TECHNICAL DATA SHEET

PRODUCT : SHELMET
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CONFORMING TO IS: 2925:1984
& DGMS Certified

SL.No.	CLAUSE	DESCRIPTION		SPECIFICATION
1	PHYSICAL PARAMETERS	GENERAL	DESIGN & FEATURES	• The TRIPLE CORRUGATION on the shell provides greater toughness thereby offering enhanced strength & stronger protection. • The anchoring points of the cradle are extra thick to ensure that there is no failure of the cradle in case of an impact. • The walls of the Anchor points in the shell where the cradle is anchored are extra thick to prevent any damages to the anchor points upon impact.
			MATERIAL	Polymer
			WEIGHT	325-350 gms
			SHOCK ABSORPTION	The function of a helmet is not only to provide protection to the user's head from a falling object but its capacity to reduce the impact which is defined as shock absorption capacity. The choice of material bearing a high degree of elasticity & softness for the molding of Cradle also enhances the Shock Absorption Capacity of the Shelmet.
			WEARER COMFORT & ERGONOMICS	• Forehead comfort pad consists of textile laminated foam sheet to provide extra softness & comfort to the user. • The comfort pad is non skin irritant. • The nape strap of the Shelmet has a very simple design consisting of locking holes in a row along with moulded locking heads for a very easy adjustment of the headband

				• The four point attachment cradle within the shell has a unique angular placement to provide optimum shock absorption. • Shelmet is provided with side slots for fitting face and hearing protection accessories • The head band is made of non-irritant and soft fabric to provide maximum comfort to the user • Has adjustable chin strap • Comes with Manual adjustment to suit most head sizes
			COLOUR PREFERENCE	SHELMET" is the only Safety Helmet that offers more than 10 colours viz. White, Yellow, Blue, Sky Blue, Red, Green, Mt Green, Orange, Grey & Violet.
			HARNESS PREFERENCE	The Helmet inner Harness is available in options of webbing and polymer as per the customer need.
2	VITAL TEST COMPLIANCE AS PER IS2925:1984	CONDITIONING BEFORE TEST	VERY HOT CLIMATE	Placed at a Temperature of 50±5°C for 4 hours in an oven.
			VERY COLD CLIMATE	Placed at a temperature of -10±2°C for 4 hours in a refrigerator.
			HEAVY RAINFALL	Water flowing all over the surface at 1Ltr/min for 4 hours.
		SHOCK ABSORPTION TEST		A rectangular block having a horizontal striking surface of 180mm x 180mm weighing 3 kgs is allowed to fall freely over the helmet which is conditioned at above mentioned conditionings from a height of 1.5mtr ±5 mm. It is ensured that the force transmitted is not greater than 5 kN i.e 510 kgf_. "SHELMET" complies with the above specification completely.
		PENETRATION RESISTANCE TEST		The IS specification IS 2925:1984 says that if a striker of mass 500 gms with a conical steel point having an included angle of 36° and a spherical point radius is dropped on the helmet, mounted on the head form and conditioned at above mentioned conditioning, from a height of 3 mtr, the helmet's shell should not be pierced enough to allow the point to touch the head form &

				the dent on Helmet shall not exceed 10mm. "SHELMET" complies with the above specification completely.
	VITAL TEST COMPLIANCE AS PER IS2925:1984	FLAME RESISTANCE TEST		IS 2925:1984 have framed certain specification for flame resistance. A blue flame is generated by a burner with temperature same as that of melting point of copper. This flame is exposed to the surface of the helmet at 45° angle for a period of 10 seconds and then the helmet is removed. It is ensured that the helmet does not catch fire within 5 seconds of removal of the flame. "SHELMET" complies with the above specification completely.
		HEAT RESISTANCE TEST		IS 2925:1984 ensures a baseline conformity to heat resistance. The shell is placed in an oven for 15 minutes maintained at a constant temperature of 93±5°C. Upon removal from the oven, the shell should not separate, distort or soften. "SHELMET" successfully complies with this test.
		ELECTRICAL RESISTANCE TEST		As per IS 2925:1984 standards an inverted helmet is placed into a container containing a solution chloride in water (6 gms/ltr.). The same solution is filled in the inside of the helmet as well. The helmet is allowed to stand for a period of 18-24 hours at room temperature. An A/C voltage of 2000 V is generated between two electrodes, and an ammeter connected in series. It is to be ensured that ammeter shall not show a leakage current in excess of 3 mA. Shelmet complies to this specification as well.
		WATER ABSORPTION TEST		The IS specification says that the Safety Helmet shall not absorb water more than 5% of its mass when totally dipped into water for 24 hours and "SHELMET" successfully complies with the requirements.
		CHIN STRAP ANCHORAGE TEST		The IS specification says that the Chin Strap of Safety Helmet shall not break when a load of 10kgf is applied for 05 minutes and "SHELMET" successfully complies with the requirements.