

TRANSNET ENGINEERING
RESEARCH AND DEVELOPMENT MECHANICAL

CONVEYOR MOTORS SPECIFICATION
RDM_KDS_SPEC_2011

Revision 00

Date of release: 8 February 2024

COMPILED BY:

A handwritten signature in black ink, appearing to read "Mokgosi", written over a horizontal line.

KGOSITSHWENE MOKGOSI

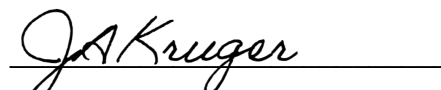
Engineer in Training

Research and Development

Transnet Engineering

Date: 8 February 2024

APPROVED BY:

A handwritten signature in black ink, appearing to read "J. A. Kruger", written over a horizontal line.

JOHAN KRUGER, Pr.Eng

Senior Engineer

Research and Development

Transnet Engineering

Date: 08 / 02 / 2024

Bidder Signature: _____

Document Name: MUNCHER MOTOR-GEARBOX SPECIFICATION

DOC. No: RDM_KDS_SPEC_2011

Date: 2/8/2024

Revision: 0

Page: 1 of 4

1. SCOPE

This specification states the minimum requirements relating to the services required and in no way absolves the contractor from responsibility for sound engineering practice. Any omissions or sub-standard requirements of this specification must be brought to the attention of Transnet Engineering at tender stage and optional prices for addressing such omissions must be provided. The Supplier shall supply all the labour, tools, material, equipment, consumables, facilities, testing, and supervision required for servicing the specified equipment on site.

2. INFORMATION REQUIRED

- 2.1. Tenders shall provide enough details at the tendering stage to enable the Transnet Technical Officers the opportunity to assess each offer properly.
- 2.2. Tenders shall complete the relevant questionnaire in full and must indicate whether their offer complies with each item of the specification.
- 2.3. Should there be insufficient space for providing full details, bidders shall provide the additional details in their covering letter. The additional details shall be numbered in accordance with the applicable clause specified in the specification.

3. GENERAL REQUIREMENT

- 3.1. Suppliers shall comply with the Occupational Health and Safety Act (Act 85 of 1993), as amended. This applies to any work done as well as any equipment supplied.
- 3.2. The dedicated supplier personnel shall complete a SAFETY INDUCTION and have valid permits when entering Transnet Engineering's facilities.
- 3.3. Supplier personnel shall always wear the appropriate personal protective equipment (PPE) on site.
- 3.4. Supplier shall have a valid Letter of Good standing with the Workman's Compensation Fund.
- 3.5. Supplier shall comply with the last version of Transnet Engineering's Safety, Health and Environment (SHE) Specification for contract work.

Bidder Signature: _____

4. SPECIFICATION:

The following list of items below details the products required for Muncher manufacturing:

4.1. Conveyor Motors

Description Specification	QTY	Comply (Yes/No)
Geared Motors Requirements: - The motor requirements for the geared motor include: - Output Power: 3 kW. - Motor Poles: 4. - Motor Speed: ~1450 rpm. - Motor Torque: ~19.76 Nm. - Voltage: 230/400 V @ 50 and 60 Hz. - Terminal Box Position: M65-3C. - Insulation Class: Class 180H (180 °C) or higher. - Efficiency: IE3 or better. - Cooling: Self air cooled (standard fan). - The gearbox requirements for the geared motor include: - Gearbox type: Bevel. - Gearbox Size: 49 (KAF49). - Mounting type: Flange-mounted design with 200 mm flange diameter (H05). - Mounting position: (D11) M1A. - Bearings: Standard sealed bearings. - Output-Shaft: Hollow shaft size H35mm. - Output torque: 322.8 Nm. - Gear ratio: 16.34. - Gearbox oil: CLP PG VG220. - General requirements for the geared motor include: - Coating: Coating for medium environmental stress C3. (<i>Signal blue colour</i>). - IP rating: IP65 - Provide the required Gearbox OIL for specified gearbox at specific quantity.	2	

Bidder Signature: _____

5. DELIVERY ADDRESS

Price should include delivery to the following address:

Research & Development
Mechanical Department
Transnet Engineering, Bay 8
Koedoespoort, Pretoria
Gauteng
0184

Note: Delivery date to be communicate with Transnet before date of delivery to ensure that staff are available to receive items. Please note, no delivery will be taken after 15:00.

Bidder Signature: _____