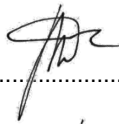


INFRASTRUCTURE MAINTENANCE

PROCUREMENT SPECIFICATION

SPECIFICATION FOR SAND BLASTING KIT

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1 General Requirements

- 1.1. This specification outlines the requirements of a sandblasting kit powered by an air compressor.
- 1.2. The sandblasting kit shall be ergonomically designed for maximum operator productivity and safety.

2 Operating Conditions

- 2.1. The sandblasting kit shall be operated in all weather conditions at altitudes varying from sea level to 1,850m above sea level, relative humidity 10% to 90% and atmospheric conditions which vary from heavily saline to dry and dusty.
- 2.2. Ambient air temperatures ranging from -5° C to 50° C.

3 Performance

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

4 Technical Requirements

4.1 General Description

- 4.1.1. High-pressure sandblasting equipment and blast pots used for surface preparation and abrasive blasting (sandblasting) to remove rust, mill, scale and other surface defects is required.
- 4.1.2. The sandblasting pot 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 Sand blast Pot

- 4.2.1. The sandblast pot shall be a pressurized vessel for storing and dispensing abrasive materials at high speeds.
- 4.2.2. The sandblast pot 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.
- 4.2.3. The sandblast pot shall have the following functional requirements.

Motor power input	230 V
Airflow	4000 Lpm
Pot Capacity	100L
Max Pressure	8 Bar
High pressure hose	15m x 32mm

4.3 Sandblasting hose sets with nozzle

- 4.3.1. A complete sandblasting nozzle gun with hose & conversion kit is required.
- 4.3.2. The pneumatic sandblast nozzle shall be designed for efficient sandblasting and air cleaning of parts and surfaces.
- 4.3.3. The pistol handle shall be manufactured from cast aluminium and operate with an 8mm air inlet.
- 4.3.4. The sandblast nozzle set shall have the following functional requirements:

Airflow	4000 Lpm
Nozzle size	8mm
Air inlet	8mm
Max Pressure	8 Bar
Hose	15m x 25mm

4.4 Sandblasting PPE

- 4.4.1. The sandblasting air filtration units shall be used to isolate air in the working environment and the air used for breathing, providing protection to the operators.
- 4.4.2. The air filtration unit shall be supplied with a respirator helmet.
- 4.4.3. The air filtration system shall have an air supply flow of 60L/min or more with the filter installed.
- 4.4.4. The unit shall be powered by a portable and rechargeable power source.
- 4.4.5. The following components shall be included in the package:

Air pump unit	Electric air pump to transport air to face cover (helmet)
Breathing filter	40 mm canister filter
Helmet	Vinyl blast helmet with 165 x 105mm visor
Gas pipe	500 mm long air pipes
Charger	Suitable for 220V at 50Hz

4.5 Pneumatic High Pressure Flexible Hose – 20m x 8mm

- 4.5.1. The flexible air hose shall be used for extension.
- 4.5.2. The flexible hoses shall come fitted with ¼-inch male to female quick couplers to switch between your tools with air-tight ease.

Suitable for	Pneumatic tools / compressor air
Max Operating pressure	20 Bar
Burst Pressure	80 Bar
Fitting Type	Male to Female Quick couplers
Fitting size	8mm
Hose length	20m
ID	25mm

4.6 Additional Requirements

- 4.6.1. The sand blasting kit shall be supplied complete with all the necessary components for it to function optimally under the conditions as in clause 2 of this specification.
- 4.6.2. An operator's handbook, service manual and spare parts list shall be supplied with each sand blasting kit to ensure that it is operated in accordance with the manufacturer's instructions.
- 4.6.3. The sand blasting kit shall be supplied complete with essential tools such as Allen keys, spanners etc. to make essential adjustments as well as to fit or remove consumable items when necessary.

4.7 Data Plate

- 4.7.1. The sand blasting kit shall come with a data plate.
- 4.7.2. The brand and model number of the sand blasting kit shall be clearly shown.
- 4.7.3. The actual weight in kilograms (kg) of the sand blasting kit shall be shown on the machine.
- 4.7.4. The actual dimensions of the sand blasting kit shall be indicated in millimetres (mm).

5 Quality Control

- 5.1. The sand blasting kit 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 sand blasting kit shall undergo functional testing prior to acceptance upon delivery.
- 5.3. The sand blasting kit shall be completely assembled and filled with lubricants and ready for service in all aspects.
- 5.4. The design of the sandblasting kit shall be that of the manufacturer but shall be of robust construction to meet sustained duty demands, yet it shall be light and easy to handle by one operator.
- 5.5. The sandblasting kit shall be acceptable in standard factory production finish and colour. Details to be furnished.

6 Legal and Operational

- 6.1. The sand blasting kit shall comply with the requirements of the Machinery and Occupational Safety Act, (Act 85 of 1993 – General and Driven Machinery Regulations) and the Machinery Directive 2006/42/EC.
- 6.2. The sand blasting kit 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 sand blasting kit 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 sand blasting kit shall be guaranteed for a minimum period of 12 months against faulty material and workmanship - fair wear and tear excluded. Full details of warranty are to be submitted.
- 6.5. The information as requested by the various clauses in this specification shall be supplied in form of technical datasheets, pamphlets and/or drawings. If this is not complied to, offers may be overlooked.

END OF SPECIFICATION