

INFRASTRUCTURE MAINTENANCE

PROCUREMENT SPECIFICATION

SPECIFICATION FOR PETROL AIRLESS SPRAY UNIT

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1 General Requirements

- 1.1. This specification outlines the requirements of a petrol airless spray unit driven by a petrol engine.
- 1.2. The petrol airless spray unit shall be ergonomically designed for maximum operator productivity and safety.

2 Operating Conditions

- 2.1. The petrol airless spray unit shall be operated in all weather conditions at altitudes varying from sea level to 1850 m above sea level, relative humidity 10% to 90% and atmospheric conditions which vary from heavily saline to dry and dusty.
- 2.2. The ambient air temperatures ranging from -5° C to 45° C.

3 Performance

- 3.1. A service life of not less than 7 years is expected from each petrol airless spray unit. The actual design life of the unit shall be stated.
- 3.2. The petrol airless spray unit shall be easily and economically maintained with standard workshop tools and equipment.

4 Technical Requirements

4.1 General Description

- 4.1.1. A mobile petrol airless spray unit, airless hoses, spraying gun and reversing spraying tips suitable for surface painting purposes is required.
- 4.1.2. The petrol airless spray unit shall come mounted on a trolley with wheels and a handle that doubles as coiled hose storage. The trolley shall withstand harsh environments and roll easily over rough terrain.

4.2 Functional Requirements

- 4.2.1. The petrol airless spray unit shall have a maximum working pressure of at least 200 bar.
- 4.2.2. A 3.5kW petrol engine shall be used for the petrol airless spray unit.
- 4.2.3. The petrol airless spray unit shall have a maximum flow rate of at least 6 litres per minute.
- 4.2.4. The piston pump or diaphragm pump is preferred for the application of the petrol airless spray unit.
- 4.2.5. The petrol airless spray unit shall be fitted with an automatic shut-down in the event of either empty fluid tank or low fluid pressure level.
- 4.2.6. The operating temperature of the hose reel shall be in the range of -10 to +50 degrees Celsius.
- 4.2.7. The mass of the petrol airless spray unit shall not exceed 100 Kg.
- 4.2.8. The petrol airless spray unit shall have a durable protective coating.

4.3 Accessories

The petrol airless spray unit shall be supplied complete with the following:

- 2 x Spray gun and reversible tip set.
- 2 x 15m high pressure hoses.

- An operator's handbook, service manual and spare parts list shall be supplied with each petrol airless spray unit to ensure that it is operated in accordance with the manufacturer's instructions.
- Essential tools such as Allen keys, spanners etc. to make essential adjustments as well as to fit or remove consumable items.

4.4 Data Plate

- 4.4.1. The petrol airless spray unit shall come with a data plate.
- 4.4.2. The brand and model number of the petrol airless spray unit shall be clearly shown.
- 4.4.3. The actual weight in kilograms (Kg) of the petrol airless spray unit shall be shown on the unit.
- 4.4.4. The actual dimensions of the petrol airless spray unit shall be indicated in millimetres.

5 Quality Control

- 5.1. The petrol airless spray unit shall be manufactured in an environment that complies to the latest ISO 9000 to ISO 9004 or similar quality control standards. ISO Certification may be required.
- 5.2. The petrol airless spray unit shall undergo functional testing prior to acceptance upon delivery.
- 5.3. The design of the petrol airless spray unit shall be that of the manufacturer but shall be of robust construction to meet sustained duty demands, yet it shall be light and easy handled by one operator.
- 5.4. The petrol airless spray unit shall be completely assembled and filled with lubricants and ready for service in all aspects.
- 5.5. The petrol airless spray unit shall be acceptable in standard factory production finish and colour. Details to be furnished.

6 Legal and Operational

- 6.1. The petrol airless spray unit shall comply with the requirements of the Occupational Health and Safety Act, (Act 85 of 1993 – General and Driven Machinery Regulations) and the Machinery Directive 2006/42/EC.
- 6.2. The petrol airless spray unit shall conform to the regulations under Section 44 of the Occupational Health and Safety Act 1993 (Act No. 85 of 1993) as categorized in terms of SANS 347 requirements. Certificate of Conformance may be required.
- 6.3. The manufacturer shall mark and label the petrol airless spray unit so that it adheres to the SANS 1186-1, SANS 1363, ISO 7010, and ISO 3864-1 standards for marking safety and warning signs.
- 6.4. The information as requested by the various clauses in this specification shall be supplied in the form of technical datasheets, pamphlets and/or drawings. If this is not complied to, offers may be overlooked.
- 6.5. The petrol airless spray unit shall be guaranteed for a minimum period of twelve (12) months against faulty material and workmanship-fair wear and tear excluded. Full details of warranty to be submitted.

END OF SPECIFICATION