SPECIFICATION REVIEW OF SYNTHETIC LIFE JACKET (RESCUERS)



S.No	Parameter	Technical Specifications	Trial Directives
1.	General	Design type - The life jacket should be of "vest-type" with front opening and the inner foam should be positioned and shaped in a way that it should cover both the dorsal (back) and ventral (front) parts of the body providing optimal buoyancy and support in compliance to SOLAS/LSA Code/ ISO/ IRS/ CE/ BIS.	BOOs to physically check and verify the parameters and compliance certificate to be provided by OEM.
2.	Approval	It should be IRS/ SOLAS/ CE/ ISO/ BIS approved and stamped. It should have Retro-reflective tape SOLAS approved. Buoyancy factor should be checked at a Govt./NABL accredited labs which are authorized to conduct tests for PFDs/ Life jackets.	BOOs to verify through Lab Test report of Govt. / NABL accredited labs, which are authorized to conduct tests for PFDs/ Life jackets.
3.	Colour	Should be High-Visibility orange colour fabric cover.	BOOs to physically check and verify the parameter.

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4.	**Adjustable buckle**	It should have adjustable 3-buckle (one side male type buckle and one side female type) for tightening. It should also have specially designed Velcro fitment for easy/ quick donning in an emergency.	BOOs to physically check and verify the parameter.
5.	**Construction**	It should have Special construction of the jacket to lift the mouth of an exhausted or unconscious person not less than 120 mm clear of the water with the body inclined backwards at an angle of not less than 20° from the vertical position, conforming to SOLAS/ LSA Code/ISO 12402-(Relevant parts conforming to said requirement)/ IS 6685 :2009.	BOOs to verify through Lab Test report of Govt./NABL accredited labs, which are authcrized to conduct tests for PFDs/ Life jackets.
6.	**Inner Foam**	Inner foam – Closed Cell Foam Outer Material- Made of 500 denier Cordura	BOOs to check and verify lab test report of Govt./NABL accredited lab, which are authorised for testing of PFDs/Life jackets.
7.	**Size**	The Life Jacket should be marked with adult size in compliance to SOLAS requirement.	BOOs to physically check and verify the parameter.
9.	**Accessory**	It should have whistle & reflective elements in compliance to SOLAS/ ISO 12402-3:2020(E)/IMO/ IS-6685.	BOOs to check and verify OEM certificate for compliance of the parameter
10.	**Shelf life**	It should have Shelf life of 05 years.	The BOOs to verify OEM certification/ Undertaking for conformity/ compliance of the parameter.
11.	**Weight**	It should not more than 2 Kgs.	BOOs to physically check and verify the weight.
12.	**Buoyancy**	It should be designed to provide buoyancy for 150 N, which is not reduced by more than 5 percent after 24 hours submersion in fresh water in compliance to LSA code/ISO-12402-(Relevant parts conforming to said requirement)/ IS 6685:2009.	BOOs to verify through Lab Test report of Govt./ NABL accredited labs, which are authorized to conduct tests for PFDs/ Life jackets.

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13.	**Additional features**		
	i.	It must have large front pockets stretch to hold carabiners, web, a GPS or a radio set.	BOOs to physically check and verify the parameter.
	ii.	Life jacket should allow the wearer to jump from a height of at least 4.5 meters into water without dislodging or damaging the life jacket in compliance to LSA code/ISO-12402-(Relevant parts conforming to said requirement)/ IS 6685:2009.	BOOs to physically check and verify the parameter in accordance with LSA code/ ISO-12402-(Relevant parts conforming to said requirement)/ IS 6685:2009.
	iii.	It should have shoulder and side adjustments which allows a one-size-fits-all jacket to accommodate different body types of rescuers.	BOOs to physically check the parameter.
	iv.	It must have an emergency release tether for swift water rescue.	BOOs to physically check the parameter.
	v.	Roomy arm holes, adjustable side tabs, marine mesh inner lining and 3M reflective material, SOLAS grade required for the rescuer.	BOOs to physically check and verify through OEM certificate.
	vi.	Crotch strap- it keeps the jacket stable on chest region.	BOOs to physically check the parameter.
	vii.	Tethering hook on back side of life jacket for safety of rescuers as ropes can be attached to it.	BOOs to physically check the parameter.

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SPECIFICATION REVIEW OF SYNTHETIC LIFE JACKET (CHILD)

S.N	Parameter	Technical specifications	Trial Directives
1.	**General**	Design type - The life jacket should be of "vest-type" with **support collar** or **head support** to help keep the infant's face above water and the **inner foam should be** positioned and shaped in a way that it should **cover both the dorsal (back) and ventral (front) parts of the body** providing optimal buoyancy and support in compliance to **ISO/ CE/ BIS/ SOLAS/LSA Code/IRS.**	The BOOs to physically check and verify the parameters and compliance certificate to be provided by OEM.
2.	**Approval**	i. It should be IRS/ SOLAS/ BIS/CE/ISO/EN approved and st amped. ii. It should have Retro-reflective tape patches SOLAS approv ed. iii. Buoyancy should be checked at a Govt accredited/certified lab. iv. Certifications – EN/ CE/ ISO 12402-relevant part conformi ng to children PFDs/Life jackets or BIS:6685- 2009	The BOOs to physically check and verify the certifications for conformity/ compliance to the parameters.

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3.	**Colour**	High-Visibility Orange colour fabric cover.	BOO to physically check and verify the parameter.
4.	**Adjustable buck le**	It should have Adjustable 3-buckle for tightening and specially design ed with Velcro fitment for easy/quick donning.	BOO to physically check and verify the parameter.
5.	**Construction**	It should have Special construction of the jacket to lift the mouth of an exhausted or unconscious person not less than 90 mm clear of the water with the body inclined backwards at an angle of not l ess than 20° from the vertical position, confirming to SOLAS/LS A code/ISO 12402-(Relevant parts conforming to said requireme nt) /IS 6685 :2009.	BOO to check and verify lab test report of Govt/NABL accredited lab, which are authorised for testing of PFDs/Life jackets.
6.	**Inner foam**	Closed cell Foam.	BOO to check and verify lab test report of Govt/NABL accredited lab, which are authorised for testing of PFDs/Life jackets.
7.	**Outer Material**	Made of 500 denier Cordura	BOO to check and verify lab test report of Govt/NABL accredited lab, which are authorised for testing of PFDs/Life jackets.
8.	**Size**	It should be of universal fit to all size (child) and marking as per SOLAS requirements for life jackets.	BOO to physically check and verify lab test report of Govt/NABL accredited lab, which are authorised for testing of PFDs/Life jackets.
9.	**Weight**	1.0 Kg max	BOO to physically check and verify the weight.
10.	**Accessory**	It should have whistle and reflective elements.	BOO to check and verify OEM certificate for compliance of the parameter.

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11.	**Buoyancy**	It should be designed to provide buoyancy not less than 6 0 N and must not reduce by more than 5 percent after 24 hours submersion in fresh water in accordance with SOL AS/LSA Code/ IS-6685/ISO-12402-(All relevant parts co nforming to said requirement).	BOO to check and verify lab test report of Govt/NABL accredited lab, which are authorised for testing of PFDs/Life jackets in accordance desired standards.
12.	**Shelf life**	It should have shelf life of 05 years.	The BOOs to verify OEM certification/ Undertaking for conformity/ compliance of the parameter.
13.	**Additional Featu re**	Should have groin strap/crotch strap in compliance to IS O 12402(All relevant parts conforming to said requireme nt)/ IS-6685-2009.	BOO to physically check and verify the parameter as per desired standards.

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