



सीएसआइआर - खनिज एवं पदार्थ प्रौद्योगिकी संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

भुवनेश्वर-751013, ओडिशा, भारत

CSIR - INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY

TEST REPORT

(Council of Scientific & Industrial Research)

Bhubaneswar-751013, Odisha, INDIA

Sample Ref. No. :- LT-01/AMT/22/22
(Ref. Lr.No. 915, Dt: 31.05.2022)

Name and address of the Client :- Office of the Superintending Engineer
R.W.S & S Division, Jajpur.

No. of Samples / Details :- 05No. (Reinforcement steel samples)
(Showing logo Elegant- QST-500D)

Date of Test Fees Received :- 20.06.2022

Standard / Method of Analysis :- IS-1786 : 2008

	Chemical Test Data					Analysis in Wt%
	Sample-1 (08 mm Dia)	Sample-2 (10 mm Dia)	Sample-3 (12 mm Dia)	Sample-4 (16 mm Dia)	Sample-5 (20 mm Dia)	Max. Permissible % as per IS:1786-2008 for Fe-500D
C	0.20	0.21	0.22	0.22	0.21	0.25
S	0.032	0.029	0.030	0.028	0.030	0.040
P	0.038	0.037	0.038	0.039	0.039	0.040
S&P	0.070	0.066	0.068	0.067	0.069	0.075

Mechanical Test Data

Sample	Y.S (MPa)	U.T.S (MPa)	% of Elongation
08mm Dia	520	628	22
10mm Dia	517	618	21
12mm Dia	523	626	23
16mm Dia	508	632	22
20mm Dia	512	634	21

- * TS/YS ratio, $N/mm^2 \geq 1.10$, but TS not less than $565.0 N/mm^2$ for 500D as per IS: 1786: 2008 or may be specified by customer.
- * Bend & Re-bend test: The bend and re-bend test conducted for the samples of diameter 08mm, 10mm, 12mm, 16mm & 20mm of Elegant 500D as per IS: 1599 and found satisfactory without any rupture or crack visible on bent & re-bent portions.

Remark: Test, retest carried out & the above Test Report only refers to the nature of samples supplied.

Signature of Analyst
Date :

Tapas Kumar Sahoo
Tapas Kumar Sahoo
Senior Technical Officer
CSIR-Institute of Minerals &
Materials Technology
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Signature
Pr. Scientist/PL

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N.B. :- The samples are not drawn by the institute. Liability if any for CSIR/IMMT arising in connection with testing shall be subject to ceiling of amount received by the institute from the client. The report should not be interpreted as part. Samples are disposed off after analysis.