

TECHNICAL SPECIFICATIONS AND OTHER ALLIED REQUIREMENTS

Sl No.	Description of items	Quantity
PUR/203/R&A/CK/E/20-21		
01.	Hyperbaric Pressure Test Rig (Detailed Specifications and schematic of the test rig as per Annex-I)	01 Set

1. INSTALLATION/COMMISSIONING

1.1. As mentioned in Annex-I.

2. WARRANTY

2.1. As mentioned in Annex-I.

Note: 1. Manufacturer's Authorization Form must be submitted by Non-OEM Bidders.

2. GST 5% against concessional GST Certificate.

ANNEXURE - I : HYPERBARIC TEST RIG FOR CSIR-CMERI

SL. NO.	DESCRIPTION	DETAILS
01	ITEM	HYPERBARIC PRESSURE TEST RIG
02	QUANTITY	01 SET
03	MEDIUM/ WORKING FLUID	FRESH WATER
04	WORKING PRESSURE	150 BAR
05	HYDRO TEST PRESSURE	195 BAR
06	WORKING TEMPERATURE	45° C MAX.
07	DESIGN CODE AND CONSTRUCTION	ASME SEC VIII DIV 1
08	HYPERBARIC PRESSURE CHAMBER	AS SPECIFIED BELOW
(a)	TYPE	VERTICAL CYLINDER WITH FIXED BOTTOM END AND OPENABLE TOP END, MOUNTED ON 4 LEGS.
(b)	SHELL MATERIAL	ANY OF THE FOLLOWING SA-724 Gr. B, SA-533 Gr. B, SA-517 Gr. E/F/P, SA-543 Gr. B/C, SA-516 Gr. 60/70.
(c)	SIZE	INNER Dia.: 475 - 500 mm LENGTH: 1000 mm (Approx.)
(d)	THICKNESS	AS PER ASME SEC VIII DIV 1
(e)	BOTTOM HEAD	WELDED
(f)	TOP HEAD	OPENABLE
(g)	VIEWPORTS	NIL
(h)	INSIDE FIXTURES	NIL
09	HIGH PRESSURE PUMP	3 HP, 195 BAR MIN
10	WATER FILLING PUMP	1 HP
11	PRESSURE GAUGE RANGE	0-250 BAR
12	VALVES	AS SPECIFIED BELOW
(a)	HIGH PRESSURE INLET	BALL VALVE WITH ACTUATOR, 1" NB, # 900
(b)	FILLING PUMP INLET	BALL VALVE WITH ACTUATOR, 1" NB, # 900
(c)	DRAIN	BALL VALVE WITH ACTUATOR, 1" NB, # 900
(d)	SRV	1/4" NB, # 900
(e)	NRV	1" NB, # 900
(f)	AIR VENT	1/4" NB, # 900
13	CONTROL UNIT	FUNCTIONALLY, THE CHAMBER WILL BE FILLED WITH WATER WITH PUMP (1 HP). THE FILLED CHAMBER WILL BE PRESSURISED WITH THE HIGH PRESSURE PUMP (3 HP). AS PER REQUIREMENT, ANY PRESSURE WILL BE SET (MAX LIMIT IS 160 BAR). EACH SET PRESSURE HAS TO BE MAINTAINED FOR THE REQUIRED TIME (MIGHT BE MANUAL). WHEN THE SET PRESSURE WILL BE REACHED THE HIGH PRESSURE PUMP WILL CUT-OFF AUTOMATICALLY. AFTER COMPLETION OF OPERATION, PRESSURE RELIEF VALVE WILL BE OPENED AND WATER WILL BE DRAINED. THE CONTROL UNIT SHOULD HAVE PROVISION TO FOLLOW THE SAID SEQUENCE. MANUAL OPERATIONS ARE ALLOWED EXCEPT AUTOMATIC CUT-OFF OF THE HIGH PRESSURE PUMP.
	BASE FIXED CRANE	1.0 TON CAPACITY, 2 DOF-VERTICAL AND HORIZONTAL MOVEMENT
15	TEST CERTIFICATE TO BE	HYDROTEST TO BE PERFORMED IN PRESENCE OF

Handwritten signature: R. Reddy

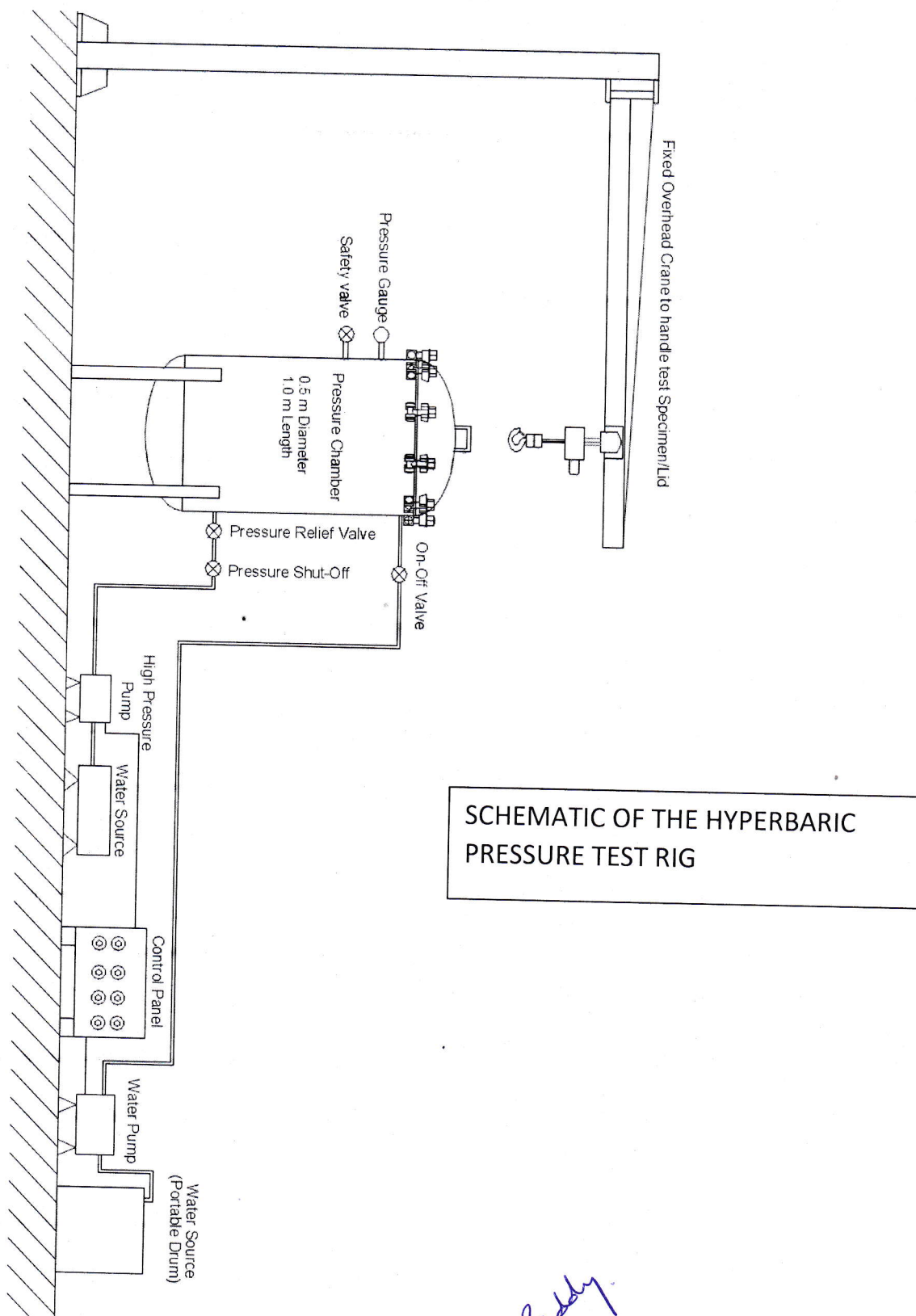
	FURNISHED WITH SUPPLY	APPROVED INSPECTOR (ANY ONE OF DNV/LRQA/TUV/ABS)
16	DESIGN APPROVAL	VENDOR HAS TO PREPARE THE DESIGN OF THE PRESSURE VESSEL, SYSTEM LAYOUT, PLC CONTROL SCHEME OF THE TEST RIG AND SUBMIT TO US (CSIR-CMERI) FOR APPROVAL AFTER PLACEMENT OF THE ORDER, BUT PRIOR TO THE COMMENCEMENT OF THE MANUFACTURING.
17	INSTALLATION AND COMMISSIONING	BY VENDOR
18	INSTALLATION SITE LOCATION	OUTDOORS NEAR BY ROBOTICS AND AUTOMATION DEPARTMENT, CSIR-CMERI, DURGAPUR - 713209, WEST BENGAL
19	PAINTING AND FINAL FINISHING PAINT AFTER INSTALLATION TO BE CARRIED OUT BY THE VENDOR	
20	WARRANTY	1 YEAR VENDOR WARRANTY

TERMS AND CONDITIONS

1. VENDOR SHOULD HAVE SUCCESSFULLY DELIVERED AT LEAST ONE ORDER OF CONTAINING PRESSURE CHAMBER/VESSEL OF AT LEAST 50 BAR PRESSURE RATING. DETAILS/PROOF TO BE FURNISHED WITH THE QUOTE.
2. ALL THE STANDARD COMPONENTS ~~SHOULD BE OF REPUTED BRANDS~~ BRANDS, DETAILS TO BE MENTIONED IN THE QUOTE. *Shirna Reddy*
3. TIMELINE:
 - a. SUBMISSION OF DESIGN REPORT TO CSIR-CMERI : 2-3 WEEKS FROM THE DATE OF PLACEMENT OF PURCHASE ORDER
 - b. APPROVAL OF THE DESIGN BY CSIR-CMERI: 2 WEEKS FROM THE DATE OF SUBMISSION OF DESIGN REPORT
 - c. FABRICATION AND INSTALLATION OF THE COMPLETE SETUP AT CSIR-CMERI: 8-10 WEEKS FROM THE DATE OF DESIGN APPROVAL BY CSIR-CMERI

Shirna Reddy

ANNEXURE - I : HYPERBARIC TEST RIG FOR CSIR-CMERI



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