



## Central Institute of Road Transport

(A unit of the Association of State Road Transport Undertakings)

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### TEST REPORT

- This Test Report is in respect of the item / material actually tested.
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- The Institute does not take any responsibility for preserving the sample for more than 3 months from the date of issue of Test Report.
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Our Ref. No. : **ED/13-14/1300373270/N2528**

To

DIRECTOR(Technical)

Association of SRT Undertakings

PLOT NO.4A, PSP BLOCK, POCKET-14

SECTOR-8, DWARKA

NEW DELHI 110 075

10 JAN 2014

1. Nomenclature and Part No.	BRAKE LINING (ASBESTOS FREE) FRONT 1510 STD TATA 2573 4213 0124
2. Customer's Nomenclature of item (if different)	-----
3. Sample Regn. No. /Code No.	C69023/ 1300373270
4. No. /Quantity of Sample	4 NOS
5. Sample Supplied by and Reference No.	DIRECTOR(TECHNICAL),ASRTU,NEW DELHI ASRTU/TEST/DT/F(35)/T138/236/03/ATR/928/2868 Dtd. 07/10/2013
6. Name of Manufacturer	THERMO FAB INDUSTRIES
Marking on the sample	TFX FRONT TATA 1510 STD
7. Customer's Code No./S.T.O.	B8477
8. Date of receipt of sample	28/11/2013
9. Test Charges Receipt/ Technical Clearance Date	29/11/2013
10. Specifications	AS:307:76:JUN:2011

#### Assessment of Test Results

#### Approved

The sample meets the requirements of tests carried out and is acceptable.

Encl :

1) Annexure "A"

2) Bill No. N2528

Mr. N.R. Kachare, Scientist E,  
Head-Engineering Division-I

10/1/14



<b>TEST REPORT</b>			ANNEXURE "A"	
ENGINEERING RESEARCH CENTRE			<b>CIRT</b>	
FORM NO: ERC:TP:215:FM03				
ITEM :- BRAKE LINING TATA, (ASBESTOS FREE) FRONT 1510 STD				
PART NO:- 2573 4213 0124				
<b>SAMPLE NO:-1300373270</b>		SPECIFICATION NO. : AS:307:76:JUN-2011	PAGE 1 OF 2	
Sr. No	Nature of Test	Test Results		Remarks
		Specified	Actual	

1.0 Visual examination (Cl.4.2)	Shall be free from surface defects like cracks, scoring, indentation, unevenness etc.	Conforms	Meets the Specification.
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2.0 Dimensions (mm) (Cl.4.3)

a) Width	Not Specified	158.33	For Record Only.
b) Thickness	Not Specified	----	
c) Length of Brake Lining	Not specified	187	
d) Counter bore dia.	Not Specified	12.8	
e) Rivet hole dia.	Not Specified	7.02	
f) No. of rivet holes	Not Specified	10	
g) Angle of curvature (Degrees)	Not Specified	52	
h) Radius of curvature	Not Specified	192	

3.0 Heat Swell test (Cl. 4.5)  
(At 200 ±3 °C for 40 min.)

a) Blistering/Swelling/Distortion/ Cracking.	Shall not show any evidence of such defects	Conforms	Meets the Specification.
b) Heat swell (change in thickness in hot condition, mm)	0.25 (Max)	0.054	Meets the Specification.
c) Growth (change in thickness in cold condition, mm)	Not specified	-0.007	For Record Only

4.0 Friction Test (Cl.5.0)

4.1 Normal Friction Test (Cl.5.2)

a) Co-efficient of Friction (Max. Interface temp.150 °C)	0.32 - 0.45	0.40	Meets the Specification.
b) Permissible co-efficient of Friction variation from normal test value, (Percent)	+30 -20	+5 -5	Meets the specification

TEST REPORT				CIRI
SAMPLE NO:-1300373270		SPECIFICATION NO. : AS:307:76:JUN-2011		PAGE 2 OF 2
Sr. No.	Nature of Test	Test Results		Remarks
		Specified	Actual	

4.2 Heat Friction Test (Cl.5.3)

Permissible co-efficient of Friction variation from normal test value (Percent)

±30

-8

Meets the Specification.

4.3 Wet Friction Test (Cl.5.4)

Decrease in co-efficient of Friction (2 hrs. soaking in water at room temp.) (Percent)

10 %(max) of normal average friction value

+5

Meets the Specification.

5.0 Cross Breaking Strength in Kg. per sq.cm (Cl.6.0)

300 (min)

357

Meets the Specification.

6.0 Water Swell Test (Cl.7.0)  
(30 minutes soaking in water at room temp.)

Change in thickness (mm)

0.1 mm (max)

0.000

Meets the Specification

7.0 Acetone Extract, Percent (Cl.8.0)

2 % (max)

0.91

Meets the Specification

8.0 Loss on Ignition, Percent (Cl.9.0)

50 % (max)

38

Meets the Specification

9.0 Hardness on Rockwell 'L' scale (Cl.10.0)

75 - 115

90

Meets the Specification.

10.0 Marking (Cl.11.0)

a) Manufacturers identification mark

Shall be marked

'TFX' FRONT TATA  
1510 STD

For record only


b) Type No/Part No.

AF P. No. 257342130124

REMARKS

Grade "A"

The sample meets the requirements of the tests carried out and is acceptable

  
V.D. Chavan, Scientist 'C'  
Scientist/Automobile Lab.1