0.242	Tr	387	503	5.65	36.00	Tr	2t	Pass	25.0	Ln	124					
Total Weight in Metric Tonnes			22.750	Grand Total of Coils/Pkt/Bundles/Slab										1														

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerences. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714198456
Invoice No. : 7105957821
GST Invoice No : 23VJ2900262331
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm2, YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



(Signature)
Authorised Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003085086
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 31.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.
(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE	Long	TEN	DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP D	IMP JOULE	
Heat No.	Coil No.	Nominal Size (MM)	Min													250	410	5.65	23.00		2T					
Mother Coil		T X W X L UD	Max	0.2000	1.50	0.040	0.040	0.400	0.070	0.0100	0.200	0.410														
F943057	23116722	5.000 X 1250.0 X Coil P	22.805	0.1560	0.52	0.005	0.013	0.126	0.036	0.0045	0.025	0.248	Tr		366	475	5.65	33.05	Tr	2t	Pass	25.0	Ln	128		
Total Weight in Metric Tonnes			22.805	Grand Total of Coils/Pkt/Bundles/Slab									1													

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerences. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714189053
Invoice No. : 7105957817
GST Invoice No : 23VJ2900262313
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm2, YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



Authorised Signatory



JSW STEEL LIMITED

Vijayanagar Works, PO- Vidyanagar, Village-Toranagallu, Dist: Bellary, Karnataka-583275, INDIA
Regd. Office: JSW Centre, Bandra Kurta Complex, Bandra (East), Mumbai - 400 051

HOT ROLLED MEDIUM AND HIGH TENSILE STRUCTURAL STEEL AS PER IS: 2062_2011

IS 2062_2011



CM/L - 6161963

Test Certificate : HR/23-24/0003080191
To M/S. Zetwerk Manufacturing Business
ZETWERK MANUFACTURING BUSINESSES PV
BANGALORE - 560102 Region: 10

Date : 29.08.2023
SO No./ Item : 402018435 / 11
Product : HR STEEL COILS
PO No. : ZET-KA-JSW1-127

It is certified that the material described below fully conforms to IS 2062_2011. Chemical composition and Mechanical properties of the product, as tested in accordance with the Scheme of Testing & Inspection contained in the BIS certification marks Licence No. CM/L - 6161963 are as indicated below against each order No. Etc.
(PLEASE REFER TO IS 2062_2011 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Specification: IS2062_2011 E250BR			QTY (MT)	C %	Mn %	S %	P %	Si %	Al %	N %	Nb+V+Ti	CE Long	TEN DIR	YS (Mpa)	UTS (MPa)	GL (mm)	EL%	Bend Dir	Bend Radius	Bend Result	IMP TEMP	IMP SAMP D	IMP JOULE		
Heat No.	Coil No.	Nominal Size (MM)	Min																						
Mother Coil	T X W X L UD <th>Max</th> <td colspan="19"></td>		Max																						
F940914	23626060	5,000 X 1250.0 X Coil P	22.580	0.1640	0.54	0.003	0.016	0.126	0.035	0.0044	0.022	0.260	Tr	355	486	5.65	35.00	Tr	2t	Pass	25.0	Ln	164		
Total Weight in Metric Tonnes			22.580	Grand Total of Coils/Pkt/Bundles/Siab										1											

This is to certify that the above mentioned product produced & supplied by us, do not contain any radio active element higher than the natural level and it confirms to Standard Rolling, Dimensional & Weight tolerances. The product or packing material does not contain any hazardous substances as per RoHS norms.

Delivery ID : 714167717
Invoice No. : 7105947571
GST Invoice No : 23VJ2900257046
Mode of Transport : Rail
Vehicle No. :
LC No. : 854010233568-N

Process Route : BOF-ARS-LHF-CASTER
Legends: BOF = Basic Oxygen Furnace, LHF = Ladle Heating Furnace, CCM = Continuous Casting Machine, RH = RH Degasser, HSM = Hot Strip Mill, HRS = HR Slitter, CTL = Cut To Length, T x W x L = Thickness X Width X Length, Chemistry = Ladle sample analysis, 1Mpa = 1N/mm², YS = Yield Strength, UTS = Ultimate Tensile Strength, El % - Percent elongation on standard gauge length, UD - Usage Decision, P - Prime, C - Commercial, A- Arising, Pcs - No of Pieces, CE = [C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15], Ln = Longitudinal, Tr = Transverse, Fully Killed Steel
Remarks :



Authorized Signatory