

MECHANICAL TESTING

The following are the details of various Test Facilities:-

1. WHEEL RIM TEST FACILITY:

SR. NO.	TEST FACILITY	BRIEF TECHNICAL SPECIFICATIONS	REFERENCE STANDARDS
A	CORNERING FATIGUE TEST FACILITY	Max. Bending Moment : 50 kN-m Max. Wheel Rim Size : 24"	IS 9436, IS 9438, AIS 073 (P1 & P2)
B	RADIAL FATIGUE TEST AND ENDURANCE	Max. Radial Load :75 kN (7.5 ton) Max. Wheel Rim Size : 24"	IS 9436, IS 9438, AIS 073 (P1 & P2).
C	CORNERING FATIGUE TEST FACILITY (for 2W/3W)	Max. Bending Moment : 20 kN-m Max. Wheel Rim Size : 18"	IS 9436, AIS 073 (P1 & P2).
D	RADIAL FATIGUE TEST AND ENDURANCE (for 2W/3W)	Max. Radial Load : 20 kN Max. Wheel Rim Size : 18"	IS 9436, AIS 073 (P1 & P2)
E	RADIAL IMPACT TEST RIG (for Alloy Wheel Rims)	Max. Drop Height : 250 mm Max. Wheel Rim Size : 18"	AIS 073 (P1)
F	LEAK TEST FACILITY	Max. Wheel Rim Size : 18" Hydraulic Air Pressure : 300 kPa	AIS 073 (P1)

2. TYRE TESTING FACILITY (BIS and NABL accredited facilities)

SR. NO.	TEST FACILITY	BRIEF TECHNICAL SPECIFICATIONS	REFERENCE STANDARDS
A	HIGH CAPACITY ENDURANCE & LOAD SPEED PERFORMANCE TEST RIG	Max. Speed : 300 km/h Max. Load : 150 kN (15 ton)	IS: 15633, IS: 15636 & IS: 15627
B	DYNAMIC GROWTH OF TYRE RIG (for 2W/3W)	Max. Speed : 360 km/h Max. Tyre Size : 18"	IS-15627
C	PLUNGER & BEAD UNSEATING RESISTANCE TEST RIG	Maximum Load for Plunger Test Rig : 30 kN (3 ton) Maximum Load for Bead Unseating Resistance Test Rig : 50 kN (5 ton)	IS: 15633, IS: 15636 & IS: 15627. R54, R30, R75.

3. BRAKE HOSE TEST FACILITY

SR. NO.	TEST FACILITY	BRIEF TECHNICAL SPECIFICATIONS	REFERENCE STANDARDS
A	EXPANSION & BURST TEST RIGS FOR HYDRAULIC BRAKE HOSES, CNG & WIRE BRAIDED HOSES	Length of hose : upto 1000 mm Max. Burst Pressure : upto 2000 bar	IS : 7079 - 2008, SAE J 1401, FMVSS 104 SAE J 1619 Standard.
B	WHIP TEST RIG FOR HYDRAULIC BRAKE HOSES	Range of Hose Length : 200 to 600 mm (Max. 04 hoses can be tested at a time)	IS - 7079, SAE J 1401, FMVSS 104

4. OTHER CERTIFICATION TESTS

SR. NO.	TEST FACILITY	BRIEF TECHNICAL SPECIFICATIONS	REFERENCE STANDARDS
A	REAR VIEW MIRROR – PERFORMANCE REQUIREMENT	<p><u>FACILITIES</u></p> <ul style="list-style-type: none"> Determination of Radius of Curvature Determination of Reflectivity Ball Impact Testing facility Dimensional Test Facility 	AIS: 001
B	FUEL TANK TESTING FACILITY (METALLIC)	<ul style="list-style-type: none"> Leakage Tightness Test. Leakage Test. Vent Size Test. 	IS12056 (4W) IS : 14681 97/24/EEC (2 Wheelers and 3 Wheelers)
C	FUEL TANK TESTING FACILITY (NON METALLIC – PLASTIC)	<ul style="list-style-type: none"> OVER TURN TEST IMPACT RESISTANCE MECHANICAL STRENGTH RESISTANCE TO HIGH TEMPERATURE FUEL PERMEABILITY RESISTANCE TO FUEL 	IS: 15547 IS : 14681
D	SAFETY GLASS TESTING FACILITY (Automotive and General Purpose)	<p><u>For Laminated Safety Glass:-</u></p> <ul style="list-style-type: none"> Visual Light Transmission Test. Dimensional measurement test. Edge matching test Impact Resistance Test Light stability test Boil Test Penetration Resistance Test Head form impact test Secondary Image Test Optical Distortion Test <p><u>For Toughened Glass:-</u></p> <ul style="list-style-type: none"> Visual Light Transmission Test. Dimensional measurement test. Impact Resistance Test Fragmentation Test 	IS :2553 - Part 1 & 2 ECE - R43
E	DOOR LOCK AND DOOR HINGES TESTING FACILITY	<p><u>UNIVERSAL TESTING MACHINE</u></p> <p>Total LOAD Capacity : 100 kN (10 ton)</p>	IS : 14225 ECE : R11
F	WASHER TANK AND WIPER BLADE TESTING	<p><u>WIPER BLADE</u></p> <ul style="list-style-type: none"> Ozone Ageing Test facility 	AIS 019/AIS:045/AIS:011 IS: 15804

	FACILITY	<ul style="list-style-type: none"> • Chemical Resistance Test facility • <u>WASHER TANK</u> • Temperature cycle test facility 	
G	DEDICATED TEST FACILITY FOR TWO WHEELERS	ANTI THEFT DEVICE TESTING	AIS:074
H		PILLION HAND HOLD TESTING	IS : 14495 93/32/EEC
I		SPRAY SUPPRESSION SYSTEM TESTING	AIS: 103
J	INSTALLATION TEST FACILITY	Rear View Mirror Installation (4W,2W & 3 W)	AIS: 002
		Bumper Test	AIS-006 ECE – R 42
		Windscreen Wiping Area (3W and 4W) Testing	AIS-019 AIS-011 AIS-045 IS: 15804-2008
		Wheel Nut and Wheel Hub	IS: 13941