

TRANSNET



**SUPPLY, DELIVERY AND TESTING OF 76 x
PNEUMATIC IMPACT WRENCHES
FOR TRANSNET ENGINEERING IN
DURBAN.**

**311 SOLOMON MAHLANGU DRIVE,
ROSSBURGH.**

REFERENCE No: FAI_DBN_SOW_156

Revision 0

Date of release: AUGUST 2023

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Signature of Bidder/s: _____

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Revision: 002 Reference No.: FAI DBN SOW 156

Document Authorities

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Signature of Bidder/s: _____

Date: _____

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B. INTRODUCTION & SCOPE of Work

As specified in the Bill of Materials

	TASK	REQUIRED
1	Design of foundations	
2	Manufacture	
3	Foundations	
4	Supply	✓
6	Installation	
7	Documentation	✓
8	Testing	✓
9	Training	✓
10	Commissioning	

of the specified:

ITEM	REQUIRED
1 Supply, delivery and testing of 67 x pneumatic impact wrenches.	✓

2. SITE INSPECTION

- 2.1 All prospective contractors shall be required to undertake a compulsory site inspection to fully acquaint themselves with all aspects involved.
- 2.2 Arrangements to visit the site and confirmation of the date and time of the site inspection shall be made with Transnet Engineering Contract Manager.
- 2.3 The site inspection certificate shall be completed and countersigned by the Contract Manager on the day of the visit and must be submitted with the tender documents.

3. INFORMATION REQUIRED

- 3.1 Offers will not be considered unless full particulars and sufficient literature are provided at the tendering stage to enable Transnet Engineering Technical Officers the opportunity to assess each technical offer properly.
- 3.2 Prospective Contractors will complete the relevant questionnaire in full and must indicate whether their offer complies with each item of the specification.
- 3.3 Should there be insufficient space for furnishing full details; contractors 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.
- 3.4 As prospective contractors are considered to be experts in their field, they are obliged to identify any shortcomings, such as omissions or sub-standard requirements, to the completeness of this specification. These must be brought to the attention of Transnet Engineering at tender stage with alternatives to address these shortcomings. However, each offer shall be quoted for separately.

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- 10.3 All parts and components shall be adequately protected against damage and corrosion during shipping, transport and storage.
Should any of the items called for be standard equipment, then the words "Standard Equipment" shall appear against the item.

11. GENERAL REQUIREMENTS

Operation will be in the following conditions:

Altitude	Sea level
Ambient temperature	0°C to 45°C
Relative humidity	50% to 100%
Atmosphere	Heavy saline

- 11.1 Tenderers shall indicate clause-by-clause either that they comply in every respect with the specific requirements, or if not, exactly how it differs.

12. DEFINITIONS AND ABBREVIATIONS

CLIENT	Transnet Engineering Durban
TECHNICAL OFFICER	Project Manager, Transnet Engineering Durban.
CONTRACTOR	Contractor appointed under this specification document.
SABS	South African Bureau of Standards.
ISO	International Organisation for Standardisation.

13. GENERAL

- 13.1 The successful tenderer will be subjected to a workshop inspection by Transnet Engineering, to ensure that the facilities are to the satisfaction of the Transnet Engineering in terms of the quality control and equipment capabilities for manufacturing such type of equipment.
- 13.2 The tenderers shall guarantee that the rating and size etc. of the equipment offered, will be adequate to perform the duties required.

14. SITE ESTABLISHMENT

- 14.1 The contractor shall be solely responsible for safety of his staff and for Providing security to safeguard his works and material on site, until such a time.
- 14.2 The contractor shall be required to attend site meetings when convened by the Project Leader controlling the contract.
- 14.3 The contractor shall be responsible for any damages caused by his staff to the building and civil works on site.

15. PENALTY CLAUSES

- 15.1 Due to the criticality of this project, penalties will be levied for late deliveries.

Signature of Bidder/s: _____

Date: _____

4. TECHNICAL REQUIREMENTS

The following regulation and codes must be complied with:-

- **The Occupational Health and Safety Act – Act 85 of 1993.**

- 4.1 Except where otherwise provided for in the specification, all equipment offered will comply with the requirements of the relevant standard specifications of the SABS, if published, otherwise with the relevant standard of the British Standards Institution in force at the time of tendering.
- 4.2 Where equipment offered complies with the recognized standards of the country of manufacture and not specifically with the standards required by this specification, such equipment will be considered at the discretion of Management. In this case, tenders shall state fully all respects in which the equipment departs from the standard laid down in this specification.
- 4.3 The successful tender will at the conclusion of the installation provide a document along the lines "that the installation complies with national/international requirements and that all selected /designed items are compliant with Act 85 of 1995 and SABS practices applicable to the installation. The equipment has been commissioned/ calibrated and employees as specified have been trained and found competent to operate the plant."

5. SPECIFIC REQUIREMENTS

Any person with the intention of supplying the machinery shall ensure that the information below is complied with. The requirements of this scope of work are binding. The supplier/Contractor in consultation with Transnet or Transnet Engineer must ensure that mutual agreement is reached between the two parties (Supplier and Transnet) before the supply of machinery.

- 5.1 Loads and duty cycles
- The impact wrenches shall be effective and be efficient for the full design life, it shall be usable for 8 hours a day for 5 days in a week.
- 5.2 Environment
- Indoors under dusty industrial conditions, and occasional windy conditions.
- 5.3 Scope of work

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance
5.3.1.1	Supply, delivery and testing of pneumatic impact wrenches.	
5.3.1.2	The bidders shall attach product literature and catalogue(s) for their proposed pneumatic impact wrenches, at tender stage.	

Signature of Bidder/s: _____

Date: _____

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance
5.3.1.3	During delivery of pneumatic impact wrenches the contractor shall submit 3 sets of hard copies and PDF files in a USB memory stick. <ul style="list-style-type: none"> Operating Manual. Maintenance Manual. Parts List. 	
5.3.1.4	The impact wrenches shall be tested in front of Transnet Engineering staff member and be fully operational on hand over.	

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance
5.3.2.1	Supply 32 off ½ inch impact wrenches.	
5.3.2.2	Square Drive: 1/2".	
5.3.2.3	Max Torque: 500 ft lbs. Nut-Busting Torque (Nm): 1760	
5.3.2.4	Handle type: Pistol.	
5.3.2.5	Speed (RPM): 8500	
5.3.2.6	Air Consumption 24 CFM (679 l/min)	
5.3.2.7	Actuation: Trigger	
5.3.2.8	The preferred impact wrench is an Ingersoll Rand 2235TiMAX or equivalent pneumatic impact wrench or superior equivalent pneumatic impact wrench.	

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance.
5.3.3.1	Supply 30 off ¾ inch impact wrenches.	
5.3.3.2	Square Drive: 3/4".	
5.3.3.3	Max Torque: 1627 Nm.	
5.3.3.4	Handle type: Pistol.	
5.3.3.5	Speed: 5500 rpm.	
5.3.3.6	Air consumption: 1076 l/min	
5.3.3.7	Weight: approximately 5.39kg.	
5.3.3.8	The preferred impact wrench is an Ingersoll Rand 261 super duty or equivalent pneumatic impact wrench or superior equivalent pneumatic impact wrench.	

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6. CONSTRUCTION INDUSTRY DEVELOPMENT BOARD (CIDB) REGISTRATION

There is no CIDB requirement.

7. OTHER INFORMATION RELATED TO THE SCOPE

- 7.1 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 at tender stage and optional prices for addressing such omissions must be provided.
- 7.2 Any matter relating to this work, which requires a decision from Transnet Engineering shall be presented to the Project Manager in charge.
- 7.3 All offers shall be completed in every respect with this specification. Only competent tenderers shall be considered.
- 7.4 The Technical Officer reserves the right to have the proposal checked independently by a third party.
- 7.5 Tenders must allow for monthly progress and clarification meetings on site initially and after commissioning for defect meetings when required. A meeting will be held after issuing of the tender to establish the exact scope and magnitude of the contract. No tender will be considered unless it has this Certificate signed by the Engineer or his representative.

8. HEALTH AND SAFETY REQUIREMENTS

- 8.1 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 and all other applicable legislation including specific set of regulations and local authority bylaws where applicable. All equipment shall be designed **to be fail safe**.
- 8.2 All the necessary safety equipment such as guards over rotating equipment shall be supplied and the equipment shall comply fully with all the requirements of the South African Occupational Health and Safety Act, Act 85 of 1993 and all other applicable legislation including specific set of regulations and local authority bylaws where applicable. At all times during the manufacture, assembly and testing of the equipment the contractor will be responsible for the safety of all persons on site and the equipment.

8.3 SHE SPECIFICATION

Prior to commencement of contract, the contractor shall be issued with a SHE specification in order to compile a SHE file in line with TE requirements. Prior to establishing on site, it is an explicit requirement of this contract that all of the Contractor's personnel directly involved with this contract, including those of sub-contractors, attend a **Safety induction course**.

Signature of Bidder/s: _____

Date: _____

Transnet will provide the course free of charge and attendance is compulsory for all personnel under the control of the Contractor who, during the duration of the contract, will be present on site whether on a full time or adhoc basis.

The contractor must allow for all additional charges because of these requirements as no claims for extras will be accepted in connection with the foregoing.

8.4 As part of the legislative and TE SHE requirements.

The successful contractor is required to conduct a Risk assessment to ascertain all potential risks associated with this project. The completed risk assessment is to be formally submitted to the Risk department via the project manager at least two weeks prior to the commencement of the actual project. A safety file and associated documents will be required from a successful tenderer and such will be communicated by the Risk department.

9. SPECIALIST SUB-CONTRACTORS

- 9.1 Only specialist sub-contractors who have previously successfully completed electrical and Mechanical work of the type and extent specified in this document should be engaged. The tenderer shall provide the technical officer with sufficient proof of having suitable experience regarding the design and manufacturing of similar equipment. To this end, complete and detailed reference list shall be submitted with the tender.

Reference list shall include addresses as well as contact person who may be visited for inspection of the equipment during the adjudication period.

- 9.2 The tender shall submit a complete list of proposed sub-contractors and suppliers of major components with his tender.
- 9.3 The tenderer shall be prepared to commit themselves in writing to the technical officer with an adequate, experienced and stable project team for the duration of the contract.
- 9.4 Transnet Engineering will not consider any Tenderer's offer that, in the sole opinion of Transnet Engineering, does not have adequate experience in the design and manufacture of such equipment.
- 9.5 Contractors shall do the installation simultaneously with other contractors on-site busy with other work and shall plan work that it integrates with other work performed.

10. MATERIAL AND WORKMANSHIP

- 10.1 The equipment shall be offered complete in all respects.
- 10.2 The equipment, as made and supplied, shall be complete in every respect, of modern design, using the most advanced proven technology extensively supported by reputable local companies, and be built to good engineering practices.

Signature of Bidder/s: _____

Date: _____

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance
5.3.4.1	Supply 8 off 1 inch impact wrenches.	
5.3.4.2	Square Drive: 1".	
5.3.4.3	Max Torque: 1,600 ft lbs.	
5.3.4.4	Handle type: D Handle.	
5.3.4.5	Speed: 6500 rpm.	
5.3.4.6	Air consumption: 60CFM.	
5.3.4.7	Weight: approximately 6.8kg.	
5.3.4.8	The preferred impact wrench is an Ingersoll Rand 2925RB2Ti or equivalent pneumatic impact wrench or superior equivalent pneumatic impact wrench.	

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance
5.3.5.1	Supply 2 off 3/8 inch impact wrenches.	
5.3.5.2	Square Drive: 3/8".	
5.3.5.3	Max Torque: 150 ft lbs.	
5.3.5.4	Handle type: D Handle.	
5.3.5.5	Speed: 9000 rpm.	
5.3.5.6	Air consumption : 3.5CFM.	
5.3.5.7	Weight: approximately 1,5 kg.	
5.3.5.8	The preferred impact wrench is an Ingersoll Rand 2015MAX or equivalent pneumatic impact wrench or superior equivalent pneumatic impact wrench.	

Item no.	REQUIRED	Compliance Write "YES" or tick "✓" to indicate compliance or write "NO" to indicate non- compliance.
5.3.5.1	Supply 4 off 2-1/2 inch impact wrenches.	
5.3.5.2	Square Drive: 2-1/2".	
5.3.5.3	Max Torque: 10000 ft lbs.	
5.3.5.4	Configuration: T Handle.	
5.3.5.5	Speed: 355 rpm.	
5.3.5.6	Air consumption: 155CFM.	
5.3.5.7	Weight: approximately 1,5 kg.	
5.3.5.8	The preferred impact wrench is an Ingersoll Rand 588A1 or equivalent pneumatic impact wrench or superior equivalent pneumatic impact wrench.	

Signature of Bidder/s: _____

Date: _____





- 5.4 Markings
- All labels and markings shall be indelible and only removable by deliberate intent.
- 5.5 Safety Features
- The machine shall have a fail to safety protection system.
- 5.6 Testing
- All prescribed tests shall be carried out on equipment as well as the testing or the installation before commissioning.
 - Transnet also reserves the right to carry out any check tests on the equipment.
 - Notwithstanding the successful completion of tests, the contractor will still be responsible for the efficient operation of the equipment.
- 5.7 Spares
- The successful tenderer shall supply Transnet Engineering with three sets of blown out diagrams and schematics of the complete machine as well as a detailed copies of the list of critical spares for all equipment including OEM numbers.
- 5.8 Warranty
- The beveling machine shall come with 1 year warranty.
 - The contractor shall undertake to repair all faults due to bad workmanship and/or faulty materials during a period of twelve calendar months, calculated from the date of delivery and testing of a beveling machine and acceptance by Transnet Engineering.
 - Any latent defects that become apparent during the guarantee period shall be rectified to the satisfaction of Transnet Engineering at the cost of the supplier.
 - The contractor shall undertake work on the rectification of any defects that may arise during the guarantee period within 7 days of being notified of such defects.
- 5.9 After-Sales Service
- The successful tenderer shall provide Transnet Engineering with acceptable proof that spares can be easily and speedily procured for the equipment within 7 working days through agents locally.
- 5.10 Commissioning
- **A testing period of 1 month (744 hours for 24/7 shifts and 248 hours for 8 hour shifts) this shall depend on what shift the business requiring the machine. Confirmation shall be given on site visits and captured minutes.**
 - **No machinery will be accepted by Transnet without the satisfaction of the conditions above.**


Signature of Bidder/s: _____

Date: _____

All prices exclude Vat.

Name: Zolani Mngqithi **Designation:** Engineering Technician **Signature and date:**  01.11.2023

Name: Malusi Biyela **Designation:** Project Manager **Signature and date:**  06 Nov 2023

Name: Lindo Ngcobo **Designation:** Maintenance Manager **Signature and date:**  02/11/2023



1. TENDER EVALUATION CRITERIA

The following criteria will be used to award the tender. Should there be criteria over and above the listed below, that will be used, such criteria will be specifically stated.

Technical

No.	<u>Pre-Qualification Criteria</u> TECHNICAL DESCRIPTION (The technical evaluation will be used as a threshold. All bidders who do not meet the minimum threshold of 70 points will not proceed to the final stage of evaluation.)	Weightings
1.	Final Lead time. The lead time is the time in days (expressed in working days excluding public holidays and weekends) that will be taken to commence and complete this project. <ul style="list-style-type: none"> Lead time equals/less than 20 working days 50 points Lead time between 21 – 25 working days 30 points Lead time 26 – 30 working days 15 points Lead time more than 30 working days 5 points 	50 points
2.	Compliance to scope of work <ul style="list-style-type: none"> Compliance to scope of work on page 4 to page 7 and activity schedule by writing "YES" or ticking "✓" (to indicate compliance). 20 points Non-compliance to scope of work by writing "No" or not fully completing the compliance tables (including not fully completing the bid document) 0 	20 points
3.	Specific knowledge relating to projects of this nature Previous experience for supply, delivery, testing, pneumatic tools and accessories (only completed projects) in the past 10 years, with contactable references. <ul style="list-style-type: none"> 3 or more submitted reference letters 30 points 2 submitted reference letters 20 points 1 submitted reference letters 10 points Zero (0) / no submitted reference letter 0 Each reference letter shall have 2 dates (date of project completion and date showing as to when the letter was signed), otherwise it will not be acceptable and zero (0) score will be allocated for such rejected letter. Each reference letter shall have contactable contact person(s) and working contact numbers, otherwise it will not be acceptable and zero (0) score will be allocated for such rejected letter.	30 points
Total Weighting:		100 points
Minimum qualifying score required:		70 points

Name: Zolani Mngqithi Designation: Engineering Technician Signature and date: [Signature] 01.11.2023

Name: Lindo Ngcobo Designation: Maintenance Manager Signature and date: [Signature] 02/11/2023

Name: Malusi Biyela Designation: Project Manager Signature and date: M. Biyela 06 Nov 2023

Signature of Bidder/s: _____

Date: _____