

Transnet SOC Limited
Transnet RME

REQUEST FOR QUOTATION

BOARD LIST TFR RME
TRANSNET FREIGHT RAIL - RME
PROCUREMENT DEPARTMENT
2000

Registration Number: 1990/000900/30
Vat Number : 4720103177

Attention:

Telephone Number :
Fax Number :
Vendor Number :2004815

Quotation Deadline Date : 05.11.2015
Quotation Deadline Time : 12H00

REQUEST for QUOTATION

Transnet RME

RFQ Number / Date

6000237943 / 23.10.2015

Contact Person / Telephone

Anne Mungie / 031 361 1759

Return to VAX Number/EMAIL

031 3000001 / TCPtendersDurban@Transnet.net

Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
00010		88kV AC Disconnect	1	ea	19.11.2015			
Supply and Delivery of 88kV AC Disconnect to come with its support structure and Castel keys interlocks (to be installed from AC Disconnects to the Rectifier gate) as per Transnet Spec: BBB7842 Version 1. Tenders should submit Annexure 2 Technical Data Sheet and equipment and support structure drawings with quotations. More Info: 88kV, 50HZ, 3-Phase Horizontal Center Break disconnecting switch with one ES as per IEC 62271-102/60129 along with solid brown porcelain insulators of 4kN strength. Rated Current: 1600Amp Rated Short Time withstand Current: 40kA/1s No. of Earth Switch: 01 Mechanism for main blade earth switch: Manual Creepage: 31mm/kV @ 88kV								
00020		88kV AC Disconnect	1	ea	19.11.2015			
Supply and Delivery of 88kV AC Disconnect to come with its support structure and Castel keys interlocks (to be installed from AC Disconnects to the Rectifier gate) as per Transnet Spec: BBB7842 Version 1. Tenders should submit Annexure 2 Technical Data Sheet and equipment and support structure drawings with quotations.								

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 2000
 YOUR VAT NUMBER WITH US: NOT

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 Vat Number : 4720103177

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Quotation Deadline Date : 05.11.2015
Quotation Deadline Time : 12H00

REQUEST for QUOTATION

Transnet RME

RFQ Number / Date

6000237940 / 28.10.2015

Contact Person / Telephone

Anne Mongie / 031 361 1759

Return to VAX Number/EMAIL

031 300001 / TCPtendersDurban@Transnet.net

Item	Material	Description	RFQ Qty	UoM	Required Del date	Confirm Del date	Unit Price Excl	Total Price Excl
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More Info: 88kV, 50HZ, 3-Phase Horizontal Center Break disconnecting switch with one ES as per IEC 62271-102/60129 along with solid brown porcelain insulators of 4kN strength.

Rated Current: 1600Amp

Rated Short Time withstand Current: 40kA/1sec

No. of Earth Switch: 01

Mechanism for main blade earth switch: Manual

Creepage: 31mm/kV @ 88kV

FOR MORE INFORMATION CALL SITHEMBISO ON 0725266764 DELIVERY : 130 EEL RD BAYHEAD DURBAN ALL PROCUREMENT RELATED QUERIES TO BE DIRECTED TO : ANNE MONGIE : 031 361 4050. E-MAIL : anne.mongie@transnet.net CLOSING DATE : 5 NOVEMBER 2015 AT 12H00. ATTACH COPIES OF BBBEE AND TAX CLEARANCE CERTIFICATES TO QUOTES, FAILURE TO DO SO, MAY RESULT IN YOUR QUOTE BEING DISQUALIFIED. PLEASE NOTE : 2 ITEMS FOR DIFFERENT PROJECTS.



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REQUEST FOR QUOTATION

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Anne Mongie / 031 361 1759

Return to VAX Number/EMAIL

031 300001 / TCPtendersDurban@Transnet.net

Delivery Address

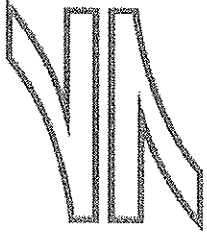
TFR RME Durban
 100 Eel Road
 Bayhead, Durban
 4001

This RFQ is subject to the following conditions:

1. Price/s : The price/s quoted in SA currency and is excluding of V.A.T.
2. Delivery : The price/s quoted should include delivery cost to the delivery address stated on the RFQ
3. Returnables : A valid tax clearance certificate and BBBEE certificate from a SANAS accredited verification agency attached to quotation for all quotes above R30 000.
Please note that only the official Transnet RFQ will be accepted and all other correspondence to be attached to the original
4. Safety : To confirm to Transnet Freight Rail RME Health & Safety plan and specification; HAS-std-0001, copy available on request.
5. Confirmation: To confirm your participation in this tender process please sign and return this document as immediate effect prior to the quotation deadline.
6. Negotiations: The Employer may elect to negotiate the final terms of the contract/order with the preferred tenderer in accordance with Clauses F.2.17 and F.3.13 of the CIDB Standard Conditions of Tender. A copy of which is available upon request.
7. Quotes will not be acceptable if not sending to the given fax or e-mail (please do not CC any buyer)
8. Should your company not receive any response from Transnet within 30 days of closing of a RFQ, please accept that your quotation was unsuccessful.

Signature _____

Date _____



SPOORNET

A division of Transnet limited

ENGINEERING & TECHNOLOGY TECHNOLOGY MANAGEMENT

SPECIFICATION

OUTDOOR, HIGH VOLTAGE, ALTERNATING CURRENT DISCONNECTORS COMBINED WITH EARTHING SWITCHES

Author: Engineering Technician
Technology Management

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Approved: Senior Engineer
Technology Management

L.O. Borchard

Authorised: Principal Engineer
Technology Management

W.A. Coetzee

Date: 18th Oct 2004

Circulation restricted to:

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Engineering & Technology: Technology Management

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INDEX

SECTION	CONTENTS	PAGE NO
1.0	SCOPE	3
2.0	STANDARDS AND PUBLICATIONS	3
3.0	TENDERING PROCEDURE	3
4.0	ANNEXURES	3
5.0	SERVICE CONDITIONS	4
6.0	CLEARANCES	4
7.0	DISCONNECTORS (ISOLATORS) COMBINED WITH EARTHING SWITCHES	4
8.0	SUPPORT STRUCTURES	5
9.0	CONNECTIONS	5
10.0	POST INSULATORS	5
11.0	NAME PLATES AND LABELS	5
12.0	DRAWINGS AND INSTRUCTIONS	6
13.0	INSPECTION	6
14.0	TOOLS AND APPLIANCES	6
15.0	SPARES	6
16.0	PACKING	6
	ANNEXURE 1	7
	ANNEXURE 2	8

1.0 SCOPE

- 1.1 This specification covers Spoomet's requirements for the supply of outdoor, 3 phase, 50 hertz disconnectors combined with earthing switches for voltages above 1 000 V.
- 1.2 Equipment is required for installation at the end of overhead transmission lines to control the power supply to traction substations and step-down points and shall consist of a 3 pole disconnector to be connected to the line and provided with facilities to earth the "load" side of the circuit.

2.0 STANDARDS AND PUBLICATIONS

The following publications and documents (latest edition) are referred to herein.

2.1 SOUTH AFRICAN NATIONAL STANDARDS

- SANS 4121 : Hot dip galvanized coatings for fabricated iron or steel article.
- SANS 6271 : Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1000 V.
- SANS 60815 : Guide for selection of insulators in respect of polluted conditions
- SANS 62271-102 : High voltage switchgear and controlgear part 102: Alternating Current disconnectors and earthing switches

2.3 SPOORNET SPECIFICATIONS

- CEE.0224 : Drawings, catalogues, instruction manuals, spares list for electrical equipment supplied under contract.

3.0 TENDERING PROCEDURE

- 3.1 Tenderers shall indicate clause by clause compliance with the specification. This shall take the form of a separate document listing all the specifications clause numbers indicating the individual statement of compliance or non-compliance.
- 3.2 A statement of non-compliance shall be motivated by the tenderer.
- 3.3 Tenderers shall complete annexure 2. "Technical data sheet."
- 3.4 Tenderers shall submit descriptive literature consisting of detailed technical specifications, general constructional details and principal dimensions, together with clear illustrations of the equipment offered.
- 3.5 Failure to comply with clauses 3.1, 3.2, 3.3 and 3.4 could preclude a tender from consideration.

4.0 ANNEXURES

The following annexures form an integral part of this specification and shall be read in conjunction with it.

- 4.1 Annexure 1 - "Schedule of Requirements"

This annexure details the specific requirements for this application.

- 4.2 Annexure 2 - "Technical Data Sheet"

This annexure calls for specific technical information to be furnished with tenders.

- 4.2.1 This annexure is used during adjudication of tenders to assess the equipment offered.

- 4.2.2 Equipment described in annexure 2 shall comply with, and be supplied in terms of this specification. No changes or substitutions will be allowed without the written consent of Spoomet.

- 4.2.3 Acceptance of the equipment detailed in this annexure in no way relieves the tenderer of his obligation to fulfil his statement of compliance with the specification.
- 4.2.4 Tenderers are responsible for the accuracy of information submitted in this annexure.

5.0 SERVICE CONDITIONS

- 5.1 The equipment shall be designed and rated for continuous operation under the following conditions:

Altitude	:	0 to 1800m above sea level.
Ambient temperature	:	-5 °C to +45 °C
Relative humidity	:	10% to 90%
Lightning conditions	:	12 ground flashes per square kilometre per annum.
Pollution	:	Heavily salt laden or polluted with smoke from industrial sources.

6.0 CLEARANCES

- 6.1 The following minimum safety clearances shall be maintained between any live conductor and earthed metal: -

Nominal phase to phase r.m.s system voltage	22kV	33kV	44kV	66kV	88kV	132kV
Highest phase to phase r.m.s voltage for equipment.	24kV	36kV	48kV	72kV	100kV	145kV
Safety clearance	320mm	430mm	540mm	670mm	1000mm	1450mm

7.0 DISCONNECTORS COMBINED WITH EARTHING SWITCHES

- This section shall be read in conjunction with SANS 62271-102
- 7.1 The combined AC disconnector and earthing switches shall be designed, manufactured and tested in accordance with SANS 62271-102.
- 7.2 Disconnectors and earthing switches shall have been type tested to verify performance and safety. Proof of these tests in the form of type test certificates shall be included in the tender documents.
- 7.3 The disconnectors shall be provided with a means for earthing the "load" side of the circuit, either by means of a separate earthing switch interlocked with its operating mechanism or contacts so placed that when the disconnector is in the "open" position, the "load" side is earthed.
- 7.4 The disconnectors shall be of the air-break type with the blades operating in a horizontal plane.
- 7.5 The disconnectors shall be so mounted that the phase-to-phase clearance for both the "open and earthed" and "closed" positions, shall not be less than:
- | | | |
|--------|---|------------|
| 22kV | - | 355mm |
| 33kV | - | 510mm |
| 40kV | - | 610mm |
| 66kV | - | 890mm |
| 88kV | - | 1,14metres |
| 132 kV | - | 1,7metres |
- 7.6 The operation of the disconnector shall be manual. (Dependent or independent).

- 7.7 The operating mechanism shall be constructed of anti-corrosive material to prevent sticking due to rust. All ferrous material shall be galvanised.
- 7.8 The operating handle shall be provided with suitable attachments to enable it to be locked in the up (closed) position and in the down (open and earthed) position by standard locks, supplied by Spoonnet.
- 7.9 The operating assembly shall be fixed at a satisfactory operating height of approximately 1m from the bottom of the structure.
- 7.10 A mechanism shall be provided to mechanically interlock the operating handle with the associated primary circuit breaker to ensure that operation is only possible when the circuit breaker is in the "open" position. It may, however, be possible to close the primary circuit breaker when the earthing switch is in the "earthed" position.
- 7.11 Electrical contacts shall be fitted to interlock the operating handle with the associated primary circuit breaker in the event of accidental operation or movement of the operating handle the primary circuit breaker will be tripped before the main contacts of the AC disconnecter starts opening.
- 7.12 A notice with the following inscription shall be mounted next to the operating mechanism:
"DO NOT OPERATE UNDER LOAD"
Refer to clause 11.4.2 of specification.
- 8.0 SUPPORT STRUCTURES**
- 8.1 The combined AC disconnecter and earthing switches shall be rigidly mounted on robust, hot-dipped galvanised supporting steel structures or pedestals in accordance with SANS 121.
- 8.2 The supporting steel structures or pedestals shall provide a minimum clearance of 3,6 metres (up to 88 kV) or 4,1 metres (above 88 kV) from the lowest "live" high voltage connection to finished yard level. Outline drawings submitted with tenders must indicate the actual clearances proposed.
- 9.0 CONNECTIONS**
- 9.1 All high voltage connections must be of the solderless, concentric grip, or other approved solderless type, and must be of adequate cross-sectional area to suit both electrical and mechanical requirements. All connections to the disconnectors must be flexible so as not to affect smooth operation of the blade mechanism.
- 10.0 POST INSULATORS**
- This section shall be read in conjunction with SANS 60273.
- 10.1 All post insulators shall be designed, manufactured and tested in accordance with SANS 60273.
- 10.2 Unless otherwise stated in Annexure 1, creepage distances for heavy polluted atmospheres shall be in accordance SANS 60815 Clause 4.
- 11.0 NAMEPLATES AND LABELS**
- 11.1 All nameplates and labels shall be in English.
- 11.2 In addition to the data called for in SANS 62271-102 the nameplate of each device shall indicate the Spoonnet contract number.
- 11.3 Labels other than interchangeable labels shall be fixed by screws or rivets.
- 11.4 All labels shall be made of composite sandwich type plastic material of the following colour combinations:
- 11.4.1 Identification labels: White lettering on Black background. Letters must be of sufficient size to be clearly legible from a distance of 3 m.

11.4.2 Danger labels: White lettering on Red background. Letters must be of sufficient size to be clearly legible from a distance of 3 m.

11.5 The following is a list of approved labels referred to in the body of this specification.

- On (1)
- Off (0)
- Open (Verb.)
- Close (Verb.)
- Closed
- Open
- Do not operate link under load.
- Open and earthed.

12.0 DRAWINGS AND INSTRUCTIONS

12.1 All drawings shall be in accordance with specification CEE-0224.

12.2 The supplier/tenderer shall supply the following drawings and/or instructions, all of which shall be included in the tender price and be to the satisfaction of Spoomet.

12.2.1 Before delivery to site three (3) sets of detailed operating and maintenance instructions, with illustrations where necessary. These instructions shall be supplied with the "as built" drawings.

12.3 Late submission of drawings and instructions shall incur delivery penalties on the full contract price.

13.0 INSPECTION

13.1 Spoomet reserves the right by prior arrangement to inspect the equipment at any stage during manufacture.

14.0 TOOLS AND APPLIANCES

14.1 One set of any special tools and appliances required for normal operation and maintenance shall be supplied. All fittings, including holding down bolts, etc. for the complete installation of the equipment offered shall be supplied.

15.0 SPARES

15.1 Tenderers shall submit a separate quote for recommended spares for maintenance purposes.

15.2 A detailed description of each item including manufacturer's catalogue number and item number where applicable shall be furnished. Separate prices for each item shall be indicated.

15.3 The spare list shall be divided into two parts, one covering items used in a 12 month period and those likely to be used in a 10 year period.

15.4 Tenderers shall also state whether a complete range of spares is held in stock by their local representatives for subsequent purchase by Spoomet as and when required.

16.0 PACKING

16.1 The equipment shall be packed in such a manner that it will be adequately protected during handling and transport.

END

SCHEDULE OF REQUIREMENTS

1.0 Required for

2.0 Number of sets required

3.0 System of supply kV, 50 Hz, 3 phase, neutral

	DISCONNECTOR	EARTHING SWITCH
4.0 Rated voltage:	 kV	 kV
5.0 Rated frequency:	50 Hz	50 Hz
6.0 Rated normal current:	 A	 A
7.0 Rated short time withstand current:	 kA	 kA
8.0 Special requirements:	.....	.....
		
		
		
		

END

TECHNICAL DATA SHEET

(To be completed by tenderers and submitted as part of their tender)

1.0	Spoornet Tender number:	DISCONNECTOR	EARTHING SWITCH
2.0	Name of manufacturer. ....	.....	.....
3.0	Type number .....	.....	.....
4.0	Number of poles. ....	.....	.....
5.0	Indoor/Outdoor. ....	.....	.....
6.0	Rated voltage. ....	.....	.....
7.0	Rated insulation level. ....	.....	.....
7.1	Rated 1 minute power frequency withstand voltage. ....	.....	.....
7.2	Rated lightning impulse withstand voltage. ....	.....	.....
8.0	Rated frequency. ....	.....	.....
9.0	Rated normal current. ....	.....	.....
10.0	Rated short circuit making current. ....	.....	.....
11.0	Rated short time withstand current. ....	.....	.....
12.0	Mass of complete unit. ....	.....	.....
13.0	Minimum clearance in air: .....	.....	.....
13.1	Between poles. ....	.....	.....
13.2	To earth. ....	.....	.....
13.3	For isolating distance. ....	.....	.....
14.0	Type of closing mechanism. ....	.....	.....
15.0	Height above ground of lowest HV connection. ....	.....	.....

ANNEXURE 2

	DISCONNECTOR	EARTHING SWITCH
16.0	Length of insulator (taut string measurement)	.....
17.0	Type test certificate	.....
17.1	Testing authority	.....
17.2	Test number	.....
18.0	Insulation	.....
18.1	Type test certificate number	.....
18.2	Testing authority	.....

END