



Format No : IDRL/FM/46.
2464-0797
Telephone : 2464-0754
Fax No. 91-033-2464-4812

33/2A, Satish Mukherjee Road, Kolkata - 700 026
(GOVERNMENT REGISTERED)

Test Report

Test Report No. C/J43/A/2018.

Date : 06. 09. 2018.

Ref./Order No. N.i.l.

Date : 30. 08. 2018.

Customer Name & Address M/s. Maithan Steel and Power Limited,

9, A. J. C. Bose Road, Ideal Centre, 6th. Floor, Kolkata - 700 017.

Description of Sample
& Condition.

Supplied 4 Nos. 1 metre long cut piece Steel sample from TMT Bar

Emboss : "MAITHAN TMT 600" described as below :

Method of Test

Spectrometer.

Matl.: IS-1786, Fe-600.

Sample received on : 30. 08. 2018.

Test Result

Test carried out on : 05. 09. 2018.

Elements:	8 mm dia T M T Bar :		16 mm dia T M T Bar :	
	Sample No-1.	Sample No-2.	Sample No-1.	Sample No-2.
% Carbon	0.183	0.209	0.184	0.191
% Manganese	0.93	0.80	0.75	0.78
% Sulphur	0.032	0.031	0.027	0.029
% Phosphorus	0.036	0.045	0.039	0.040
% Sulphur + % Phosphorus	0.068	0.076	0.066	0.069
% Carbon Equivalent	0.38	0.37	0.34	0.35

Specified requirement as per IS-1786/2008, Grade-Fe-600, % C : 0.30 max., % S : 0.040 max.,

% P : 0.040 max.(+ 0.005), % S & % P : 0.075 max.(0.010), % C.E. : 0.42 max.

Above test witnessed by Mr. Sujit Roy for Maithan Steel and Power Ltd., Kolkata.

-: End of Test Report :-

Page No. 1 of 1.

Note :

1. The Test Result in this Test Report, relate only to the test sample(s) submitted to our Laboratory.
2. This Test Report shall not be reproduced without written approval of our Laboratory.
3. Sample(s) not drawn by us.


B. N. Dhan
Director
Authorized Signatory



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33/2A, Satish Mukherjee Road, Kolkata - 700 026
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Test Report

Test Report No. C/143/2018.

Date : 06.09.2018.

Ref./Order No. N I I.

Date : 30.08.2018.

Customer Name & Address M/s. Maithan Steel and Power Limited,

9, A. J. C. Bose Road, Ideal Centre, 6th. Floor, Kolkata - 700 017.

Description of Sample
& Condition.

Supplied 4 Nos. 1 metre long cut piece Steel sample from TMT Bar

Emboss : "MAITHAN TMT 600" described as below :

Standard of Test

IS-1786.

Matl.: IS-1786, Fe-600.

Sample received on : 30.08.2018.

Test Result

Test carried out on : 05.09.2018.

Tensile Test :	8 mm dia T M T Bar :		16 mm dia T M T Bar :	
	Sample No-1.	Sample No-2.	Sample No-1.	Sample No-2.
Specimen Nominal dia	8.00 mm	8.00 mm	16.00 mm	16.00 mm
Cross-Sectional Area	49.44 mm ²	49.60 mm ²	204.40 mm ²	204.90 mm ²
Yield Stress	624 N/mm ²	624 N/mm ²	734 N/mm ²	735 N/mm ²
Ultimate Tensile Strength	709 N/mm ²	714 N/mm ²	804 N/mm ²	820 N/mm ²
Elongation on 5.65√So	17.00%	16.00%	15.00%	15.00%

Specified requirement : Y.S.: 600 N/mm² min., U.T.S.: 660 N/mm² min., Elongation-10% min.
as per IS-1786/2008, Grade-Fe-600.

180° Bend Test :
(Roller dia-5 x D.)

Specimen Nominal dia	8.00 mm	8.00 mm	16.00 mm	16.00 mm
Observation	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.
Remarks	Acceptable.	Acceptable.	Acceptable.	Acceptable.

Specified requirement : No rupture or cracks visible on the bent portion by normal vision as per IS-1786/2008.

Re - Bend Test : (Bend Test carried out as per IS-1786/2008, CLNo.9.3)

Roller dia	7 x D.	7 x D.	8 x D.	8 x D.
Specimen Nominal dia	8.00 mm	8.00 mm	16.00 mm	16.00 mm
Observation	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.
Remarks	Acceptable.	Acceptable.	Acceptable.	Acceptable.

Specified requirement : No rupture or cracks visible on the re-bent portion by normal vision as per IS-1786/2008.

(Re-Bend Test carried out as per IS-1786/2008, CLNo.9.4)

Mass Test :

Total length	0.505 Mtr.	0.506 Mtr.	0.507 Mtr.	0.507 Mtr.
Total weight	0.1960 Kg.	0.1970 Kg.	0.8135 Kg.	0.8155 Kg.
Mass per Metre Run	0.388 Kg.	0.389 Kg.	1.60 Kg.	1.61 Kg.

Specified requirement : Nominal Mass per Metre Run-0.395 Kg. for 8 mm & 1.58 Kg. for 16 mm as per IS-1786/2008.

Above test witnessed by Mr. Sujit Roy for Maithan Steel and Power Ltd., Kolkata.

-: End of Test Report :-

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Standard of Test

IS-1786.

Matl.: IS-1786, Fe-600.

Sample received on : 30. 08. 2018.

Test Result

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Tensile Test :	8 mm dia T M T Bar :		16 mm dia T M T Bar :	
	Sample No-1.	Sample No-2.	Sample No-1.	Sample No-2.
Specimen Nominal dia	8.00 mm	8.00 mm	16.00 mm	16.00 mm
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Yield Stress	624 N/mm ²	624 N/mm ²	734 N/mm ²	735 N/mm ²
Ultimate Tensile Strength	709 N/mm ²	714 N/mm ²	804 N/mm ²	820 N/mm ²
Elongation on 5.65√So	17.00%	16.00%	15.00%	15.00%
Specified requirement : Y.S. : 600 N/mm ² min., U.T.S. : 660 N/mm ² min., Elongation-10% min.				
180° Bend Test : (Roller dia-5 x D.)	as per IS-1786/2008, Grade-Fe-600.			
Specimen Nominal dia	8.00 mm	8.00 mm	16.00 mm	16.00 mm
Observation	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.
Remarks	Acceptable.	Acceptable.	Acceptable.	Acceptable.
Specified requirement : No rupture or cracks visible on the bent portion by normal vision as per IS-1786/2008.				
Re - Bend Test :	(Bend Test carried out as per IS-1786/2008, Cl.No.9.3)			
Roller dia	7 x D.	7 x D.	8 x D.	8 x D.
Specimen Nominal dia	8.00 mm	8.00 mm	16.00 mm	16.00 mm
Observation	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.	No rupture or cracks.
Remarks	Acceptable.	Acceptable.	Acceptable.	Acceptable.
Specified requirement : No rupture or cracks visible on the re-bent portion by normal vision as per IS-1786/2008. (Re-Bend Test carried out as per IS-1786/2008, Cl.No.9.4)				
Mass Test :				
Total length	0.505 Mtr.	0.506 Mtr.	0.507 Mtr.	0.507 Mtr.
Total weight	0.1960 Kg.	0.1970 Kg.	0.8135 Kg.	0.8155 Kg.
Mass per Metre Run	0.388 Kg.	0.389 Kg.	1.60 Kg.	1.61 Kg.
Specified requirement : Nominal Mass per Metre Run-0.395 Kg. for 8 mm & 1.58 Kg. for 16 mm as per IS-1786/2008.				

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