

TECHNICAL SPECIFICATION FOR RIGID INFLATABLE BOAT DAVIT FOR 50T.BOLLARD PULL TUG HSL YARD Nos.11162 & 64		PRQ NO: D/4552/10-11 Revision No. : 1 Dept: MEO Date: 07.10.2011 Pages: 5
<u>General - PART-'A'</u>		
Clause No.	Description of Technical Specification	Vendors Reply Complied / Not complied
1	<u>SCOPE OF SUPPLY OF SUPPLIER:</u>	
1.1	The supply shall include complete equipment as detailed in Part-B & Part-C (enclosed) and to comply with requirements of Section 6.1 of LSA Code IMO Resolution MSC 48 (66).	
1.2	Furnishing foundation details for making foundation stools by shipyard.	
1.3	Dispatch of the equipment adequately packed to prevent any damage due to exposure to weather, transportation, storage etc.	
1.4	Painting, lubricating and greasing of all the necessary parts of the equipment before dispatch to prevent corrosion. S.S. nipples are to be provided for all moving parts.	
1.5	Any other parts of the equipment that are omitted in the description given under Part-B & Part-C but are still necessary for proper function of the equipment as required per Para 1.1 above are to be considered for supply.	
1.6	The equipments are to be inspected, tested and approved by the Surveyors of Directorate General of Shipping (DGS) India or equivalent National Authority.	
2	<u>SCOPE OF WORK OF SHIPYARD:</u>	
2.1	Making the seating as per the foundation details given by the supplier.	
2.2	Erecting the equipment on board the vessel, testing and commissioning them in presence of surveyors and owners representatives.	
2.3	Intimating to the suppliers any functional defects which may come to the notice during testing and commissioning of the equipment.	
3	<u>GUARANTEE:</u>	
3.1	The supplier shall guarantee the equipment against any defects or failures that may arise due to faulty design, defective material employed or poor workmanship involved on their part for a period of 12 months from the date of delivery of the vessel or 30 months from the date of dispatch of equipment whichever is earlier.	
3.2	During the suppliers guarantee, the supplier shall either arrange to repair the defective part/parts of the equipment or supply new ones in compensation free of charge.	

Clause No.	Description of Technical Specification	Vendors Reply Complied / Not complied
3.3	In case of supplier guarantee being applicable, the supplier shall either arrange to repair the defective parts of the equipment at their cost or supply new ones in compensation free of charge at the earliest and by quickest possible means. The supplier shall provide further guarantee of 12 months in respect of such parts replaced during the guarantee period.	
3.4	Replacement parts supplied pursuant to the guarantee shall be delivered free of cost by the supplier through quickest possible means in any of the supplier's servicing stations situated around the world.	
3.5	The suppliers shall submit basic drawings and dimensions of the equipment to shipyard for comments and this does not relieve the suppliers from their responsibility of their guarantee in any manner whatsoever. Supplier shall not claim any delay in delivering of the equipment on this account.	
4	DELIVERY: As stated in COMMERCIAL PART.	
5	INSPECTION AT HSL:	
5.1	The equipment will be physically inspected in Shipyard in relation to the specification and all deviations and or any defects observed shall be notified to supplier for making good by suppliers free of cost.	
6	DOCUMENTS TO BE SUPPLIED: Along with Tender	
6.1.1	Detailed dimensional General Arrangement drawing of davit offered.	
6.1.2	Detailed description of the offered equipment along with Bill of Materials and offered spares, if any, required.	
6.1.3	Approximate weight and C.G. of the equipment offered.	
	Note : Weights of equipment / items are critical in the project, hence keeping in view the criticality of these weights on the ships design, this parameter shall be given due consideration while placement of the order for the equipments. Hence suppliers are requested to offer their equipments with possible minimum weight.	
6.1.4	MCA (U.K)/ Copies of prototype approval for the offered equipment from DGS/ Equivalent Statutory Authority as per IMO Resolutions.	
6.1.5	Price shall be submitted separately for (1) Davit (2) Automatic release hook	
6.1.6	Proforma of price quotation w/o price shall be submitted along with offer.	
6.2	<u>On receipt of order (within two weeks) :</u>	
6.2.1	Fully dimensioned general arrangement drawing of davit, with internal arrangement of gears, details of winch etc. (both hard copy & soft copy in AUTOCAD Format)	
6.2.2	Foundation drawing and bolting arrangement. (both hard copy & soft copy in AUTOCAD Format)	
6.2.3	Weight of equipment and its centre of gravity.	

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6.3	<u>Before dispatch of the equipment.</u>	
6.31	MMD / MCA (UK) or National Authority Surveyor's test and inspection certificates in One original + 5 copies for the davit and for hook, block and wire rope separately as per IMO Resolution A 689 (17).	
6.32	Operation and Maintenance manuals in 12 copies.	
7	<u>REJECTION CRITERIA:</u>	
7.1	All the paras of this specification are to be confirmed para wise without fail and	
7.2	All documents as required per paras 6.1.1 to 6.1.4 must invariably enclosed to the offer.	
7.3	Without the above documentation the offer will be rejected.	

MANAGER (OAD&M)

Encl: Part-B with Sketch no. WDO/03A. & PartC

RIGID INFLATABLE BOAT DAVIT (MECHANICAL PART) PART-'B'

Clause No.	Description of Technical Specification	Vendors Reply Complied / Not complied
1	<u>Davit Load:</u> 1250 kgs. approx. (To handle 4.7m RIB)	
2	<u>Slewing:</u> 290 ° (as shown in the sketch) by hand operation.	
3	<u>Working Radius:</u> 4700 mm (min) up to C.L. of hook.	
4	<u>Height OF JIB:</u> 5100 mm Min to C.L. of sheave on jib room deck (including yards foundation of 800 high). The height from C.L. of sheave to swivel hook is to be indicated. The hook shall be automatic release type as per rules.	
5	<u>Lowering height:</u> 8.5 meters approx (from LWL to HOOK).	
6	<u>Operation:</u> 20° list & 10 ° trim	
7	<u>Davit arms (jib):</u> Fabricated steel box section or pipe section welded to the arm post and with head sheave assembly. Locking arrangement to be provided to lock the jib with pin on davit at desired position, and details of locking arrangement to be submitted.	
8	<u>Pedestal & Post:</u> Fabricated steel construction & to be equipped with bearings (anti friction & bush) and mounted with winch & seating.	
9	<u>Slewing Gear:</u> Incorporated on the pedestal and would consist of enclosed worm and spur geared reduction unit hand slewing by means of crank handle with one person against adverse list of 20 ° and trim of 10° The radius of crank handle will be approximately 300 mm. The slewing can be effected by one person against adverse conditions of 20 degrees list and 10 degrees trim. The effort required for manual slewing operation shall not exceed 15 Kgs. Slewing provision shall be provided on both sides of slewing shaft. Mechanical stoppers to be provided.	
10	<u>Winch for Hoisting/ Lowering:</u> One no. Electric motor operated winch is to be fitted to the davit pedestal suitable for hoisting RIB and lowering with a load weighing 1250 kgs. The winch drum is to be of M.S. fabricated type and will accommodate the designated length of wire rope.	
	Necessary brakes such as band brake and centrifugal brakes shall be incorporated in the winch to stop and hold the load at any desired position. Crank handle is to be provided to the winch for operation. Lowering can be done by gravity. The winch is to be designed for hoisting and lowering and the speeds are to be according to rules. The handles shall be fail safe type and shall not fly off and cause injury during operation.	
11	<u>Hoisting speed:</u> 18 m / minute. (minimum)	
12	<u>Lowering Speed:</u> As per mercant shipping (life saving rules) rules,1991 first schedule of part III of clause No.6 and to be indicated by supplier in the offer.	

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13	Remote operation: The winch is to be equipped with remote control operation from RIB by means of remote control wire the wire size and details of same may be indicated in the drawings and to be approved by Competent Authority.	
14	Wire rope: Suitable size and length of wire rope is to be supplied. Details are to be indicated in the offer.	
15	Hook and Block: Automatic release hook and block are also to be included in the scope of supply and drawing with details to be furnished in the offer. Seperate price offer to be furnished for automatic release hook, since hook may be procured from Davit supplier or RIB supplier.	
16	SPARES :	
	Class / Manufacturer's recommended spares for unrestricted services for complete system shall be included in the offer.	
17	On Board Spares:	
	List of manufacturer's recommended spares for the two years operation/ maintenance with individual cost shall be indicated in the offer.	
18	B & D Spares:	
	List of manufacturer's recommended spares for five (5) years operation / maintenance with individual cost shall be indicated in the offer. One copy of Parts Identification List to be supplied with quotation. The validity of the offer for B& D spares shall be for 18 months.	
19	LIFE TIME SUPPORT:	
	Supplier shall confirm the Provision of Life time Support by providing for a minimum period of 20 year, except Electronics where the minimum period will be 10 years after delivery of the last Tug.	
	In case the equipment is likely to become obsolete, the Manufacturer shall be committed to give a clear three (3) year notice to the Indian Navy to assess the requirement of "Life Time Buy" of spares.	
20	TRAINING: The ships crew & shore maintenance staff are required to be trained on the operation and maintenance of the equipment installed On Board.	
21	Quantity required: One set per ship. As per the enclosed guidance sketch no. WDO/03A.	

MANAGER (OAD&M)

Encl: Part C & Drg. of General arrgt of RIB no: WDO/03-B