

SCOPE OF WORK AND TECHNICAL EVALUATION

A **Supply Contract – Short Term contract** is required. The following tasks will be done as part of the order:

1. Scope of Work

1.1 Supply, delivery, installation and commissioning of two (2) complete Dielectric Strength testers at the Rotek & Rosherville Oil Laboratories. Train staff to operate equipment.

(x1) Rotek Oil Laboratory and (x1) Rosherville Oil Laboratory
Train 5 staff members to operate the equipment

1.2 Delivery addresses:

Eskom Oil laboratory (Rotek),
c/o Rotek Engineering – Next to Switchgear Workshop
Lower Germiston Road
Rosherville
Contact person: Vusumuzi Sibeko, +27 11 629 5521

Eskom Oil Laboratory (Rosherville),
Eskom Research and Innovation Centre,
Block B – Oil lab reception,
Lower Germiston Road
Rosherville
Contact person: Hlengiwe Nzima, +27 11 629 5711

2. Specifications

Dielectric Strength Tester

The system must be suitable for the application of Method IEC 60156.

The system able to measure the breakdown voltage in kV

Requirements:

Output voltage 0 – 100 kVrms symmetrical

Voltage slew rate 0.5 – 10 kV/s

Switch-off time < 10 μ s

Voltage slew monitoring Real Breakdown Monitoring (RBM)

Accuracy 0 – 100 kV \pm 1 kV

Resolution 0.1 kV

Internal temperature recording of the oil sample 0 – 99°C

Temperature resolution 1°C

User-specific test sequences

REVISED SCOPE OF WORK & TECHNICAL CRITERIA

SUPPLY, DELIVERY, INSTALLATION AND COMMISSION OF TWO DIELECTRIC STRENGTH - CAPEX

Data interface

Printer

Calibration Certificate

Test standards

IEC 60156:2018 Annex A,

SABS EN 60156, VDE 0370-5:1996,

User-specific test sequences 10

Included

User manual

Main supply cord, 2.5m

Certified Setting gauge 2.5 mm ± 0.05

Magnetic Lifting stick for magnetic stirrer

Magnetic stirrer

Test vessel, glass, with min 350 ml capacity and with electrodes with partial spherical electrodes (IEC 60156).

Important notes:

1. Payment will be made once installation, commissioning and training has been completed to the satisfaction of the end-user.
2. Job completion form, to be signed off by both the supplier and the end-user.

3. Technical Evaluation

Eskom Specifications	Proof	Score (%)
Supplier to provide proof on a letter head that they can offer after sales support within 24hrs as well as keeping spares. <ul style="list-style-type: none"> After sales support within 24hrs =15% After sales support more than 24hrs =5% If support will be sub-contracted, the supplier must submit an agreement letter between the two parties on a subcontractor's letterhead with turnaround times.	Supplier letterhead (for himself or for sub-contractor)	15%
Provide a detailed quotation and all items must be quoted for.	Quotation	10%
Proof that the instrument will perform the test in accordance to IEC 60156, SABS 60156 and ASTM D877	Highlighted in the brochure/ Manual	15%
Supplier to commit on a letterhead that they can offer a two (2) year warranty or better <ul style="list-style-type: none"> Two (2) years or better – 10% Below two (2) years – 5% 	Letterhead	10%
Provide three (3) reference letters (They must have contact details such as email, name and contact number) where this type of equipment was installed. <ul style="list-style-type: none"> Three reference letters = 15% Two reference letters = 5% 	Reference letters	15%
Instrument Technician must not have less than three (3) years' experience in installation and repairs of the Dielectric Strength tester.	1. Provide job card/job	15%

REVISED SCOPE OF WORK & TECHNICAL CRITERIA

SUPPLY, DELIVERY, INSTALLATION AND COMMISSION OF TWO DIELECTRIC STRENGTH - CAPEX

<ul style="list-style-type: none"> • Provide three job cards or more or CV with certificates = 15% • One to two job cards or CV with certificates = 5% 	completion certificate 2. CV with certificate in instrument repairs and maintenance.	
Supplier to prove that the equipment is capable of performing at a range of 0-100kV.	Example of a calibration certificate	20%
TOTAL SCORE		100
THRESHOLD (%)		75

4. SHEQ Criteria

SHEQ evaluation criteria	Office Use: (Yes/No)
• Baseline SHE risks assessment	
• Signed 37(2) agreement	
• Acknowledgement of Eskom's rules and requirements	
• Valid letter of good standing	
• SHE policy	

Compiled by: Vusumuzi Sibeko **Date:** 15 August 2022

Approved by: Zanele Khuzwayo **Date:** 16 August 2022 **Signature:**

