



(ISO 9001:2015, 14001:2015 Certified & NABL Accredited Lab.)

Harbanswala, Shimla By-Pass, Telpur Chowk, Dehradun-248171 (U.K.) India Mobile: +91 7535000490, 491 | Email: metclddn@gmail.com

Date of Report: 27/05/2020

Date of Receipt: 22/05/2020

Date of Testing: 23-26/05/2020

TEST REPORT

Description of Sample: TMT Steel Bar 10 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001506F

Sample ID: 220520/05

Sample Quantity: 3x1 mtr.

Sample Condition: Receipt as OK

Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 28.5°C & NA Addition to, Deviation or Exclusion from the Method: NA

Letter Date: 22/05/2020

C.B. No.: 174/UDRP/AF/59(BR)

N.O.W.: Construction of 42 M Span Steel Truss Motor Bridge in Km-11

of Arakot Chinwa Balcha Motor Road in District Uttarkashi

Issued To:

M/s Tons Builders, Near Telephone Exchange, Purola, Uttarkashi (IIK)

S. No.		Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -		RA: 2018 (Fe-500D)	
1.	Dia., mm	10		
2.	Wt, kg/m	0.618	0.617 ± 7%	
		0.010	0.617 ± 7%	IS: 1786-2008, Amd
3.	Tensile strength, N/mm ²	688.16	10% more than actual 0.2 % proof	Reaff:2018 IS: 1608-2005
			stress/ Yield stress but not less than 565 N/mm ²	Reaff: 2017
4.	Yield stress, N/mm ²	572,46	500 Min.	10
			Soo Min.	IS: 1608-2005
5.	TS/YS Ratio	1.20	≥ 1.10	Reaff: 2017
6.	Elongation, %	23.50	16.0 Min.	By Calculation
		23.50	10.0 Min.	IS: 1608-2005
7.	Bend test	Satisfactory No transverse crack in the bend portion	Reaff: 2017	
			should occur	IS: 1599-2019
8.	Rebend test	Satisfactory	No fracture in the bend portion should	
			occur	IS: 1786-2008
II.	Chemical Properties: -		occur -	Amd.2, Reaff:2018
1.	Carbon as C, % w/w	0.21	0.25 Max.	IS: 228 (P-I)-1987,
2.	Sulphur as S, % w/w	0.025		Reaff. 2018
		0.025	0.040 Max.	IS: 228 (P-IX)-1989
3.	Phosphorous as P, % w/w	0.020		Reaff. 2014
	-1/4 "/"	0.030	0.040 Max	IS: 228 (P-III)-1987
4.	Sulphur + Phosphorous, % w/w	0.055		Reaff. 2018
17.7	The Above Test refers only to the I	0.055	0.075 Max.	By Calculation

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

*****End of Report******



he result listed refer only to the tested samples and applicable parameters endorsement of product is neither inferred nor implied.

Total liability of our Lab. is limited to the invoiced amount.

Samples will be destroyed after 30 bays from the date of issue of test report.

This report is not be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any





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Date of Report: 27/05/2020

Date of Receipt: 22/05/2020

Date of Testing: 23-26/05/2020

TEST REPORT

Description of Sample: TMT Steel Bar 12 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001507F

Sample ID: 220520/06 Sample Quantity: 3x1 mtr.

Sample Condition: Receipt as OK

Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 29.1°C & NA Addition to, Deviation or Exclusion from the Method: NA Letter Date: 22/05/2020

C.B. No.: 174/UDRP/AF/59(BR)

N.O.W.: Construction of 42 M Span Steel Truss Motor Bridge in Km-11

of Arakot Chinwa Balcha Motor Road in District Uttarkashi

Issued To:

M/s Tons Builders, Near Telephone Exchange,

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -		KAI 2010 (FC-300D)	
1.	Dia., mm	12		
2.	Wt, kg/m	0.892	0.888 ± 5%	IS: 1786-2008, Amd.2
3.	Tensile strength, N/mm ²	656.46	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm ²	Reaff: 2018 IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm ²	544.32	500 Min.	IS: 1608-2005
5.	TS/YS Ratio	1.21	≥ 1.10	Reaff: 2017 By Calculation
6.	Elongation, %	21.60	16.0 Min.	IS: 1608-2005
7.	Bend test	Satisfactory	No transverse crack in the bend portion should occur	Reaff: 2017 IS: 1599-2019
8.	Rebend test	Satisfactory	No fracture in the bend portion should occur	IS: 1786-2008
II. 1.	Chemical Properties: - Carbon as C, % w/w	0.19	0.25 Max.	Amd.2, Reaff:2018 IS: 228 (P-I)-1987,
2.	Sulphur as S, % w/w	0.027	0.040 Max.	Reaff. 2018 IS: 228 (P-IX)-1989
3.	Phosphorous as P, % w/w	0.031	0.040 Max	Reaff. 2014
4.	Sulphur + Phosphorous, %			IS: 228 (P-III)-1987 Reaff, 2018
"	w/w	0.058	0.075 Max.	By Calculation

Note: 1. The Above Test refers only to the Items tested.

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

******End of Report*****



d refer only to the tested samples and applicable parameters endorsement of product is neither inferred nor implied.

Total liability of our Lab is limited to the invoiced amount. Samples will be destroyed after 30 Days from the date of issue of test report. This report is not be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.





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Date of Report: 27/05/2020

Date of Testing: 23-26/05/2020

Date of Receipt: 22/05/2020

Mobile: +91 7535000490, 491 | Email: metclddn@gmail.com

TEST REPORT

Description of Sample: TMT Steel Bar 16 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001508F

Sample ID: 220520/07

Sample Quantity: 3x1 mtr.

Sample Condition: Receipt as OK

Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 28.7° C & NA Addition to, Deviation or Exclusion from the Method: NA

Letter Date: 22/05/2020

C.B. No.: 174/UDRP/AF/59(BR)

N.O.W.: Construction of 42 M Span Steel Truss Motor Bridge in Km-11

of Arakot Chinwa Balcha Motor Road in District Uttarkashi

Issued To:

M/s Tons Builders.

Near Telephone Exchange, Purola, Uttarkashi (IIK)

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -		101. 2010 (FE-300D)	
1.	Dia., mm	16		
2.	Wt, kg/m	1.586	1.58 ± 5%	IS: 1786-2008, Amd. Reaff:2018
3.	Tensile strength, N/mm ²	690.06	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm ²	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm ²	586.20	500 Min.	IS: 1608-2005 Reaff: 2017
5.	TS/YS Ratio	1.18	≥ 1.10	By Calculation
6.	Elongation, %	22.40	16.0 Min.	IS: 1608-2005 Reaff: 2017
7.	Bend test	Satisfactory	No transverse crack in the bend portion should occur	IS: 1599-2019
8.	Rebend test	Satisfactory	No fracture in the bend portion should occur	IS: 1786-2008
II. 1.	Chemical Properties: - Carbon as C, % w/w	0.20	0.25 Max.	Amd.2, Reaff:2018 IS: 228 (P-I)-1987, Reaff. 2018
2.	Sulphur as S, % w/w	0.023	0.040 Max.	IS: 228 (P-IX)-1989 Reaff, 2014
3.	Phosphorous as P, % w/w	0.028	0.040 Max	IS: 228 (P-III)-1987 Reaff, 2018
4.	Sulphur + Phosphorous, % w/w	0.051	0.075 Max.	By Calculation

Note: 1. The Above Test refers only to the Items tested.

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

******End of Report*****



d samples and applicable parameters endorsement of product is neither inferred nor implied.

Total liability of our Lab. is limited to the invoiced amount.

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TEST REPORT

Description of Sample: TMT Steel Bar 10 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001509F

Sample ID: 220520/08

Date of Report: 27/05/2020 Sample Quantity: 3x1 mtr. Date of Testing: 23-26/05/2020 Sample Condition: Receipt as OK Date of Receipt: 22/05/2020

Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 29.1°C & NA Addition to, Deviation or Exclusion from the Method: NA

Letter No.: 22/05/2020

C.B. No.: 176/UDRP/AF/64(BR)

N.O.W.: Construction of 48 M Span Steel Truss Motor Bridge over Kamal River near Village Thalli at Sada Name -Tok in District Uttarkashi.

Issued To:

M/s Tons Builders, Near Telephone Exchange, Purola, Uttarkashi.

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -		KA: 2016 (Fe-300D)	
1.	Dia., mm	10		
2.	Wt, kg/m	0.620	0.617 ± 7%	IS: 1786-2008, Amd.2 Reaff:2018
3.	Tensile strength, N/mm ²	687.76	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm ²	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm ²	579.24	500 Min.	IS: 1608-2005 Reaff: 2017
5.	TS/YS Ratio	1.19	≥ 1.10	By Calculation
6.	Elongation, %	23.0	16.0 Min.	IS: 1608-2005 Reaff: 2017
7.	Bend test	Satisfactory	No transverse crack in the bend portion should occur	IS: 1599-2019
8.	Rebend test	Satisfactory	No fracture in the bend portion should occur	IS: 1786-2008 Amd.2, Reaff:2018
II. 1.	Chemical Properties: - Carbon as C, % w/w	0.20	0.25 Max.	IS: 228 (P-I)-1987, Reaff, 2018
2.	Sulphur as S, % w/w	0.024	0.040 Max.	IS: 228 (P-IX)-1989 Reaff, 2014
3.	Phosphorous as P, % w/w	0.030	0.040 Max	IS: 228 (P-III)-1987 Reaff, 2018
4.	Sulphur + Phosphorous, % w/w	0.054	0.075 Max.	By Calculation

Note: 1. The Above Test refers only to the Items tested.

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

*****End of Report*****

sult listed refer only to the tested samples and applicable parameters endorsement of product is neither inferred nor implied.

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Date of Report: 27/05/2020

Date of Receipt: 22/05/2020

Date of Testing: 23-26/05/2020

TEST REPORT

Description of Sample: TMT Steel Bar 12 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001510F

Sample ID: 220520/09 Sample Quantity: 3x1 mtr..

Sample Condition: Receipt as OK Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 28.8° C & NA Addition to, Deviation or Exclusion from the Method: NA

Letter No.: 22/05/2020 C.B. No.: 176/UDRP/AF/64(BR)

N.O.W.: Construction of 48 M Span Steel Truss Motor Bridge over Kamal River near Village Thalli at Sada Name - Tok in District Uttarkashi.

Issued To:

M/s Tons Builders. Near Telephone Exchange, Purola, Uttarkashi.

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test	
I.	Physical Properties: -		(I C COOD)		
1.	Dia., mm	12			
2.	Wt, kg/m	0.892	0.888 ± 5%	IS: 1786-2008, Amd.2 Reaff:2018	
3.	Tensile strength, N/mm ²	665.54	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm ²	IS: 1608-2005 Reaff: 2017	
4.	Yield stress, N/mm ²	549.30	500 Min.	IS: 1608-2005 Reaff: 2017	
5.	TS/YS Ratio	1.21	≥ 1.10	By Calculation	
6.	Elongation, %	22.10	16.0 Min.	IS: 1608-2005 Reaff: 2017	
7.	Bend test	Satisfactory	No transverse crack in the bend portion should occur	IS: 1599-2019	
8.	Rebend test	Satisfactory	No fracture in the bend portion should occur	IS: 1786-2008 Amd.2, Reaff:2018	
II. 1.	Chemical Properties: - Carbon as C, % w/w	0.17	0.25 Max.	IS: 228 (P-I)-1987, Reaff. 2018	
2.	Sulphur as S, % w/w	0.022	0.040 Max.	IS: 228 (P-IX)-1989 Reaff, 2014	
3.	Phosphorous as P, % w/w	0.029	0.040 Max	IS: 228 (P-III)-1987 Reaff, 2018	
4.	Sulphur + Phosphorous, % w/w	0.051	0.075 Max.	By Calculation	

Note: 1. The Above Test refers only to the Items tested.

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

*****End of Report*****



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Date of Report: 27/05/2020

Date of Receipt: 22/05/2020

Date of Testing: 23-26/05/2020

TEST REPORT

Description of Sample: TMT Steel Bar 16 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001511F

Sample ID: 220520/10

Sample Quantity: 3x1 mtr.

Sample Condition: Receipt as OK

Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 29.2° C & NA Addition to, Deviation or Exclusion from the Method: NA

Letter No.: 22/05/2020

C.B. No.: 176/UDRP/AF/64(BR)

N.O.W.: Construction of 48 M Span Steel Truss Motor Bridge over Kamal River near Village Thalli at Sada Name - Tok in District Uttarkashi.

Issued To:

M/s Tons Builders, Near Telephone Exchange, Purola, Uttarkashi.

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -		1011 2010 (10 2000)	
1.	Dia., mm	16		
2.	Wt, kg/m	1.584	1.58 ± 5%	IS: 1786-2008, Amd.2 Reaff:2018
3.	Tensile strength, N/mm ²	694.40	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm ²	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm ²	586.56	500 Min.	IS: 1608-2005 Reaff: 2017
5.	TS/YS Ratio	1.18	≥ 1.10	By Calculation
6.	Elongation, %	23.70	16.0 Min.	IS: 1608-2005 Reaff: 2017
7.	Bend test	Satisfactory	No transverse crack in the bend portion should occur	IS: 1599-2019
8.	Rebend test	Satisfactory	No fracture in the bend portion should occur	IS: 1786-2008 Amd.2, Reaff:2018
II. 1.	Chemical Properties: - Carbon as C, % w/w	0.18	0.25 Max.	IS: 228 (P-I)-1987, Reaff, 2018
2.	Sulphur as S, % w/w	0.026	0.040 Max.	IS: 228 (P-IX)-1989 Reaff, 2014
3.	Phosphorous as P, % w/w	0.028	0.040 Max	IS: 228 (P-III)-1987 Reaff, 2018
4.	Sulphur + Phosphorous, % w/w	0.054	0.075 Max.	By Calculation

Note: 1. The Above Test refers only to the Items tested.

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

******End of Report*****

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Date of Report: 27/05/2020

Date of Receipt: 22/05/2020

Date of Testing: 23-26/05/2020

TEST REPORT

Description of Sample: TMT Steel Bar 20 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001512F

Sample ID: 220520/11

Sample Quantity: 3x1 mtr.

Sample Condition: Receipt as OK

Sample Plan & Sampling Method: NA

Environment Condition (Temp. & Humidity): 28.5° C & NA Addition to, Deviation or Exclusion from the Method: NA

Letter No.: 22/05/2020

C.B. No.: 176/UDRP/AF/64(BR)

N.O.W.: Construction of 48 M Span Steel Truss Motor Bridge over Kamal River near Village Thalli at Sada Name -Tok in District Uttarkashi.

Issued To:

M/s Tons Builders, Near Telephone Exchange, Purola Hittarkachi

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I. 1.	Physical Properties: - Dia., mm	20		
2.	Wt, kg/m	2.472	2.47 ± 3%	IS: 1786-2008, Amd.2 Reaff:2018
3.	Tensile strength, N/mm ²	705.15	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm ²	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm ²	598.80	500 Min.	IS: 1608-2005 Reaff: 2017
5.	TS/YS Ratio	1.18	≥ 1.10	By Calculation
6.	Elongation, %	22.50	16.0 Min.	IS: 1608-2005 Reaff: 2017
7.	Bend test	Satisfactory	No transverse crack in the bend portion should occur	IS: 1599-2019
8.	Rebend test	Satisfactory	No fracture in the bend portion should occur	IS: 1786-2008 Amd.2, Reaff:2018
II. 1.	Chemical Properties: - Carbon as C, % w/w	0.20	0.25 Max.	IS: 228 (P-I)-1987, Reaff. 2018
2.	Sulphur as S, % w/w	0.027	0.040 Max.	IS: 228 (P-IX)-1989 Reaff. 2014
3.	Phosphorous as P, % w/w	0.030	0.040 Max	IS: 228 (P-III)-1987 Reaff. 2018
4.	Sulphur + Phosphorous, % w/w	0.057	0.075 Max.	By Calculation

Note: 1. The Above Test refers only to the Items tested.

2. Statement of Conformity & Decision Rule (In case of Borderline): NA

3. Opinion & Interpretations: NA

******End of Report******

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The team isset even only to the team case an injuries and approache parameters enconserved to product is require interfect not improve. Total liability of our Lab. is limited to the invoiced amount. Samples will be destroyed after 30 Days from the date of issue of test report. This report is not be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.