



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

An ISO - 9001:2008 Certified Institute

TEST CERTIFICATE

000286478



Issued to :
ELECTROSTEEL STEELS LIMITED
G K TOWER, 2ND & 3RD FLOOR
19, CAMAC STREET
KOLKATA - 700017, WEST BENGAL

J.O.No. 306-171-3026
Reg.No. 1346610
Date 15-06-2013
GC-01 (REV-04)
Your Ref.No. -

Kind Attn: MR SUJEET KISPOTA

Sample Particulars :

One sample described as TMT Grade FE 500D 25 mm was received.

Date

The sampling was not carried out by SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH.
The sample particulars provided in the Test Certificate are based on the declaration by the Party.

TEST RESULTS

(As Per IS: 1786-2008)

S.No.	Parameters	Observation	Requirement Grade FE-500D	Conformity	Protocol Adopted
A. Chemical Analysis (% by wt.)					
1.	Carbon	0.15	0.25 Max.	Yes	IS: 228 Pt 1-2002
2.	Sulfur	0.040	0.040 Max.	Yes	IS: 228 Pt 9-1999
3.	Phosphorus	0.034	0.040 Max.	Yes	IS: 228 Pt 3-2002
4.	Sulfur + Phosphorus	0.074	0.075 Max.	Yes	IS: 1786-2008
B. Physical Properties					
1.	Tensile Strength (N/mm ²)	621	10 % more than the actual 0.2% proof stress / Yield stress but not less than 565	Yes	IS: 1608-2005
2.	Yield Stress (N/mm ²)	507	500 Min.	Yes	IS: 1608-2005
3.	Elongation (%) (Gauge Length 5.65 Sq Root Area)	27.4	16.0 Min.	Yes	IS: 1608-2005
4.	Bend Test	Satisfactory	To satisfy the test	Yes	IS: 1599-2012
5.	Rebend test	Satisfactory	To satisfy the test	Yes	IS: 1786-2008
6.	Mass per metre run (Kg)	3.797	Not less than 3.696	Yes	IS: 1786-2008
Deformations & Surface Characteristics					
a.	Mean ribs area in mm ² /mm length	5.13	4.25 Min.	Yes	IS: 1786-2008
b.	Mean projected area of transverse ribs in mm ² /mm length	5.13	1.42 Min.	Yes	IS: 1786-2008

Remarks: The sample conforms to IS: 1786-2008 for Grade FE 500D.

D.O.R.: 07/06/2013
D.O.C.: 14/06/2013

AUTHORISED SIGNATORY
(EMPLOYEE CODE: 5065)