



RAIL NETWORK PROCUREMENT SPECIFICATION

Specification for Electric Angle Grinders

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1 General Requirements

- 1.1 This specification outlines the requirements for angle grinders required by Transnet Freight Rail - Rail Network.
- 1.2 The angle grinders shall be designed for maximum operator productivity and safety

2 Operating Conditions

- 2.1 The angle grinders will be operated in all weather conditions at altitudes varying from sea level to 2000m above sea level, relative humidity of 10% to 90% and atmospheric conditions which vary heavily from saline to dry and dusty
- 2.2 Ambient air temperatures ranging from -10°C to 50°C

3 Qualifications

- 3.1 The design of the angle grinders is to be that of the manufacturer, but must be of robust construction in order to meet sustained heavy duty demands, yet it must be light and easy handled by one operator.
- 3.2 The angle grinders will be acceptable in standard factory production finish and colour. Details to be furnished.

4 Performance

- 4.1 A heavy duty angle grinders are required
- 4.2 The actual design and service life of the angle grinders is to be stated

5 Technical Requirements

5.1 General Description

- 5.1.1 The angle grinders are to be used for cutting, roughing and brushing metal and stone materials without the use of water.

5.2 Operational Requirements

- 5.2.1 The angle grinder shall have performance characteristics as per annexure A of this specification.

5.3 Preferred Mass and Housing

- 5.3.1 The mass shall not exceed 6kg

- 5.3.2 The housing for the units making up this device shall be of robust construction to sustain heavy duty demands under the service conditions as stated in clause 2 of this specification

5.4 Additional Requirements

- 5.4.1 An operator's handbook and spare parts list must be supplied with each device in order to ensure that the device is operated in accordance to the manufacturer's instructions
- 5.4.2 Sufficient training must be given to all operators of these devices when necessary

5.5 Safety

- 5.5.1. Compliance to the following standards:
- Sound emission & vibration (EN 607 45-2-3)
 - SAAA - safety code of bonded abrasives.

5.6 Documentation

- 5.6.1. Detailed user manual
- 5.6.2. Guarantee certificate

6 Data Plate

- 6.1 The angle grinders must come with a data plate

7 Quality Control

- 7.1 All angle grinders must be manufactured in an environment that complies with the latest ISO 9001 to ISO 9004 or similar quality control standards.
- 7.2 Angle grinders will be subject to a technical evaluation and the final decision will, amongst others, be based on these findings

8 Legal and Operational

- 8.1 All equipment to comply with the requirements of the SANS and other internationally recognized standards applicable to grinders.
- 8.2 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. If this is not complied with, offers may be overlooked.

8.3 Transnet Freight Rail reserves the right to verify the information as supplied by the tenderer. The grinders shall be submitted for verification when requested.

8.4 All grinders are to be guaranteed for a minimum period of 12 months against faulty material and workmanship - fair wear and tear excluded. Full details of guarantee are to be submitted.

END OF SPECIFICATION

ANNEXURE A

SPECIFICATION	SMALL ANGLE GRINDER	BIG ANGLE GRINDER
Rated power input	750 W	2000 W
Output power	Min 380 W	Min 1280 W
No-load speed	Max 11 000 rpm	6500 - 8500 rpm
Grinding Disc diameter	115 mm	180 - 230 mm
Thread of grinder spindle	M14	M14
Max Weight	1.5 - 2kg	4.5 - 6 kg
Input Voltage	230-240V~50Hz	230-240V~50Hz
Power supply cord	Minimum 2.5 m	Minimum 2.5 m