

Amendment No. 1**Date: 19/04/2018****Subject: Amendment to the Tender Enquiry Document.****Ref: Tender no. HMC/Manifold Gas Pipeline System/17-18/005 dated 14.04.2018**

The following changes have been incorporated in the referred tender.

Section-VI (List of Requirement)

SL No.	ITEM DESCRIPTION	UNIT	Qty	RATE	AMOUNT
1	OXYGEN SYSTEM				
1.1	Main Oxygen Manifold 2x7 cylinders with NRV's, Tail pipes and Middle frame	SET	01		
1.2	Semi - automatic Oxygen Control Panel (indigenous) with automatic changeover from Running Bank to Reserve Bank of Cylinders and having non-halogenated polymer in the high pressure side of the primary regulators and 40 micron inlet filter.	NOS	01		
1.3	3-cylinder Emergency Oxygen Manifold complete with tail pipe, NRV and Pressure Reducing System having non-halogenated polymer materials in the high pressure side of the regulator (IOX-14)/double stage.	SET	01		
2	Nitrous Oxide System				
2.1	Main Nitrous Oxide Manifold 2x2 cylinders with NRV's, Tail Pipes and Middle Frame	SET	01		
2.2	Semi - automatic N2O Control Panel with Automatic Changeover (indigenous) from Running Bank to Reserve Bank of Cylinders	Nos	01		
2.3	1-Cylinder Emergency Nitrous Oxide Manifold complete with tail pipe, NRV and Pressure Regulator (Single Stage)	SET	01		
3	COMPRESSED AIR SYSTEM				
3.1	To design, fabricate, test and install Medical Air System comprising of 1 no of air compressor having 5 HP motor and 1000 litre reservoir tank and filter (3-stage). NRV, Isolation Valves: Air Dryer System and Pressure Reducing System, complete in all aspects	SET	01		
4	VACCUM SYSTEM				
4.1	To design, fabricate, test and install Medical Vacuum System comprising of 1 no of Vacuum Pump having 5HP Motor and 1500 litres reservoirs, Bacteria filter, NRV, Isolation Valve, complete in all aspects.	SET	01		
5	COPPER PIPING AS PER EN 13348 Suitable for Medical use				
5.1	Copper Pipe for Medical use with 12mm x 0.9mm thick	Mtr	100		

5.2	Copper Pipe for Medical use with 15mm x 0.9mm thick	Mtr	500		
5.3	Copper Pipe for Medical use with 22mm X 1.0 mm thick	Mtr	300		
5.4	Copper Pipe for Medical use with 28 mm X 1.0 mm thick	Mtr	200		
5.5	Copper Pipe for Medical use with 42mm X 1.2 mm thick	Mtr	50		
6	FACTORY DEGREASED ISOLATION VALVES FOR				
6.1	Isolation Valve with brass adapter for 12mm Copper Pipe i.e. 1/4" (Butterfly Knob)		100		
7	VALVE BOX WITH VALVES FOR MEDICAL USAGE				
7.1	Valve Box – 2 Gas Service (size 15mm X 22mm)- 2 GAS = Oxygen, Vacuum	Nos.	01		
7.2	Valve Box – 3 Gas Service (size 15mm X 15 mm X 22mm) – 3 GAS = Oxygen, Air, Vacuum)	Nos.	03		
7.3	Valve Box – 4 Gas Service (size 15mm X 15mm X 15mm x 22mm) = (Oxygen, Nitrous, Air ,Vacuum)	Nos.	02		
8	Analog ALARM SYSTEMS				
8.1	2 Gas Area Alarm With Analog Gauge/LED Display	Nos.	01		
8.2	3 Gas Areas Alarm With Analog Gauge/LED Display	Nos.	03		
8.3	4 Gas Area Alarm With Analog Gauge/LED Display	Nos.	02		
9	GAS OUTLETS				
9.1	Double Lock with probe – Oxygen	Nos.	05		
9.2	Double Lock with probe – Nitrous Oxide Set	Nos.	02		
9.3	Double Lock with probe-Air 4 Medical Air Set	Nos.	05		
9.4	Double Lock with probe - Vacuum Set	Nos.	05		
10	PENDANT				
10.1	Rigid Ceiling Pendant (Stainless Steel) Set (Oxygen, Vacuum, Nitrous &Air)-2No.each 4 nos. of (5/15 Amp Switch Socket), Monitor Stand, IV Poll	Nos.	02		
11	SUCTION AND OXYGEN THERAPY PRODUCT				
11.1	Oxygen Flow meter BPC (0- 15 LPM) with Humidifier Set	Nos.	30		
11.2	Ward Vacuum Unit with Regulator and 600ml polycarbonate jar set	Nos.	30		
11.3	Theatre Suction Unit with 2 x 2000 ml Polycarbonate Jars Set	Nos.	02		
11.4	Kit Conversion - Oxygen Set (For OT)	Nos.	01		
11.5	Kit Conversion - Nitrous Oxide Set (For OT)	Nos.	01		
11.6	High Pressure Tubing	Mtr.	20		
11.7	Low Pressure Tubing	Mtr.	60		
12	Bed Head Panel - Bed head panel (3.5 ft) with facilities of GAS outlets (Double lock outlet with Parking facilities for Oxygen, Vacuum and Air (4 Bar) with 5/15 Amp Power Socket (duly fitted with 2nos of Oxygen, Vacuum-1, Air outlets and 5/15 Amp power switch sockets.	Nos.	30		

13	Electric Control Panel: Common electrical control panel for both air and vacuum system consisting of various MCBs, starters and electric equipments required for functioning of both systems.	No.	01		
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**SECTION-VII
TECHNICAL SPECIFICATIONS**

Sl. No 03

Existing specification:

Medical Compressed Air Combined Air Plant and Surgical Air Plant (7 Bar) – At least 1000 LPM

CE Marking: The standard range of Medical Air plant systems are 'CE' marked under the Medical Devices Directive 93/42/EEC with approval from notified body no. 0088 (Lloyd's Register Quality Assurance). Under this directive, the specified products are classified as Class II Medical Devices.

ALTERNATIVELY, compressed medical air plant of equivalent system capacity suitable for medical & surgical air as per NFPA99C standard with UL listed control panel can be offered.

Read as:

Medical Compressed Air Combined Air Plant and Surgical Air Plant (4 Bar) – At least 1000 LPM

Compressed Medical Air Plant of equivalent system capacity suitable for medical & surgical air as per NFPA99C/HTM standard

SL No.4

Existing Specification

CE Marking: The standard range of Medical Air plant systems are 'CE' marked under the Medical Devices Directive 93/42/EEC with approval from notified body no. 0088 (Lloyd's Register Quality Assurance). Under this directive, the specified products are classified as Class II Medical Devices.

ALTERNATIVELY, compressed medical air plant of equivalent system capacity suitable for medical & surgical air as per NFPA99C standard with UL listed control panel can be offered.

Read as:

Compressed Medical Air Plant of equivalent system capacity suitable for medical & surgical air as per NFPA99C/HTM standards

Sl No.4.2 Bacteria Filters

Existing Specifications

The duplex bacteria filter system shall incorporate high efficiency filter elements. A differential vacuum indicator shall be installed across the filter to indicate blockage. Additional pressure sensors shall be installed at the inlet and outlet of the filter to measure the pressure drop across the filters. Each filter shall be designed and sized to carry the full plant design flow capacity with a pressure drop not exceeding 33mbar (25mmHg). Bacteria Filter elements shall have penetration levels not exceeding 0.005% when tested by the sodium flame method in accordance with BS 3928:1969 and utilizing particles in the 0.02 to 2 micron size range. Drain flasks shall be connected to each filter. Drain flasks shall be manufactured from transparent Pyrex® with a polymer coating on the inner and outer surfaces in order to maintain a seal in the event of inadvertent breakage of the Pyrex® flask. All drain flasks shall be suitable for sterilization and be connected via a manual isolating valve.

Read as:

The duplex bacteria filter system shall incorporate high efficiency filter elements. A differential vacuum indicator shall be installed across the filter to indicate blockage. Additional pressure sensors shall be installed at the inlet and outlet of the filter to measure the pressure drop across the filters. Each filter shall be designed and sized to carry the full plant design flow

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SL No 08

Existing Specifications

Digital Alarm System

Read as :

Analog Alarm System /LED Display System

- Alarm system should fully comply with requirements of HTM standards.
- Each Gas Service shall be displayed by cored LED to show normal (Green), low and high pressure (Red) conditions.
- Medical Vacuum System shall be displayed in the Normal (Green) and Low Vacuum (Red) conditions.
- Failure indications shall be displayed with flashing lights and normal indication shall be steady.
- An audible warning shall sound simultaneously with any failure indication and a mute facility shall be provided.
- Alarm should have pressure gauge to show the readings of pressure of gas.

All other contents of the tender enquiry including terms & conditions remain unaltered.

Note:

- 1. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of submission of tenders.**