

	SCOPE OF WORK	Lethabo Power Station
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Title: **Supply of Coal laboratory consumables for a period of 5 years on an as and when required basis at Lethabo Power Station**

Unique Identifier:

Alternative Identifier

Document Type

Area of Applicability **Lethabo Power Station**

Revision: **00**

Total Pages: **9**

Next Review Date: **As and when required**

Disclosure Classification: **Controlled Disclosure**

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1. INTRODUCTION

This scope of work defines the process which will be followed to supply Chemical Services Coal laboratory consumables for a period of 5 years, on an as and when required basis at Lethabo Power Station.

2. SUPPORTING CLAUSES

2.1 SCOPE

This procedure deals with the method to supply Chemical Services Coal laboratory consumables for a period of 5 years, on an as and when required basis at Lethabo Power Station.

2.1.1 Purpose

The aim of this document is to determine the process which must be followed to supply Chemical Services Coal laboratory consumables for a period of 5 years, on an as and when required basis at Lethabo Power Station.

2.1.2 Applicability

This document shall apply to Chemical Services, Eskom Lethabo Power Station and the Contactor.

2.2 NORMATIVE/INFORMATIVE REFERENCES

2.2.1 Normative

- Procurement Strategy

2.2.2 Informative

- ISO 9001

2.3 DEFINITIONS

None

2.3.1 Classification

- a) Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary).

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2.4 ABBREVIATIONS

PPE - Personal protective equipment

2.5 ROLES AND RESPONSIBILITIES

The overall responsibility for ensuring that the content of this procedure is followed shall lie with Contract Manager, Supervisor and Technician

Contractor

- All contractors shall work within the parameter of the job description and scope of work. To keep all instructions/ procedures on hand and supply Eskom power station with reference to be included in this document and supply record and history requirements.
- Must perform work to the highest standard and regarding to the safety regulations, hold points and notify Eskom Supervisor/ Contract Manager when work is completed.

Contract Manager

Ensure that:

- All workers have appropriate PPE.
- All workers are familiar with the risk assessment, safety precautions and hazards.
- The work is carried out by authorised or competent person.
- Ensure that all documents are accurately completed and signed before doing service entry on SAP.
- Oversee all the operations in work package.

Technician

- Must do proper stock control inspections to identify when stock needs replenishment and keep the records.
- The Technician is responsible for the on-job technical clarifications to the contractor.
- Ensure consumables delivered are quality checked and keep the records.
- Must maintain the system after ad hoc delivery by the contractor following the approved quality control plan.

2.6 PROCESS FOR MONITORING

- Scope of Work approval process
- Procurement Strategy Approval process
- Internal Audits
- Quality control sheet for Consumables received LFM12158

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2.7 RELATED/SUPPORTING DOCUMENTS

- Quality control records

3. SCOPE OF WORK

3.1 Supply of Coal laboratory consumables for a period of 5 years on an as and when required basis, at Lethabo Power Station Station.

Scope Description, Purpose and applicability

Supply of Coal laboratory consumables on an as and when required basis at Lethabo Power Station to enable proper operation to ensure quality of results.

3.2 Consumable types and functional locations

This work is applicable to the following consumables:

Location	Type
Chemical Services Laboratory	<ul style="list-style-type: none">• Ash Crucible• Moisture crucible with lid• Volatile crucible with lid• Tray used in Ash furnace• Forceps (Tweezer)• Spatula• Crucible tongs

3.3. Detailed scope of Work

Frequency of supply will be as and when required by Lethabo PowerStation, Chemical Services Coal Laboratory.

Consumables to be delivered to Chemical Services, Lethabo Power Station.

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3.3.1. Ash crucible

Crucible: type: silica; capacity: less than 0.15 g/cm² loading g; dimensions: width 40 mm x length 15 mm; material: silica; porcelain; dish silica; porcelain 8 to 15mm deep such a size that the sample loading does not exceed 0.15 g/cm².



3.3.2. Moisture crucible with lid

Inherent moisture crucibles with lid to be as per latest edition of SANS 5925:

Weighing vessel should be a shallow cylindrical vessel of diameter at least 30mm and which has a well-fitting cover. The vessel and cover shall be of glass with matching surfaces that are ground, or of a non-corrodible and heat resistant material. NOTE: a silica dish, of the specified diameter and of depth 10-15mm may be used if suitable precautions are taken to avoid absorption of moisture by the dish. Dimensions: Height 30mm, Depth 40mm, Boro 3.3. Crucibles and lids to withstand temperatures of up to 110°C without cracking. Inherent Moisture crucibles with lid: preferably marked with corresponding unique identifying numbers, marking to withstand temperature up to 110°C.

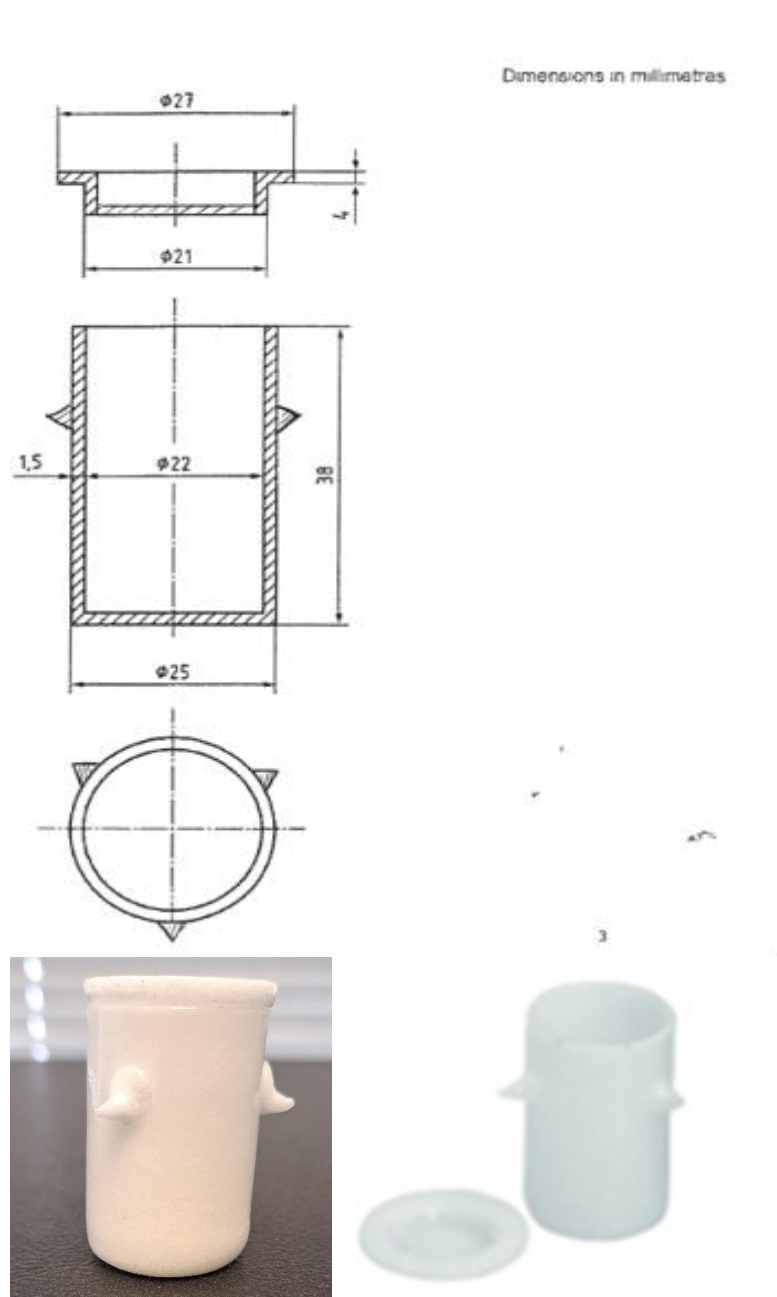


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3.3.3. Volatile crucible and lid

Volatile crucible with 3 projectiles and lid: Volatile crucible to be as per latest edition of ISO562: Cylindrical, with well-fitting lid, both of fused silica. The crucible with lid shall have a mass between 10-14g and dimensions approximating to those shown on figure 2 of ISO562. The fit of the lid on the crucible to have a horizontal clearance between them no greater than 0.5mm. The crucible and lid shall be ground together to give smooth surface. Crucibles and lids to withstand temperatures of up to 910°C without cracking.



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3.3.4. Tray used in Ash furnace

Tray for use in ash furnace for ash crucibles; material: ceramic or silicon carbide; dimensions: width 14-15.5cm, length 42.5- 42.8cm, height 2.3- 3cm, thickness 0.5 cm, inside height 1.3-2 cm; Application: ash furnace; to withstand temperature up to 825 °c as per ISO1171 method for ash determination of coal.

Front view:



Top view:



Bottom view:



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3.3.5. Forceps (Tweezers)

Forceps (tweezers) , stainless steel with a curved blunt pointed ends and serrated jaw, approx. 14.5 cm length.



3.3.6. Spatula

Multipurpose double spatula. Chattaway type. One end is flat and spatula shaped, the other end is rounded and tuned up at 45°. Very good chemical and thermal resistance. Stainless steel. Length 200mm, width 10mm; round handle.



3.3.7 Crucible tongs

Crucible tongs, 500mm. Used for easy loading and unloading of furnaces. Able to withstand temperature up to 910°C



4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation

5. REVISIONS

Date	Rev.	Compiler	Remarks
12/3/2024	00	Annalize Wentzel	First issue

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