



TRANSNET ENGINEERING

PRODUCT AND SERVICES DEVELOPMENT

SPECIFICATION FOR THE SUPPLY AND DELIVERY OF REFURBISHED REAR AXLES FOR TERBERG PORT HAULERS

Revision 00

Date of release

PD_PRTS_DBN_SPEC_018

The information contained herein is the sole property of Transnet Engineering. It may not be used, disclosed or reproduced in part or in whole in any manner, except with the written permission of and in a manner permitted by the proprietor.

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for
Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 1 of 7



Table of Contents

1.0. INTRODUCTION.....	3
2.0. TECHNICAL REQUIREMENTS	3
3.0. OPERATING ENVIRONMENT	3
4.0. GENERAL REQUIREMENTS.....	4
5.0. SPECIFIC REQUIREMENTS	5
6.0. DOCUMENTATION.....	6
7.0. DOCUMENT AUTHORITIES.....	7

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for
Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 2 of 7



1.0. INTRODUCTION

- 1.1. This specification details the supply and delivery of all the components detailed in the subsections of this document.
- 1.2. This specification states the minimum requirements of the refurbishment, and in no way absolves the Supplier from the responsibility for sound engineering practice.
- 1.3. The components and subcomponents mentioned in this document shall be delivered at Transnet Engineering, Bay 45, 311 Solomon Mahlangu Drive, Durban.
- 1.4. Any person with the intention of bidding for the refurbishment shall ensure that the information below is complied with. The information or requirements are binding and must be supplied by either the supplier in consultation with Transnet or Transnet Engineer and must ensure that mutual agreement is reached between the two parties (Supplier and Transnet) before the supply of machinery or material.

2.0. TECHNICAL REQUIREMENTS

Discussed in the sub-sections below are specifications and requirements of the Terberg Port Hauler rear axle refurbishments, which should be complied with for the purpose of this RFQ.

3.0. OPERATING ENVIRONMENT

The components specified in this document will be exposed to the following ambient conditions:

- To be used in corrosive environment (sea level)
- Temperature: 5°C - 45°C
- Humidity: Frequently 100%
- Air Pollution: Heavy saline, dust laden and industrial fumes.

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for
Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 3 of 7



4.0. GENERAL REQUIREMENTS

The information in this section shall be provided by the supplier with the quotation on the noted components in this document.

- The cost of the refurbished axle.
- The supplier shall only use new components that are of proven design for the component replacement for the refurbishment of the axles.
- All components must be dust proof and watertight, where applicable.
- Each component/product shall include a minimum of one (1) year warranty. Verifiable warranty documents to be furnished by supplier.

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for
Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 4 of 7



5.0. SPECIFIC REQUIREMENTS

5.1. Technical Requirements

Complete reconditioning of the rear axle and differential which includes the following, but not limited to:

- 5.1.1. Replace all bearings
- 5.1.2. Replace all seals
- 5.1.3. Replace all shims
- 5.1.4. Adjust pre-loads and end float
- 5.1.5. Replace hub bearings
- 5.1.6. Replace hub seals
- 5.1.7. Replace hub seal runner
- 5.1.8. Replace wheel studs and nuts
- 5.1.9. Replace wear plates/pads
- 5.1.10. Recondition all drums and fit new linings
- 5.1.11. Fit new suspension bellows.
- 5.1.12. Replace all other components that are identified to be missing or damaged with new components.
- 5.1.13. Paint axle according to the original color – TE will provide the paint specification to the successful bidder. For quotation purposes, the paint system to be used must be a zinc-based primer and acrylic polyurethane topcoat to a DFT of 250 micron.

Note: Bidders are to quote for the refurbishment of each axle, accordingly, based on its condition. Each axle has different components which are missing. Bidders are considered to experts in this field of work and are to notify TE if additional work (not listed above) is required to be carried out on a specific axle.

All quality documentation capturing the inspections conducted by the bidder during the refurbishment process must be submitted with the delivery of each axle.

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 5 of 7



6.0. DOCUMENTATION

The following documents shall be obtained for the procurement process.

- Itemized cost breakdown
- Brochure of the various components where applicable.
- The supplier shall provide documentation outlining the warranty of the refurbished axle and what is covered.

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for
Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 6 of 7



7.0. DOCUMENT AUTHORITIES

Compiled by:

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

Payal Dhunlal

Engineer: Port Equipment

Transnet Engineering

Date: 02/03/2023

Approved by:

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

Theo Govender

Principal Engineer

Transnet Engineering

Date: 02/03/2023

Signature of Bidder/s: _____

Date: _____

Document Name: Specification for the Refurbishment of Rear Axles for
Terberg Port Haulers

DOC. No : PD_PRTS_DBN_SPEC_018

Classification: Technical Specification

Revision: 00

Date: 02/03/2023

Page: 7 of 7