

	<b>Scope of Work</b>	
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**Title: Manufacture and delivery of Apron and Bucket Elevator buckets at Kendal Power Station on an “as and when required” basis.**

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## **1. Introduction**

Kendal Power Station intends to partner with a reputable service provider to ensure a reliable and continues supplier of goods “as and when” required by the station. This document details the scope of work and all the mandatory requirements from the suitable contractor for this service.

## **2. Supporting Clauses**

### **2.1 Scope**

The scope of this document is the Scope of work and requirements for the Manufacture and delivery of Apron and Bucket elevator buckets to Kendal Power Station.

#### **2.1.1 Purpose**

The purpose of this document is to describe the Scope of work and requirements of the products to be supplied to Kendal Power Station.

#### **2.1.2 Applicability**

This document shall apply to Kendal Material Management Department, Engineering Department, Maintenance Department, Contractor, and anyone who is involved in the manufacture, assembly, delivery, storage, and use of the products listed in this contract.

#### **2.1.3 Effective date**

This document is effective from commencement of the contract date until revised or end of contract date.

### **2.2 Normative/Informative References**

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

#### **2.2.1 Normative**

- [1] ISO 9001 of 2008: Quality Management Systems.
- [2] GPM/0147 User requirement specification guidelines.
- [3] Occupational Health and Safety Act 85 of 1993.
- [4] ISO 14001 of 2004: Environmental management system.

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## 2.2.2 Informative

- [1] Safety Health and Environment Specifications for Contractors - GVLIR 0007
- [2] Construction, Safety, Health, and Environment Management in Eskom - 32/136 Rev 0 -
- [3] Eskom Information Security Policy - 32-85 Rev 0
- [4] Eskom Vehicle and Driver Safety Management Procedure - 32-93 Rev 0
- [5] Integrated Business improvement – prevention and improvement Standard - 6-366 Rev 0
- [6] Smoking Policy - 32-36 Rev 0
- [7] Alcohol Policy GGP 1209
- [8] Incident Management 32-95
- [9] Mandatory SHE requirements for the Eskom procurement and Supply chain management process - 32-726 Rev 0

## 2.3 Definitions

- **Accuracy of measurement** - The closeness of the agreement between the result of a measurement and the (conventional) true value of the measurement.
- **Apron** – The common reference name of the Apron conveyor and/or any components associated with the Apron conveyors situated on Unit 1 to 6 at Kendal Power Station. There are 6 Apron conveyors installed at Kendal Power Station.
- **Apron Bucket with lugs**– A uniquely designed and manufactured bucket bolted on the Apron conveyor. The lugs are attachments intended for installation of support wheels.
- **Apron Bucket without lugs**– A uniquely designed and manufactured bucket bolted on the Apron conveyor. Lugs are not attached as these buckets are supported by the chain between Apron buckets with lugs.
- **Bucket elevator** – The common reference name of the Bucket elevators and/or any components associated with the Bucket elevators situated on Unit 1 to 6 at Kendal Power Station. There are 12 Bucket elevators installed at Kendal Power Station.
- **Bucket elevator Bucket** - A uniquely designed and manufactured bucket bolted on the Bucket elevator steel reinforced conveyor belt.
- **Competence** - The ability to apply knowledge and skills to achieve the intended results.
- **Nonconforming work** - Any manufactured item, process or work performed that is found to be outside of the accepted or documented standards or tolerances.

## 2.4 Abbreviations

Abbreviation	Explanation
ISO	International Organisation for Standardisation
B/E	Bucket Elevator

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Abbreviation	Explanation
B/E	Bucket Elevator
CQP	Contract Quality Plan
GO	General overhaul
IR	Interim repairs
KKS	Kraftwerk-Kennzeichensystem (Function, Equipment and Component Identification System for Power Stations)
NB	Nominal Bore
OEM	Original Equipment Manufacturer
OHSA	Occupational Health and Safety ACT
QA	Quality Assurance
QAP	Quality Assurance Programme
QC	Quality Control
QCP	Quality Control Plan
SANS	South African National Standards
SAP	Systems, Applications and Products. (Software products that allow businesses to track customer and business interactions.)
SHEQ	Safety, Health, Environmental and Quality
SOW	Scope of Work
URS	User Requirements Specifications

### **3. Document Content**

#### **3.1 Project description**

Manufacture and delivery of Apron and Bucket elevator Buckets at Kendal Power Station on an “as and when required” basis.

#### **3.2 General requirements**

- (a) All orders and purchases shall be done on System Application and Products (SAP) for Eskom records.
- (b) The Contractor shall only deliver the product to the premises after a Purchase Order (PO) number has been released by the responsible person.
- (c) The contractor shall manufacture all the components on his own premises. All components that are manufactured or bought out from sub-contractors need to be supplied to the contractor as per the required latest specifications approved by the Eskom representative. The contractor remains responsible and accountable to correct and carry all associated costs to replace or repair defective products for any non-conformances found on any components. The contractor cannot refer any issues from the Eskom representative to any sub-contractor.
- (d) The Eskom representative shall perform quality control of the products received before accepting the products at stores as per International Standards Organisation (ISO 9001) standards. The contractor shall fetch rejected products from Kendal Power Station at own cost and as soon as being notified by the Eskom representative. Any rejected products

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that are missing due to delays by the contractor to fetch from Kendal Power Station are for the contractor account.

- (e) If the material or products received was accepted and indicated to be of good quality during quality evaluation but fails prematurely after installation, an investigation must be done by both parties and if an error is found to be from the service provider a replacement unit must be delivered within a reasonable time.
- (f) The contractor shall ensure that labelling or marking of product is clear and corresponds with the order number when delivery is made.
- (g) The contractor shall request approval from the Eskom Engineering representative before intending to make any changes, modification, or amendments to the products. No such changes may be made until written approval is granted by the Eskom Engineering representative.
- (h) All deliveries should be made from 07:15 am to 16:30 pm from Monday to Thursday and from 7:15 am to 12:15 pm on Friday, no deliveries should be made after the specified times or on a weekend unless otherwise arranged prior with the Eskom representative.

### **3.3 Technical requirements**

The contractor shall manufacture and deliver Apron and Bucket elevator Buckets at Kendal Power Station on an “as and when required” basis to the following requirements:

- (a) Supplier to provide detailed design drawing of each part to be evaluated before contract is issued. Note Eskom will supply the outer dimensions as per the Eskom Stock number description as well as the relevant Eskom drawings. Supplier to design and manufacture and supply materials according to the relevant specifications.
- (b) Technical Evaluation will be done at the suppliers’ premises before the contract is issued.
- (c) Material and manufacturing certificates will be issued with each batch of buckets.
- (d) Supplier shall provide an Eskom Approved quality check document and procedure.
- (e) Quality checks of the manufacturing and welding process may be done by the Engineer and Technician at the supplier premises while the contract is running.
- (f) Standard materials approved by the Eskom Engineering representative to be used. No deviation will be allowed unless it is approved.

### **3.4 Technical specifications**

- a) Detailed description of parts:

- i) Eskom Stock number: 0038304

BUCKET: ELEVATOR;64.7 L;STL DIMENSIONS:

BUCKET:

TYPE: ELEVATOR;

CAPACITY: 64.7 L;

MATERIAL: STL;

SUPPL P/N: 0.64/14919 REV.2;

SIZE 800MM

- ii) Eskom Stock number: 0038795

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BUCKET: CONVEYOR;STL

BUCKET:  
TYPE: CONVEYOR;  
MATERIAL: STL;  
SUPPL P/N: 142-0128;  
WITHOUT BRACKET AND LUGS

iii) Eskom Stock number: 0038732

BUCKET: CONVEYOR;STL;142-0128  
BUCKET:  
TYPE: CONVEYOR;  
MATERIAL: STL;  
DRAWING NO: 142-0128 REV 1;  
SIZE WD 805MM X LG 430MM X HT 360MM;  
COMPLETE WITH HOLES, BRACKETS AND LUGS

b) Manufacturing specifications of components:

- i) The bucket to be manufactured from mild steel plate (EN10025 or equivalent) within correct thickness and tolerance standards. All cut edges to be deburred. The bucket to be bent within size tolerances and parallel to ensure squareness of bucket. End plates to be fully welded to ensure watertight joints unless indicate different on the drawing. All bolt holes to be drilled, not punched. All welding to be performed while buckets are secured in jigs to prevent deformation and allowed to cool and relieve stress before removal. All welding to conform to welding standards.
- ii) Bucket elevator buckets mounting plate to be positioned accurately symmetrical to the centreline and square before welding.
- iii) The Apron wheel lugs to be manufactured from EN10025 or equivalent steel and machined to specified tolerances. Lugs need to be accurately positioned before welding to ensure correct centre line and pitch distances and squareness to the bucket. Lugs to be fully welded around all faces.
- iv) After manufacture, the bucket to be painted with 2 coats of red oxide primer.

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