


CR-RRIKMT-FSS_THANE INVENTORY

BOQ Sr No	Description of item	Unit	Installed Quantity at Thane Site
1	Supply of UL/FM/Vds/LPCB Approved 140 ltrs Seamless Tank and valve assembly, Super pressurised with Nitrogen. Gas design concentration @ % v/v shall be 4.7 and @ 25 Bar. The cylinder shall be seamless steel type tested in accordance with IS 7285/BS5045 standard and approved by PESO as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	0
2	Supply of UL/FM/Vds/LPCB Approved 120 ltrs Seamless Tank and valve assembly, Super pressurised with Nitrogen. Gas design concentration @ % v/v shall be 4.7 and @ 25 Bar. The cylinder shall be seamless steel type tested in accordance with IS 7285/BS5045 standard and approved by PESO as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	3 ✓
3	Supply of non-toxic, environment friendly, non-corrosive, clean gaseous agent at the atmospheric pressure, safe for Electronic /Electrical/ Telecommunication Equipments/Equipments/Computers, Human Friendly, non-residual, Non flammable gas and UL/FM/VDS/LPCB Approved. as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Kgs	Master + 2 Slave 1+1+1=3 324 ✓
4	Supply of Master Cylinder Accessories Electric Actuator Control Head, 24 V DC, Discharge Hose as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	1 ✓
5	Supply of End Slave Cylinder Pressure Operated Control Head, Actuation Hose, Discharge Hose, Discharge Hose, Male Elbows as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	2 ✓
6	Supply of Discharge Nozzles as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	8 ✓
7	Supply of Discharge Pressure Switch as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	1 ✓
8	Supply of El Check 2" (Manifold Check Valve) as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest. (Inspection Agency-Consignee)	Nos	3 ✓


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9	Supply of microprocessor based Advance Multifunction <u>Programmable 2 Zone Control Panel</u> as per detailed technical specification given Annexure Supply installation Testing & commissioning of Listed Single zone Gas Release Panel facility to connect Manual Abort/Release switches. The Panel shall provide Potential free contacts for First knock, second knock, Trouble / Fault Status. The Panel shall be Complete with Red Colour Housing, Monitored Power supply unit, Battery charger & batteries Gas Release Panel shall be capable to connect Main & Standby Electrical Actuators. as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest.(Inspection Agency-Consignee)	Nos	ESM Room Gr. Sep. panel. Switch Socket 1 ✓
10	Supply of UL/FM/Vds/LPCB Listed Intelligent <u>Fire Alarm Control Panel</u> Single Loop expandable upto 2 Loops, 1 Loop card inbuilt, 235 Addressable points per loop, 30 Zone, 2 Bell Circuit, Integrated PSU with Battery Charger, Excluding Batteries, Requires network card additionally for networking as per RDSO specification no. RDSO/SPN/218/2016 version 1.0 or latest.(Inspection Agency-Consignee)	Nos	panel Room 1 ✓
11	Supply of UL/FM/Vds/LPCB Listed <u>Multi criteria detector</u> shall be Rate-of-rise temperature-cum-fixed temperature type detector, Plastic, if used for heat detector, shall not start softening, deforming or melting at a temperature lower than 95°C. detector shall be able to detect smoke and shall communicate alarm signal to Control unit when optical density of smoke exceeds 0.1 dB/M (10 m visibility) as per RDSO specification no. RDSO/SPN/217/2018 version 1.0 or latest.(Inspection Agency-Consignee)	Nos	44 ✓
12	Supply UL/FM/Vds/LPCB Listed Intelligent <u>Ultraviolet Flame Detector</u> for Spark Detection. as per RDSO specification no. RDSO/SPN/217/2018 version 1.0 or latest.(Inspection Agency-Consignee)	Nos	4 ✓
13	Supply of UL/FM/Vds/LPCB Listed Addressable Semi Flush Mounting Resettable (NonBreaking Glass), Supplied with Special Reset Tool (Inspection Agency-Consignee)	Nos	0
14	Supply of <u>Manual Gas Release unit</u> Supply installation Testing & commissioning of UL/FM/Vds/LPCB Listed Manual Release Stations with DPDT Relay, shall be fitted with transparent hinged covers to avoid the possibility of accidental operation. The Release switch will be monitored simultaneously by Fire Alarm and Remote Monitoring Software. (Inspection Agency-Consignee)	Nos	1 ✓
15	Supply of <u>Manual Gas Inhibit Unit</u> Supply installation Testing & commissioning of UL/FM/Vds/LPCB Listed Manual Abort Stations with DPDT Relay, shall be fitted with transparent hinged covers to avoid the possibility of accidental operation. The Abort will be monitored simultaneously by Fire Alarm and Remote Monitoring software. (Inspection Agency-Consignee)	Nos	1 ✓

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16	Supply of <u>Control Input/Output Module</u> for Hooter/VESDA or equivalent.(Inspection Agency-Consignee)	Nos	4 ✓
17	Supply of <u>Warning Sign Board</u> with Marking "GAS DISCHARGE. DO NOT ENTER". Shall Operate on 24 V DC, Driven Through Gas Release Panel. (for use outside room) (Inspection Agency-Consignee)	Nos	1 ✓
18	Supply of <u>TRH (Temperature & relative humidity)</u> sensor, integrated with centralise remote monitoring system and <u>PIR (passive Infrared)</u> Sensor for relay room.as per RDSO specifcation no. RDSO/SPN/217/2018 version 2.0 or latest.(Inspection Agency-Consignee)	Nos	2 ✓
19	Supply of <u>M S Seamless pipe</u> as per ASTM106 Gr. B painted with 2 coats of primer and 2 coats of Red Enamie Paint as per the design requirements SITC of NOVEC or equivalent. Piping & Manifold as required, Sch 40; ASTM A106 Gr B, as per flow calculations for the specific hazard volume and stand to hold,position & Support the Manifold and Piping properly.Pressure testing for piping with nitrogen as per NFPA 2001. (Inspection Agency-Consignee)		1 ✓
20	Supply of 2 <u>Corex 1.5 mm, Multistranded AT Copper, FRLS, cable, RED</u> in Colour, laid on surface with GI saddle-spacers every 0.3 meters. Complete with GI Junction Box, lugs, cable compression glands, cable tags and Ferruling. (Inspection Agency-Consignee)	Mtr	510 ✓
21	Supply of <u>UL/FM/Vds/LPCB listed Maunal Call Point</u> for Fire Alarm system,(Inspection Agency-Consignee)	Nos	3 ✓
22	Supply of <u>UL/FM/Vds/LPCB listed Hooter</u> for Fire Alarm system.as per RDSO specifcation no. RDSO/SPN/217/2018 version 2.0 or latest.(Inspection Agency-Consignee)	Nos	3 ✓
23	Supply of <u>Single Pipe Inlet Single Sensor</u> on board Programmer suitable for single pipe run of 25m (80ft), or two pipe runs of 15m (50ft) mtr pipe length & approx 250 Sq.mtr Area. Power supply shall be in a separate enclosure suitable for 240 VAC input & 24 VDC output. RS485 communications built in as standard for networking and remote communications.The panel should UL/FM/Vds/LPCB approved as per RDSO specifcation no. RDSO/SPN/217/2018 version 2.0 or latest.(Inspection Agency-Consignee)	Nos	1 ✓
24	Supply of <u>Capillary tube and sampling point</u> assembly with labels "Vesda or equivalent sampling points" With required sampling pipe.(Inspection Agency-Consignee)	Nos	8 ✓
25	Supply of <u>conventional/addressable Hooter</u> for VESDA or equivalent system(Inspection Agency-Consignee)	Nos	1 ✓
26	Supply of <u>Online Remote Monitoring Software</u> for inegration of all <u>Location DDC & Fire Suppression system ,Fire Detection system, VESDA</u> or equivalent system & accessories(Inspection Agency-Consignee)	Nos	1 ✓

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27	Supply of <u>32 Bit IP Based Direct Digital Controller</u> with on board Bacnet & Modbus Protocol for integration with Fire Alarm Panel to monitor status of cylinder pressure switch, Panel operating mode, Fire status on Remote Monitoring Software. The software should have capabilities to send mail alert. The system should comprises of necessary panel, switches, cables etc required to complete the job. Make Trane/ L & T/Tridium/Johnson Controls (Inspection Agency-Consignee)	Nos	1 ✓
28	Supply of Centralise Monitoring Server & PC system should include all below parameter for all 4nos location Server & PC should have Intel Core i7 generation processor having 4 core 3.20Ghz with 6MB Cache, <u>2GB</u> Graphic Card, 1 HDMI Port, min at 1333 MHz or above with a bus speed of 3.2 Ghz, 500GB SSD, 52X DVD writer, 8GB RAM DDR4, optical Mouse, 104 Keys keyboard, 4 hi speed USB 3.0 ports, 2 serial ports. (Inspection Agency-Consignee)	Nos	1 ✓
29	Supply of Electrical Switch Socket, Power Cable & Accessories (Inspection Agency-Consignee)	Nos	5 ✓
30	Supply of MS stand for installation of Smoke Detector (Inspection Agency-Consignee)	Nos	10 ✓
31	Installation Testing & Commissioning of Fire Suppression system & Accessories (Inspection Agency-Consignee)	Job	1 ✓
32	Installation Testing & Commissioning of Fire detection system & Accessories (Inspection Agency-Consignee)	Job	1 ✓
33	Installation Testing & Commissioning of VESDA System & Accessories (Inspection Agency-Consignee)	Job	1 ✓
34	Installation Testing & Commissioning of Centralise Online Monitoring system and integration with Fire Suppression system, Fire Detection, VESDA or equivalent system (Inspection Agency-Consignee)	Job	1 ✓
EXTRA NS ITEMS			
1	Supply and Installation of wooden cabinet Rack for cylinder for Each Location	Nos	1 pending
2	Supply & Installation of Relay control Module for AHU Integration with all other accessories complete requirement.	Nos	NA
3	Supply and installation of 4 Core x 0.75 Sq.mm Armoured ATC, Shielded PVC Insulated Cable with all accessories.	Mtr	56 ✓

Checked item No. 1 to 34 & found as per description. Hathal

In Extra NS items SSS/STNA/CL Item No 1 is pending.
Rest all as per description.

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SSS/STNA/CL