

Testing Facilities at Gliders India Limited, OPF Testing Laboratory, Kanpur

Discipline	Product(s) / Material of test	Specific tests performed	Test Method / Standard
Chemical – Textile	Yarn/ Fabrics	Quantitative Chemical Analysis of Binary mixture of Polyester fibers with cotton or regenerated cellulose	IS:3416: 1988 RA 2022
	Tape Cordage Webbing sewing Thread And Fabrics	Colour Fastness to Washing	IS/ISO:105-C-10: 2021 TEST NO. 1 TO 5
		pH of Aqueous	IS:1390-2022
		Colour Fastness to Perspiration	IS/ISO-105-E04-2008 RA 2019
		Scouring Loss in grey and finished cotton textile materials	IS:1383-2023 (Mild Method)
		Water Soluble Matter	IS: 3456-2022
	Fabric & Tape	Identification of Dyes (Cotton & Other cellulosic Fibers)	IS:4472 Part-I 1967 RA 2021
	Fabric	Determination of Dimensional Changes on Soaking in Water (Other than wool)	IS: 2977-1989 RA 2020
	Coated Fabric and Polythene Coated Fabric	Resistance to Penetration by water by Static Pressure Head	IS: 7940-1976 RA 2020
Water Repellency of Fabric by water Spray Test		IS: 390-1975 RA 2022	
Chemical - Metals	Low Alloy Steel	Chemical Composition (Carbon %)	ASTM E 415:2021
		Chemical Composition (Manganese %)	
		Chemical Composition (Phosphorus %)	
		Chemical Composition (Silicon %)	
		Chemical Composition (Sulphur %)	
	Stainless Steel	Chemical Composition (Carbon %)	ASTM E 1086:2022
		Chemical Composition (Chromium %)	

		Chemical Composition (Manganese %)	
		Chemical Composition (Nickel %)	
		Chemical Composition (Phosphorus %)	
Mechanical - Textile	Textile yarn and Sewing Thread	a) Determination of Linear Density	IS: 1315-1977 RA 2023
		b) Single Yarn Tensile strength	IS: 1670-1991 RA 2022
		c) Elongation at Break %	IS: 1670-1991 RA 2022
	Fabric, Tape, Cordage, Webbing and Sewing Thread	Determination of Twist	IS: 832-2021 (Part 1)
	Tape, Webbing, Ribbon and Fabric	Determination of Threads/decimeter	IS:1963-1981 RA 2023
	Fabric	Determination of Weight/Sq. m	IS:1964-2001 RA 2022
	Fabric	Breaking load	IS:1969-2018 RA 2024
		Elongation at Break%	
	Tape, Webbing and Fabric	a) Breaking Load	ADDE/BP/03(c) Appendix A
		b) Elongation at Break	
	Tape, Webbing, Ribbon	a) Determination of Weight per Linear Meter	IS:4727-2020 Appendix A
		b) Breaking Strength	IS:1969-2018 RA 2024
	Webbing, Tape	a) Breaking Load	IS: 4437-1973Appendix C
		b) Elongation at Break	
	Cordages	c) Elongation at Break	IS:7071-2021
	Ropes & Cordages	a) Breaking Load	
b) Weight per Linear meter			
Tape & Webbing	Determination of Weight/Linear mtr	IS:1964-2001 RA 2022	
Fabric	Crease Recovery Test	IS: 4681-1981 RA 2023	

	Metallic and plastic slide fastener	Reciprocating Movement Test	IS:14181(Part 2):2002Annexure (K) RA 2019
	Fabric	Tearing Strength (Elmendorf Tester)	IS:6489-2011 RA 2021
	Fabric	Resistance to damage by flexing	IS:7016 (Pt-4)-2003 RA 2023
Mechanical - Metals	Steel and Other Alloys	Vickers Hardness Test	IS: 1501 (Part 1): 2020