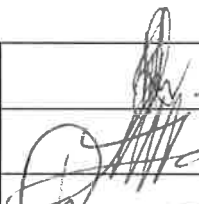

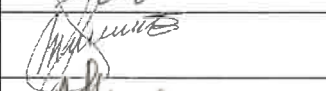





TE-IMS-PEMM P&E KDS-SPEC 113

Description: Specification for the resurveying, design, replacement and installation, test and commissioning of gantry crane rails in Bay 54 at Koedoespoort MOP Business.				
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Local Business:	PEMM			
Location:	MOP Bay 54			



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1. Scope of Work

This specification requirement covers all the requirements that will be needed to inform the supplier/vendor/manufacture to carry out what is expected from him/her: The contract will be awarded as a turnkey project and the contractor will be responsible for all the work specified.

This specification states the minimum requirements relating to the work 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 KOEDOESPOORT 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 the supply of the specified equipment at site during erection, pre-commissioning and commissioning activities.

2. Site Inspection

Tenderers must visit the site to familiarize themselves with all the aspects involved relating to the project that must be done. This must be arranged via the Contract Manager. The site inspection certificate will be counter-signed by the Contract Manager on day of the site visit. The tender documents must only be submitted if the site inspection certificate has been signed.

3. Information Required

Tenders shall be in duplicate and will not be considered if full particulars of all relevant equipment and works requested are not submitted at the tender stage, to ensure an objective assessment of the offer can be made. Tenderers shall confirm that the items that they are offering comply at a standard not less than the minimum required requirement asked for in the specifications. Tenderers must comply to these specifications, but alternative offers may, in addition, also be submitted. Such alternative offers must be fully motivated and substantiated.

4. Specific Requirements:

- Comply with the Occupational Health and Safety Act (Act 85 of 1993) and its Regulations, as amended
- Adhere to the requirements set out on the Construction Regulations of 2014
- Compensation of Occupational Injuries and Diseases Act (Act 130 of 1993) as amended
- Transnet Contractor Management Procedure (TRN-IMS-GRP-PROC 014)
- Transnet Engineering IMS Compliance Policy Statement
- The contractor shall undergo Safety, Health and Environmental **(SHE) Induction**, and be issued with Induction certificate and valid permits authorising him/her to enter Transnet premises for the duration of the contract.
- **The contractor is required to produce an approved** Compliance File or SHE File **and** Site Instruction Book **on site at all** times.
- Contractor's name board will at all times be visible.
- All measurements and amounts must be stipulated in quote.
- The prescribed PPE shall be worn at all times. (Harnesses ropes, etc.)
- During and on completion of the project, there will be SHE inspections and audits done on the site that the supplier/vendor is working on, which will be reported to the project manager.
- Failure to comply with Transnet SHE Requirement will result in a stop certificate being issued and the supplier will be required to leave the site until the situation is rectified.
- All measurements and amounts must be stipulated in quote.
- A supervisor will be on site at all times.
- Rubble will be removed from site daily.
- All scaffolding used to be SANS approved and must be erected by a competent people.
- All employees who will be working at height to have medical fitness certificate and proof of competency training thereof.
- Valid letter of good standing with Workman's Compensation .

5. Technical Requirements:

All equipment and installation whether detailed in this specification or not shall comply with the requirements of the Occupational Health and Safety Act 85 of 1993 as amended. Sudden power losses will not have an adverse effect on equipment and shall not unduly delay return to operation after power is restored.

6. Codes of Practice, Regulations & Standards:

The tenderer shall specify which statutory or industry rules will be applied for the equipment to be working successfully and safely and shall indicate the designed life span.

7. Loads and Duty Cycles:

The tenderer shall describe all duty cycles that the equipment would be required to perform. The duration and the number of cycles per day/week/month/year must also be stipulated.

8. Dimensional Parameters:

The tenderer shall describe the major physical dimensions that are required for ease of operation and installation.

9. Operational Parameters:

9.1 Environment:

The equipment will be required to operate in the climatic conditions of Pretoria.

10. Testing:

The tenderer shall indicate the performance/s standard which the equipment will be subjected to.

13. Specific Requirements:

	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
	Specification for the resurveying, design, replacement and installation, test and commissioning of gantry crane rails in Bay 54 at Koedoespoort MOP Business.	
1.	Scope of work:	
1.1	Bidder shall conduct their own crane gantry survey as per SANS 2001-CS1:2017 before removal of existing rails and provide a report to TE.	
1.2	Remove old rails.	
1.3	Design, supply, install, and commission the new rails and correction of the gantry span.	
1.4	Upon completion of installation of new rails, bidder shall conduct a second gantry rail survey to confirm compliance of newly installed crane rail as per SANS 2001-CS1:2017 standard.	
1.5	Testing and commissioning of new rail installation.	
2.	Removal of existing rails	
2.1	Both rails in Bay 54 east and west side shall be removed.	
2.2	Total length of each rail is $\pm 255\text{m}$.	
2.3	The current overhead crane maximum Safe Working Load is 35Ton and the weight of the current rail is 35.38 kg/m.	
2.4	All removed metal material to be handed over to local MOP business.	
2.5	All debris shall be carried away from site and the site must be left unencumbered.	
3.	Installation of new rails	
3.1	Two parallel rails suitable to meet existing specification, supplier shall provide all rail selection criteria and calculations based on the latest applicable gantry crane rail design and indicate all standards used as reference, latest national and internal. Certified by the Professional Engineer (Civil and Mechanical) and the LMIs.	
3.2	Installation must comply with SANS 2001-CS1:2017 Table 9 and BS 466:1984.(titles of standards)	
3.3	Installation must comply with ISO 12488-1 Table 2, 3, 4, 5, 6, and 7.	
3.4	Comply with the South African Occupational Health and Safety Act, Act 85 of 1993.	



	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
3.5	Supplier to recommend the method of clamping/fastening (advantages and dis and risk analysis) the rails.(recommendation must part of submission attachment)	
3.6	Difference in level over any 2m length of rail : 1mm.	
3.7	Deviation from straight line :±10mm.	
3.8	Horizontal offset from a 2m long chord at any point: 1mm.	
3.9	Rail gauge: ±5mm	
3.10	Confirmation that the crane rail alignment and level meet the code and standard requirement. Written method used to confirm the alignment.	
3.11	The design and installation must make provision for the expansion joints at necessary rail joints.	
3.12	At every expansion joint position, fixing clips/bolting shall be mounted 100mm from each end.	
3.13	Repair or replace all damaged areas on the support structure (bottom H-beam) and structural crane rail column and foundation where necessary.	
3.14	Supplier shall replace and install the rail in section to allow for normal business operation to continue.	
3.15	The incorrect areas on the gantry crane rail which are out of the allowable span tolerances must be rectified as per the survey results.	
4.	Testing and Commissioning	
4.1	Perform a gantry survey. A geometry report must be submitted after installation.	
4.2	Calibration certificates for all equipment used.	
4.3	A detailed scope of work carried out clearly indicating sections repaired or replaced.	
4.4	Perform the crane load test on the newly installed rail to verify that rail can withstand the maximum crane capacity and provide the report.	
4.5	Catalogue for the rail to be used, material certificate, dimensions clearly showing rail to be installed.	
4.6	Certificate of compliance covering the whole structure shall be handed in as part of the data pack and crane load testing.	
5.	Documentation: POST DOC AND PRIOR FOR LME	
5.1	<ul style="list-style-type: none"> Complete Gantry survey report to be provided after 	



	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
	<p>installation of rails to verify compliance to SANS 2001-CS1:2017 table 9, and ISO 12488-1 Table 2, 3, 4, 5, 6, and 7.</p> <ul style="list-style-type: none"> • Certificates of personnel working at heights. • LMIs and Professional Engineer certificates. • Company lifting machinery entity registration certificate. • ECSA registration personnel certificates. • Copy of the approved designs and drawings by an ECSA registered professional Engineer must be handed to Transnet on the pack. • If there is any welding work to be carried the coded welder is required and for any electrical work it must be carried by electrician. 	
6.	Guarantee:	
6.1	The supplier shall guarantee for a period 24 months after successful commissioning of the new rails that all components, plant equipment and material are new and fit for the specific purpose which they are purchased, and free from any defects in design, workmanship and material, and are in strict accordance with the contract, unless otherwise agree in writing.	
6.2	The supplier shall agree to replace at his/her cost any defective items discovered within the guaranteed period.	
6.3	The supplier shall clearly stipulate the nature of the guarantee and how long it will take their maintenance staff to be on site. Transnet Engineering requires a response time of no more than 24 hours.	
6.4	Should the supplier fail, when called upon, to make good or remedy a defect (under guarantee or declared inherent) within a reasonable time, Transnet Engineering may affect the repair and thereafter recover from the supplier all cost and expenses associated with the supplier.	
7.	General:	
7.1	No metal or material belonging to TE (old fence) shall be removed from the premises. (To be handed over to TE).	
7.2	Damage to any existing services shall be repaired by the supplier.	
7.3	Area to be cleaned and neat on completion.	

	REQUIRED	DETAILS OF OFFER Comply (Yes) / Do not comply (No)
7.4	Rubble to be removed on regular base and be dump at suitable dumping site.	
7.5	Supplier must take into consideration that due to tight production schedule/ demands, the workshop might be used during production hours for production purposes, the supplier quotation must also include working on weekends to fast track the new rail installation.	
7.6	Supplier must make provision for MOP business to be able to use half of the workshop bay while the installation will be taking place.	

14. Painting

The supplier shall indicate the code of practice to which painting and surface preparation will conform to.

15. Installation and Commissioning:

A detailed program (project-plan/gantt-chart) shall be submitted with the tender, indicating the main activities and periods necessary up to handover. The bidder shall submit with their tender a detail erection and installation procedure.

The contractor shall be fully responsible for any damage caused to all supplied equipment and to Transnet Engineering's assets during the installation, testing and commissioning. The supplier shall conduct a risk assessment as to identify anything that might hinder the installation of the equipment.

16. Guarantee:

The contractor shall guarantee for a period of 24 months minimum after successful commissioning and free from any defects in design, workmanship and material, and are in accordance with the Contract, unless otherwise agreed in writing. The Contractor shall agree to replace at his cost any defective items discovered within the guaranteed period.



Price schedule breakdown:

Specification for the resurveying, design, replacement and installation, test and commissioning of gantry crane rails in Bay 54 at Koedoespoort MOP Business. TE-IMS-PEMM P&E KDS-SPC-234
Specification


Activity		Quantity.	Unit Price	Total Price exc vat:
1.	Survey of Gantry Structure.	Cost		
2.	Design of new rails.	Cost		
3.	Removal of old rails (m).	510m		
4.	Installation of new rails (m)	510m		
5.	Health and safety measures	Cost		
6.	Repair of the structure (Provisional sum).	Cost		R 300 000.00
7.	Repair of foundation (Provisional sum).	Cost		R 200 000.00
8.	Transportation of new rails	Cost		
9.	Gantry survey (after installation and repairs)	Days		
10.	Documentation.	Cost		
11.	Testing and commissioning.	Cost		
12.	Contingency			
Total:				

Bidder Signature: _____ Date: _____


Company Stamp:

Technical Evaluation Criteria Score Sheet: Gantry crane rails

Tender Number:

Category	Criteria	Weightings	Scoring Methodology Based on Weight	Evidence
1.	<p>Compliance to specification:</p> <p>Compliance with the specification including signing of the specification (Sign on each page/company stamp)</p>	30%	<p>Fully Compliant (All pages must be signed/stamped) = 30 points</p> <p>Non-compliant (if one or more pages is not signed/stamped) = 0 points</p>	<p>Acknowledgement of the specification by Bidder and signature at the bottom of the specification (Sign on each page/company stamp).</p>
2.	<p>Organization and staffing:</p> <p>Reporting Structure (Organogram) to be used for this contract consisting of the Suppliers' Key staff personnel and Supporting Specialists together with their CV's, Qualifications and Professional certificates</p>	30%	<p>Fully Compliant = (All certificates and CV's) 30 points</p> <p>Each personnel CV and Qualification = 5 points</p> <p>No-compliant (if all the personnel 1.1,1.2,1.3,1.4,2.1,2.2 CVs and Qualifications are missing) = 0 Points</p>	<p>Bidders submitted the Organogram and the Supporting Documents for the following Professionals:</p> <p>1. Key staff personnel with at least a minimum of 3 years' experience:</p> <ul style="list-style-type: none"> 1.1 Contracts Manager. 1.2 Quality Assurer. 1.3 Rigger (Certified Copy not older than 3 months of bidder's qualified) 1.4 Fitter Red sealed artisan <p><i>CV's and Qualifications of each staff personnel to be submitted.</i></p> <p>2. Supporting Specialist professional registered personnel with at least a minimum of 3 years' experience:</p> <ul style="list-style-type: none"> 2.1. Professional Civil Engineer/Professional Technologist (ECSA Accredited, CV indicating structural Engineering experience). 2.2. Professional Mechanical Engineer/Professional Technologist (ECSA Accredited). <p><i>CV's, qualifications and professional certificates in relation to the scope of work to be submitted.</i></p> 
3.			Detailed program with all minimum activities	

Technical Evaluation Criteria Score Sheet: Gantry crane rails

<p>Proposed project plan for Gantry crane rails which consists of a list of key activities and time frames including but not limited to the following:</p> <p>A. Design and Approval for gantry crane rail drawings in conjunction with Transnet Plant Engineer. a.1. Rail selection Calculations and drawings a.2. Detailed design report</p> <p>B. Safety file approval for gantry crane rail in conjunction with Transnet risk practitioner and Regional Plant Engineer</p> <p>C. Ordering and delivery of materials for gantry crane rails.</p> <p>C.1. Gantry Rails C.2. Fastening equipment</p> <p>D. De-commissioning of existing rails. D.1. Removal of all bolts and nuts D.2. Removal of existing rails</p> <p>E. Installation of new gantry crane rails. E.1. Gantry crane rails in portions of section. E.2. Fastening procedure.</p> <p>F. Commissioning and Testing for gantry crane rails: F.1. Commissioning plan for approval in conjunction with Transnet representatives F.2. Pre-commissioning the newly installed rails. F.3. Pre-commissioning the fastening method, straightness, and alignment of the rail. F.4. Final commissioning and testing of newly installed gantry crane rails. F.5 Survey for the geometry.</p>	30%	<p>and time frames included = 30 Points</p> <p>If any of the minimum activity is omitted on the program = 0 points</p>	<p>Project Plan with time lines.</p> 

Technical Evaluation Criteria Score Sheet: Gantry crane rails

4.	Previous Experience/projects of similar nature		4 Reference letters/Completion certificates on a Company Letterhead with contactable details = 10 Points 2 Reference letters/Completion certificates on a Company Letterhead with contactable details = 5 Points No Reference Letter/Completion certificate=0 point	Referral letters and or Certification of Completion certificates on previous projects.
Total		100%		
Threshold		80%		

*Should the category threshold not be met the response will be deemed not compliant and be disqualified.

Compiled by: Keorapetse Nyokong

Signature: 
Date: 25/11/2021

Reviewed by:

Signature: 
Date: 25/11/2021

Approved By:

Signature: 
Date: 25/11/2021