



# SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)  
An ISO - 9001, 14001 & OHSAS 18001 Certified Institute

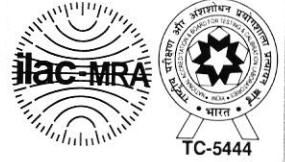
Website : www.shriraminstitute.org  
E-mail id : customercare@shriraminstitute.org

## TEST CERTIFICATE

NO : C1/0000214518

Issued To :  
Client Code : (JHAJ01C1034)  
CONSOLIDATED CONSTRUCTION CONSORTIUM  
LTD.  
INFOSYS VISHRAM SADAN  
JHAJJAR  
HARYANA-0  
Kind Attn: M. PANCHAPIKESAN,PROJECT  
MANAGER

Date : 20-03-2020  
Job No : 2003-1-MET-1205  
Booking No : RG1920/1/15487  
Booking Date : 09-03-2020  
Customer Ref No. : -  
Customer Ref Dt. : 05-03-2020  
ULR NO. : TC544420000004099F



### Sample Detail :

ONE SAMPLE DESCRIBED AS 25 MM DIA, BRAND- PREMIER, SOURCE- JAIPUR, IDENTIFICATION MARK AS DEFENDOQT-500D, RECIEVED AT SITE ON 29/02/2020, WAS RECEIVED.

### Job No : 2003-1-MET-1205

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 ,RA 2018 with Amendment No. 4)

S.No.	Test Parameter	Observation	Requirement Grade FE-500D	Conformity	Protocol Adopted
A.	Chemical Test % by mass				
i	Carbon	0.21	0.25 Max.	Yes	IS:228 (Pt-1)1987,RA-2018
ii	Sulphur	0.028	0.040 Max.	Yes	IS:228 (Pt-9)1989,RA-2014
iii	Phosphorous	0.039	0.040Max.	Yes	IS:228 (Pt-3)1987,RA-2018
iv	Sulphur+Phosphorous	0.067	0.075 Max.	Yes	IS:1786-2008,RA 2018

AUTHORISED SIGNATORY  
EMPLOYEE CODE:( 5124 )



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### B. Physical Tests

1	TS/YS ratio <sup>1)</sup>	1.21	≥ 1.10 but TS	Yes	IS: 1786-2008,RA 2018
	Tensile Strength, N/mm <sup>2</sup>	707	not less than 565	Yes	IS: 1608 (Pt-1)-2018
2	Yield Stress, N/mm <sup>2</sup>	585.9	500.0 Min.	Yes	IS: 1608 (Pt-1)-2018
3	Elongation (%) (Gauge Length 5.65 Sq Root Area)	17.6	16.0 Min.	Yes	IS: 1608 (Pt-1)-2018
4	Bend Test	Satisfactory	To satisfy the test	Yes	IS: 1599-2019
5	Rebend Test	Satisfactory	To satisfy the test	Yes	IS: 1786-2008,RA 2018
6	Mass per metre run (Kg)	3.838	Not less than 3.696	Yes	IS: 1786-2008,RA 2018
7	Deformation & Surface Characteristics				
a.	Mean ribs area in mm <sup>2</sup> /mm length	8.82	4.25 Min	Yes	IS: 1786-2008,RA 2018
b.	Mean projected area of transverse ribs in mm <sup>2</sup> /mm length	8.82	1.42 Min.	Yes	IS: 1786-2008,RA 2018

Remarks:- The sample conforms to IS: 1786-2008 , RA 2018 with amendment No. 4 for Grade FE 500D w.r.t. above test parameters.

Note: <sup>1)</sup> TS/YS ratio refers to ratio of tensile strength to the yield stress of the test piece.

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DOR: 09/03/2020

DOC: 20/03/2020

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