

Laboratory	BiSS Labs, No. 497E, 14th Cross, 4th Phase, Peenya Industrial Area, Bangalore, Karnataka		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	07.06.2016
Certificate Number	T-2274	Valid Until	06.06.2018
Last Amended on	25.07.2016	Page	1 of 4

S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	MECHANICAL PROPERTIES OF METALS			
1.	Ferrous and Non Ferrous Alloy Products Semi Finished Products	Tensile	ASTM E8/E8M-15a/ ASTM E21-09	Load Upto 500 kN
		0.2%PS, YS		Upto 800 MPa
		UTS,		Upto 1000 MPa
		%RA		Upto 50 %
		%EI		Upto 30 %
		Compression	ASTM E9-09	Load Upto 500 kN
		Compressive Strength,		Upto 1000 MPa
		YS		Upto 700 MPa
		Poisson's Ratio	ASTM E132-10	Upto 0.4
		Axial Fatigue	ASTM E 466-15	Load Upto 500kN Flat from 0.25 mm to 25mm Round from 0.25 mm to 24 mm 0.01 Hz to 100 Hz
	Axial Fatigue For Fatigue Properties	ASTM E 606M-12	Load Upto 100 kN Round Upto 24 mm	
	Fatigue Crack Growth	ASTM E647-15	Load Upto 1000 kN Crack growth a/w ratio 0.7	

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	Ferrous and Non Ferrous Alloy Products Semi Finished Products	Thermo Mechanical Uniaxial Fatigue	ASTM E2368-10	Upto 1000 °C Load Upto 100 kN Round from 0.25 mm to 24 mm
		Creep Fatigue Loading	ASTM E2714-13	Load Upto 150 kN Upto 1000° C Round from 0.25 mm to 24 mm
		Tensile Shear Strength (For Adhesives For Bonding Metals)	ASTM D3528-16	Load Upto 100 kN
2.	Ferrous and Non Ferrous Alloy Products Semi Finished Products Only C (T) and SE (B) Geometries	Fracture Toughness (K1c)	ASTM E399-12	Load Upto 1000 kN Upto 100 MPa√m
		Fracture Toughness Using K, J And CTOD Parameters	ASTM E1820-15a	Load Upto 1000 kN Upto 400 kJ/m ²
II. PLASTICS AND PLASTIC PRODUCTS				
1.	Isotropic and Orthotropic Reinforced Plastic Composites	Tensile	ISO 527-4 / ASTM D3039M-14/ CI-10226/A3 1.4.2	Load Upto 1000 kN Upto 10%
		%El,		
		UTS		Upto 1500MPa
		E		Upto 50 GPa
		Uniaxial Fatigue	ISO 13003: 2003 / CI-10230/A4 1.4.5	Load Upto 500 kN Frequency from 0.01 Hz to 100 Hz Flat from 0.25 mm to 24 mm

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	Isotropic and Orthotropic Reinforced Plastic Composites	Tensile Shear	ISO 14129: 1997/ CI-10226/A3 1.4.3	Load Upto 100 kN
		Strain At Max Load		Upto 30 %
		Shear Modulus		Upto 20 GPa
		Shear Strength		Upto 300 MPa
2.	Unreinforced and Reinforced Plastics	Tensile	ASTM D638-14	Load Upto 100 kN
		%El		Upto 10 %
		E		Upto 50 GPa
3.	Unreinforced and Reinforced Plastics and Electrical Insulating Materials	Flexural Strength	ASTM D790-15	Load Upto 100 kN
				Upto 800 MPa
4.	Polymer Matrix Composite	Flexural Strength	ASTM D2344/D2344M-13 / CI-00408/A2 1.4.2	Load Upto 100 kN Upto 100 MPa
5.	Unreinforced and Reinforced Composites	Shear Strength	ASTM D5379/D2359M-12	Load Upto 100 kN Upto 300 MPa
6.	Polymer Matrix Composites	Compression (Compressive Strength)	ASTM D3410/D3410M-16	Load Upto 100 kN Upto 1000 MPa
		Compression (Compressive Strength)	ASTM D6484/D6484-14	Load Upto 100 kN Upto 1000 MPa

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7.	Adhesive Bonds	Peel Resistance	ASTM D1781-12	Load Upto 100 kN
8.	Structural Adhesives	Fatigue	ISO 9664: 1993	Load Upto 100 kN
III. RUBBER AND RUBBER PRODUCTS				
1.	Rubber, Vulcanised or Thermoplastic	Fatigue	ISO4664: 2011	Load Upto 100 kN 0.01 Hz to 150 Hz
2.	Sandwich Panel	Tensile Shear	ASTM C297-16	Load Upto 100 kN

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