




## INFRASTRUCTURE MAINTENANCE

## PROCUREMENT SPECIFICATION

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### SPECIFICATION FOR A PETROL BRUSH CUTTER

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|-----------|------------------------------|-------------------|---|
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## **1. General Requirements**

- 1.1. The specification details the requirements for a petrol brush cutter for use in railway infrastructure maintenance.
- 1.2. The petrol brush cutter shall be ergonomically designed for maximum operator productivity and safety.

## **2. Operating Conditions**

- 2.1. The petrol brush cutter 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 petrol brush cutter. The actual design life of the petrol pole pruner shall be stated.
- 3.2. The petrol brush cutter shall be easily and economically maintained with standard workshop tools and equipment.

## **4. Technical Requirements**

### **4.1. General Requirements**

- 4.1.1. The petrol brush cutter shall be designed for professional use; it shall be able to perform in tough conditions and in a wide variety of applications.
- 4.1.2. The supplier should ensure that each petrol brush cutter is supplied with all the special equipment and accessories essential to enable it to be adjusted, maintained, and used safely.
- 4.1.3. The petrol brush cutter will be acceptable in standard factory production finish and colour.

### **4.2. Functional Requirements**

- 4.2.1. A 2-stroke petrol engine rated 2.5 kW power shall be used for the petrol brush cutter.
- 4.2.2. The petrol brush cutter shall have a fuel tank capacity of 1 litre.
- 4.2.3. The petrol brush cutter shall have an oil tank capacity of 0.5 litre.
- 4.2.4. The petrol brush cutter shall have a cutting width of minimum 54mm.
- 4.2.5. The petrol brush cutter shall have a minimum tube length of 1400mm.
- 4.2.6. The petrol brush cutter shall have a sound pressure level of 92-93 dB(A).
- 4.2.7. The petrol brush cutter shall have a sound power level of 109 dB(A).
- 4.2.8. The petrol brush cutter shall be fitted with an automatic shut-down in the event of either empty fluid tank or low fluid level.
- 4.2.9. The petrol brush cutter shall have optimum handling, i.e. Ergonomic handlebar with a soft grip.

### **4.3. Additional Requirements**

The petrol brush cutter shall be supplied complete with the following:

- A 3-teeth Carbon Steel blade.
- Nylon line head.
- Shoulder strap.

- Fuel mixing bottle.
- Safety guard.
- An operator's handbook, service manual and spare parts list shall be supplied with each petrol brush cutter 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 brush cutter shall come with a data plate.
- 4.4.2. The brand and model number of the petrol brush cutter shall be clearly shown.
- 4.4.3. The actual weight in kilograms (Kg) of the petrol brush cutter shall be shown on the machine.
- 4.4.4. The actual dimensions of the petrol brush cutter shall be indicated in millimetres.

### **5. Quality Control**

- 5.1. The petrol brush cutter 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 brush cutter shall undergo functional testing prior to acceptance upon delivery.
- 5.3. The design of the petrol brush cutter 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 brush cutter shall be acceptable in standard factory production finish and colour.

### **6. Legal and Operational**

- 6.1. The petrol brush cutter 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 manufacturer shall mark and label the petrol brush cutter so that it adheres to the SANS 1186-1, SANS 1363, ISO 7010, and ISO 3864-1 standards for marking safety and warning signs.
- 6.3. The petrol brush cutter shall be completely assembled and filled with lubricants and ready for service in all aspects.
- 6.4. The information as requested by the various clauses in this specification is to be supplied in the form of technical data, pamphlets and/or drawings.
- 6.5. The petrol brush cutter is to be guaranteed for a minimum period of twelve (12) months against faulty material and workmanship-fair wear and tear excluded. Full details of guarantee to be submitted.

**END OF SPECIFICATION**