**REQUEST FOR QUOTATION  
SPECIFICATION OF STANDARD GOODS**

**Procurement No:** **RFQ-22-G008-22**

## Specification

### Background

Oxygen plant is one of the many equipment essential for the safe and proper operation of health services. This plant is responsible for producing oxygen gas with purity of 95% or higher, that is suitable for medical purposes.

For background information, there is only one existing oxygen plant in the MHMS. This oxygen plant was initially installed in 2019 and has been in service till the covid19 outbreak period in Tarawa. This is a complex machine and most components have undergone replacement due to wear and tear.

The breakdowns of the existing oxygen plant has forced the MHMS to procure oxygen cylinders on a daily basis from the offsite local supplier. This has proven to strain the MHMS budget due to the high demand of oxygen from all health facilities.

The procurement of a new oxygen plant will certainly improve the supply of oxygen gas to the MHMS, hence resulting in continuous delivery of safe and high quality oxygen needed for safe surgical operation and managements of patients with respiratory distress. This would also assist the MHMS in saving more money by preventing procurement of oxygen gases from local suppliers.

### Requirements

The followings are the minimum requirements needed to be available in the quoted PSA system:

1. **Functional requirements:**

- Produce medical oxygen 93%±3 from ambient air

- containerized for easy installation

- oxygen production monitoring

- Control panel or user interface, with numerical and graphical values

- Alarm for low oxygen concentration

1. **Detailed requirements**

- Oxygen concentration monitor with ±1% accuracy

- continuous display of oxygen concentration and pressure

- alarm when an oxygen concentration is lower than 90%

1. **Control panel or user interface**

- Digital display, clearly visible in English for at least:

- oxygen concentration (%)

- oxygen production trending (Nm3/hour)

- output pressure

- system status, including current maintenance need

- cumulative hours of operation (digital or analogue meter)

- Audible and visual alarms for:

- high temperature

- low/high pressure

- low oxygen concentration (<90%)

- power failure, system failure

1. **Spare parts**

- 3-year spare parts kit as per recommended preventative maintenance programme clearly defined in a dis-aggregated list comprising part numbers, descriptions, and unit cost as well as brand/models specific by the manufacturer

- Set of inlet filters & outlet bacteria filter for 3-years operation

1. **Power supply**

- Electrical source requirements must be locally compatible:

- 415VAC ±15% for 3 phase / 50Hz

- or 220VAC ±15% for 1 phase / 50Hz

- Must be equipped with electrical protection

1. **Documentation**

- Hard & soft copies, in English language, of:

- life span of minimum 10 years, guaranteed by a letter form the manufacturer

- certificate of quality, calibration and inspection

- user manual, detailing specific protocols for operation & list of equipment & procedures required for cleaning, disinfection, troubleshooting, calibration and routine maintenance

- service manual

- contact details of manufacturer technical support

1. **Transportation, storage and operation requirements**

- PSA system to be containerized (20 ft container) to facilitate rapid installation

- Capable of supplying the specified oxygen concentration continuously in ambient temperature from 10 - 40 0C

- Capable of being stored continuously in ambient temperature from 10 - 40 0C

1. **Standards, for the product performance**

- Free Scales Certificate (FSC) favourable, provided from Australia/Canada/Japan/USA/European community

1. **Warranty**

- Warranty 48 months, with option to extend

- Agreements of terms of warranty and maintenance contract

1. **User & Maintenance training**

- The supplier/manufacturer to conduct onsite training on the followings:

- Safe operation of the plant

- Cleaning techniques and routines of the PSA plant & filters

- Testing of alarms

- Testing of operating pressures

- Testing of oxygen concentration

- Frequency of the recommended maintenance routines

- Safety precautions on management of oxygen

- Advanced maintenance tasks required for prolonging the good operation of the system

<list other general requirements>

Should have output capacity of 10 Nm3/h or more

Connection/Fitting/Adapters must be in bullnose

Equipped with filling stations of 6-8 bays with bullnose fittings.

Come with 30 x G oxygen cylinder (white & black colour) with bullnose fitting

Come with 3 x oxygen cylinder trolley

### Installation services

<insert related services>

To be conducted onsite by supplier’s technician.

Under special circumstances (for instance, worldwide lockdown), installation can be conducted by Local Biomed technicians while under close remote guidance of supplier’s technicians.

### Delivery Time

<insert requested delivery time, if general, otherwise in the table below>

All items shall be delivered in a month’s time after contract launches.

## Description of the Goods

*Here, list all items to be Tendered*

*(This part may be replaced by a proprietary Supplier description)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pos. | Description | Number | Delivery Time (to be Tendered) | Price (to be Tendered) |
| 1 | PSA Oxygen plant  - Capable of producing medical grade oxygen with oxygen purity of 90-96%  - Robust & versatile design  - Should have output capacity of 10 Nm3/h or more  - Equipped with filling stations of 6-8 bays with bullnose fittings.  - Should come with accessories/consumables/spare parts as per previously listed requirements | 1 |  |  |