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HEAD OFFICE & LABORATORY  
Campus - I



Cert. No.  
TC - 6809

256A, M. G. Road, Purbasan, Thakurpukur, Kol.- 63  
Phone : (033) 2497 1903, 2438 1677, M. 9830020628 / 9432219707  
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A Govt. Regd. Test House

ULR No. TC680919000000162F		Format NO. OCS/QR/23	
TEST REPORT			
Job ID No.: OCSK/JN/100/00009 (Physical)		Date: 23.10.2019	Page: 1 of 1
Ref. No. : Memo No.1042-ENC/2019 Date:16.10.2019	Product Specification : IS : 1786-2008, Reaf:2013 (Amendment No.4, 2019) Gr- Fe 500D	Test Specification : IS: 1608 (P-1) - 2018 IS: 1599-2012, Reaf:2017 IS: 1786-2008, Reaf:2013 (Amendment No.4, 2019)	Seal / Stamp / Mark (if any) : ELEGANT
Issued To : Engineer-in-Chief & Ex-Officio Secretary Public Work Department 'NABANNA', 8 <sup>th</sup> Floor, Room No.802 325, Sarat Chandra Road, Howrah-711102	Description of Sample(s) : 5nos. (1no. each of 16mm, 20mm, 25mm, 28mm & 32mm) dia. Reinforcement Steel Bar sample for the following tests. <b>Brand: ELEGANT</b> Subject: Physical Test of Reinforcement steel. Ref: T.O.Memo No. 595/2(5)-ENC/2019, Dt.17.06.2019	Test Parameters : Weight/meter, U.T.S, 0.2% P.S, %Elongation, Ratio of TS/YS, Bend & Rebind test	Sample received on : 22.10.2019 Sample tested on : 22.10.2019 to 23.10.2019

This is to certify that the above sample (S) has/have been tested with the following results:

**PHYSICAL PROPERTIES**

**I. Building Materials:**

- Reinforcement Steel (rebar):

Sl. No	Dia. (mm)	Weight/mtr (Kg./mtr)	U.T.S. (N/mm <sup>2</sup> )	0.2% Proof Stress (N/mm <sup>2</sup> )	% Elong. (5.65√so)	Ratio of TS/YS	Bend Test (180°/3Φ & 4Φ)	Rebind Test (135°/157.5°/6Φ)
1.	16	1.539	684.420	595.6800	17.544	1.149	Satisfactory	Satisfactory
2.	20	2.486	712.234	583.1099	20.235	1.231	Satisfactory	Satisfactory
3.	25	3.761	662.519	546.5675	23.613	1.214	Satisfactory	Satisfactory
4.	28	4.736	679.134	559.6332	21.842	1.221	Satisfactory	Satisfactory
5.	32	6.407	705.486	590.9269	19.714	1.193	Satisfactory	Satisfactory
Req. as per IS: 1786-2008, Reaf: 2013, (Amendment No.4, 2019), Gr. Fe- 500D		16mm-1.580(±5%) 20mm-2.470(±3%) 25mm-3.850(±3%) 28mm-4.830(±3%) 32mm-6.310(±3%)	565.00 Min.	500.00 Min.	16.00 Min.	1.10 Min.	Shall pass the test	Shall pass the test

**REMARKS:** The above submitted samples were duly tested and conform to the Req. of IS: 1786-2008, Reaf: 2013, (Amendment No.4, 2019), Gr. Fe- 500D, with respect to the above test parameters.

*Rb*  
Prepared By

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*[Signature]*  
Authorised Signatory

**Note :**

- ★ Analysed as on received basis and test results relate to the sample(s) only.
- ★ Liability for return of sample(s) ceases after fifteen days.
- ★ The reproduction of the report except in full is invalid without written approval of the laboratory.
- ★ The test results referred in certificate are based on observations & measurements under the stated environmental conditions.
- ★ The Test Report without EMBOSING is Invalid.

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ULR No. TC680919000000162F		Format NO. OCS/QR/23	
TEST REPORT			
Job ID No.: OCSK/JN/100/00009 (Physical)		Date: 23.10.2019	Page: 1 of 1
Ref. No. : Date:16.10.2019	Memo No.1042-ENC/2019	Product Specification : IS : 1786-2008, Reaf:2013 (Amendment No.4, 2019) Gr- Fe 500D	Test Specification : IS: 1608 (P-1) - 2018 IS: 1599-2012, Reaf:2017 IS: 1786-2008, Reaf:2013 (Amendment No.4, 2019)
Issued To : Description of Sample(s)	Engineer-in-Chief & Ex-Officio Secretary Public Work Department 'NABANNA', 8 <sup>th</sup> Floor, Room No.802 325, Sarat Chandra Road, Howrah-711102 5nos. (1no. each of 16mm, 20mm, 25mm, 28mm & 32mm) dia. Reinforcement Steel Bar sample for the following tests. <b>Brand: ELEGANT</b> Subject: Physical Test of Reinforcement steel. Ref: T.O.Memo No. 595/2(5)-ENC/2019, Dt.17.06.2019	Seal / Stamp / Mark (if any) :	ELEGANT
Test Parameters	Weight/meter, U.T.S, 0.2% P.S, %Elongation, Ratio of TS/YS, Bend & Rebend test	Sample received on :	22.10.2019 Sample tested on : 22.10.2019 to 23.10.2019

This is to certify that the above sample (S) has/have been tested with the following results:

**PHYSICAL PROPERTIES**

I. Building Materials:

• Reinforcement Steel (rebar):

Sl. No	Dia. (mm)	Weight/mtr (Kg./mt)	U.T.S. (N/mm <sup>2</sup> )	0.2% Proof Stress (N/mm <sup>2</sup> )	% Elong. (5.65√so)	Ratio of TS/YS	Bend Test (180°/3Φ & 4Φ)	Rebend Test (135°/157.5°/6Φ)
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5.	32	6.407	705.486	590.9269	19.714	1.193	Satisfactory	Satisfactory
Req. as per IS: 1786-2008, Reaf: 2013, (Amendment No.4, 2019), Gr. Fe- 500D		16mm-1.580(±5%) 20mm-2.470(±3%) 25mm-3.850(±3%) 28mm-4.830(±3%) 32mm-6.310(±3%)	565.00 Min.	500.00 Min.	16.00 Min.	1.10 Min.	Shall pass the test	Shall pass the test

REMARKS: The above submitted samples were duly tested and conform to the Req. of IS: 1786-2008, Reaf: 2013, (Amendment No.4, 2019), Gr. Fe- 500D, with respect to the above test parameters.

*Ribon*  
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ULR No. TC680919000000162F		Format NO. OCS/QR/24	
<b>TEST REPORT</b>			
Job ID No.: OCSK/JN/100/00009 (Chemical)		Date: 23.10.2019	Page: 1 of 1
Ref. No. : Date:16.10.2019	Memo No.1042-ENC/2019	Product Specification : IS : 1786-2008, Reaf:2013 (Amendment No.4, 2019) Cl.4.2.1, Gr- Fe 500D	Test Specification : IS: 228 (Relevant Parts)
Issued To : Description of Sample(s)	Engineer-in-Chief & Ex-Officio Secretary Public Work Department 'NABANNA', 8 <sup>th</sup> Floor, Room No.802 325, Sarat Chandrta Road, Howrah-711102 5nos. (1no. each of 16mm, 20mm, 25mm, 28mm & 32mm) dia. Reinforcement Steel Bar sample for the following tests. <b>Brand: ELEGANT</b> Subject: Chemical Test of Reinforcement steel. Ref: T.O.Memo No. 595/2(5)-ENC/2019, Dt.17.06.2019	Seal / Stamp / Mark (if any) : ELEGANT	
Test Parameters	%C, %S, %P & %(S+P)	Sample received on : Sample tested on :	22.10.2019 22.10.2019

This is to certify that the above sample (S) has/have been tested with the following results:

**CHEMICAL PROPERTIES**

**I. Metals & Alloys:**

- Carbon Steel (Low Carbon):

Sl. No	Dia. (mm)	%C	%S	%P	%(S+P)
1.	16	0.203	0.028	0.036	0.064
2.	20	0.197	0.027	0.029	0.056
3.	25	0.207	0.030	0.036	0.066
4.	28	0.205	0.016	0.029	0.045
5.	32	0.208	0.029	0.037	0.066
Req. as per IS: 1786-2008, Reaf: 2013, (Amendment No.4, 2019), Cl.4.2.1, Gr. Fe- 500D		0.27 Max	0.045 Max	0.045 Max	0.085 Max

**REMARKS:** The above submitted samples were duly tested and conform to the Req. of IS: 1786-2008, Reaf: 2013, (Amendment No.4, 2019), Cl.4.2.1, Gr. Fe- 500D, with respect to the above test parameters.

*R.B.*  
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Ref. No. : Memo No.1042-ENC/2019 Date:16.10.2019	Product Specification : IS : 1786-2008, Reaf:2013 (Amendment No.4, 2019) Cl.4.2.1, Gr- Fe 500D	Test Specification : IS: 228 (Relevant Parts)	
Issued To : Engineer-in-Chief & Ex-Officio Secretary Public Work Department 'NABANNA', 8 <sup>th</sup> Floor, Room No.802 325, Sarat Chandra Road, Howrah-711102	Description : 5nos. (1no. each of 16mm, 20mm, 25mm, 28mm & of 32mm) dia. Reinforcement Steel Bar sample for the Sample(s) following tests. Brand: ELEGANT Subject: Chemical Test of Reinforcement steel. Ref: T.O.Memo No. 595/2(5)-ENC/2019, Dt.17.06.2019	Seal / Stamp / Mark (if any) : ELEGANT	
Test Parameters : %C, %S, %P & %(S+P)	Sample received on : 22.10.2019 Sample tested on : 22.10.2019		

This is to certify that the above sample (S) has/have been tested with the following results:

**CHEMICAL PROPERTIES**

I. Metals & Alloys:

• Carbon Steel (Low Carbon):

Sl. No	Dia. (mm)	%C	%S	%P	%(S+P)
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