



(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 (U.K.)

S. No.		Test Value	Requirement as per IS-1786-2008	Method of test
I.	Physical Properties: -		RA: 2018 (Fe-500D)	
1.	Dia., mm	10		
2.	Wt, kg/m	0.618	0.617 ± 7%	IS: 1786-2008, Amd
3.	Tensile strength, N/mm <sup>2</sup>			Reaff:2018
		688.16	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm <sup>2</sup>	572.46	500 Min.	IS: 1608-2005
5.	TS/YS Ratio			Reaff: 2017
6.		1.20	≥ 1.10	By Calculation
0.	Elongation, %	23.50	16.0 Min.	IS: 1608-2005
7.	Bend test			Reaff: 2017
	Delid test	Satisfactory	No transverse crack in the bend portion should occur	IS: 1599-2019
8.	Rebend test	Satisfactory		
		Jacistaciory	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. Ph	Phosphorous as P, % w/w			Reaff. 2014
	1 1, /0 W/W	0.030	0.040 Max	IS: 228 (P-III)-1987
4.	Sulphur + Phosphorous, % w/w	0.055		Reaff. 2018
to: 1 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 Days from the date of issue of test 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 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: -		(10-300D)	
1.	Dia., mm	12		
2.	Wt, kg/m	0.892	0.888 ± 5%	IS: 1786-2008, Amd.2
3.	Tensile strength, N/mm <sup>2</sup>	656.46	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	Reaff:2018 IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm <sup>2</sup>	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.			U.U4U IVIAX	IS: 228 (P-III)-1987 Reaff. 2018
.	Sulphur + Phosphorous, % 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\*\*\*\*\*



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

The result is seen reservoiry to the reservoir samples and applicable parameters enconserved a product a neutral immediation for 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 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.: 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,

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -		12.1.2010 (1C-300D)	
1.	Dia., mm	16		
2.	Wt, kg/m	1.586	1.58 ± 5%	IS: 1786-2008, Amd.
3.	Tensile strength, N/mm <sup>2</sup>	690.06	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	Reaff:2018 IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm <sup>2</sup>	586.20	500 Min.	IS: 1608-2005
5.	TS/YS Ratio	1.18	≥ 1.10	Reaff: 2017 By Calculation
6.	Elongation, %	22.40	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	0.20	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\*\*\*\*\*



ted 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 Pays from the date of issue of test 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 10 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001509F

Sample ID: 220520/08 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 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: -		101. 2010 (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 <sup>2</sup>	687.76	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm <sup>2</sup>	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.	Chemical Properties: -			IS: 228 (P-I)-1987,
1.	Carbon as C, % w/w	0.20	0.25 Max.	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\*\*\*\*\*

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

The result inside reter only to the tested samples and applicable parameters endorsement or product is neither innered not 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 wholfly 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 Testing: 23-26/05/2020

Date of Receipt: 22/05/2020

### **TEST REPORT**

Description of Sample: TMT Steel Bar 12 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001510F Date of Report: 27/05/2020

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: -		(10 0000)		
1.	Dia., mm	12	A Line Land Land Land Land Land Land Land Land		
2.	Wt, kg/m	0.892	0.888 ± 5%	IS: 1786-2008, Amd.2 Reaff:2018	
3.	Tensile strength, N/mm <sup>2</sup>	665.54	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	IS: 1608-2005 Reaff: 2017	
4.	Yield stress, N/mm <sup>2</sup>	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\*\*\*\*\*

The 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 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







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Date of Report: 27/05/2020

Date of Receipt: 22/05/2020

Date of Testing: 23-26/05/2020

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

### **TEST REPORT**

Description of Sample: TMT Steel Bar 16 mm dia. Make "SHYAM SEL" ULR No.: 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: -		1111 2010 (1 0 0000)	
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 <sup>2</sup>	694.40	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm <sup>2</sup>	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\*\*\*\*\*

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

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Date of Testing: 23-26/05/2020

Date of Receipt: 22/05/2020

### **TEST REPORT**

Description of Sample: TMT Steel Bar 20 mm dia. Make "SHYAM SEL" ULR No.: TC657520000001512F Date of Report: 27/05/2020

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, Uttarkashi,

S. No.	Parameters	Test Value	Requirement as per IS-1786-2008 RA: 2018 (Fe-500D)	Method of test
I.	Physical Properties: -			
1.	Dia., mm	20		
2.	Wt, kg/m	2.472	2.47 ± 3%	IS: 1786-2008, Amd.2 Reaff:2018
3.	Tensile strength, N/mm <sup>2</sup>	705.15	10% more than actual 0.2 % proof stress/ Yield stress but not less than 565 N/mm <sup>2</sup>	IS: 1608-2005 Reaff: 2017
4.	Yield stress, N/mm <sup>2</sup>	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.	Chemical Properties: -			IS: 228 (P-I)-1987,
1.	Carbon as C, % w/w	0.20	0.25 Max.	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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