

Title: **Scope of works for the Supply and delivery of Dome Valves to Unit 6 Dust Handling Plant at Kusile Power Station**

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1. INTRODUCTION

Eskom Rotek Industries, a wholly subsidiary of Eskom Holdings is contracted to Eskom Kusile to complete works on Unit 4, 5 and 6 Dust Handling Plant and Silo 4, 5 and 6 as per scope of works **366-369424 & 366-299036**.

The construction of Unit 4 Dust Handling Plant has been completed with the Unit running and commissioning activities underway. Access has been granted to commence with the construction of Unit 6 Dust Handling Plant. The first phase of the construction execution is the installation of the structural steel. The second phase will be the installation of piping and mechanical equipment This scope depicts the requirements of the supply of the mechanical equipment.

2. SUPPORTING CLAUSES

2.1 SCOPE

Scope of works for the Supply and delivery of Dome Valves to Unit 6 Dust Handling Plant at Kusile Power Station.

2.1.1 Purpose

The purpose of this document is to provide the requirements for the Scope of works for the Supply and delivery of Unit 6 Dust Handling Plant Dome Valves at Kusile Power Station.

2.1.2 Applicability

This document shall apply to Kusile Power Station Dust Handling Plant **Unit 6 Dust Handling Plant**.

2.2 NORMATIVE/INFORMATIVE REFERENCES

2.2.1 Normative

The applicable reference documents are listed below. These documents (latest revision) form part of this specification to the extent as specified in this specification. In the event of a conflict between the text of this specification and the applicable parts of the Eskom documents listed below, the text of this specification takes precedence. However, this specification does not supersede applicable laws and regulations (including the SANS standards), unless a specific exemption has been obtained from the relevant authorities.

- [1] 240-53665024: Engineering Quality Manual.
- [2] ISO 9001: Quality Management Systems.
- [3] Kusile Power Station Quality Specification.
- [4] 240-83539994 Eskom Kusile NDT requirements.
- [5] 240-105658000 Supplier Quality Management Specification.
- [6] SSZ 45-17 Medupi Corrosion Protection Specification.

2.2.2 Informative

- [7] SANS 1200 Annexure.

2.3 DEFINITIONS

Definition	Description
Pneumatic Conveying	Ash conveying system using process air.
Aeration Air	The heated air used to agitate the ash in the hoppers.
Instrument Air	Compressed air used to drive instruments.

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2.3.1 Disclosure Classification

Controlled Disclosure: Controlled Disclosure to external parties (either enforced by law, or discretionary)

2.4 ABBREVIATIONS

Abbreviation	Description
DHP	Dust Handling Plant
U 6	Unit 6
CM	Configuration Management
SANAS	South African National Accreditation System
SANS	South African National Standards
QMS	Quality Management System
C&I	Control and Instrumentation
NDT	Non Destructive Testing

2.5 ROLES AND RESPONSIBILITIES

2.5.1 Eskom Rotek Industries

- As principal contractor, verify that the bill of material submitted by the supplier is accurate.
- As principal contractor, ensure that all returnables are tendered upon delivery.
- As principal contractor, to ensure that the supplier is aware of all applicable standards governing the works.
- As principal contractor, ensure that both technical and financial evaluations are done when evaluating bids.

2.5.2 Eskom Rotek Industries – Quality Controller

- Ensure that the items are supplied as per the specifications.
- Ensure that all data sheets/material certificates/data books are tendered when the items are delivered to site.
- Ensure that ERI inspections on hold points are honoured.

2.5.3 Supplier

- Ensure that Material Certificates - **EN 10201 TYPE 3.1** are tendered upon delivery of the items to site.
- Ensure that **Data Books** are tendered for the dome valves.
- Ensure that **OEM Data Sheets** with comprehensive information are tendered for all the valves.
- Ensure that they supply the items as per specifications.

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2.6 PROCESS FOR MONITORING

- Refer to **240-105658000 Supplier Quality Management Specification**.

2.7 RELATED/SUPPORTING DOCUMENTS

N/A.

3. SPECIFICATION

3.1 GENERAL

The following are the general requirements for the Supply and Delivery of Dome Valves Unit 6 Dust Handling Plant at Kusile Power Station

3.1.1 SCOPE OF SUPPLY WORKS

Scope of works for the Supply and delivery of Dome Valves to Unit 6 Dust Handling Plant at Kusile Power Station.

KUSILE POWER STATION			
UNIT 6 - DUST HANDLING PLANT & SILO			
ESKOM ROTTEK INDUSTRIES SOC LIMITED			
SUPPLY AND DELIVERY OF DOME VALVES TO UNIT 6 DUST HANDLING PLANT AT KUSILE POWER STATION			
Item	Description	Unit	Quantity
1	VALVE, BALL: VALVE SIZE: 15NB BSP TAPERED; DESIGN RATING: 100 KPA; CONNECTION: SCREWED BSP	EA	40
2	VALVE, BALL: VALVE SIZE: 25NB BSP TAPERED; DESIGN RATING: 100 KPA; CONNECTION: SCREWED BSP	EA	60
3	VALVE, BALL: VALVE SIZE: 50NB BSP TAPERED; DESIGN RATING: 100 KPA; CONNECTION: SCREWED BSP	EA	30
4	VALVE, BALL: VALVE SIZE: 100NB BSP TAPERED; DESIGN RATING: 100 KPA; CONNECTION: SCREWED BSP	EA	8
5	VALVE, BUTTERFLY: TYPE: DOUBLE ACTING; VALVE SIZE: 100 NB; DESIGN RATING: 900 KPA; CONNECTION: FLANGED CONNECTIONS TO BS4504 PN10	EA	8
6	VALVE, BUTTERFLY: TYPE: DOUBLE ACTING; VALVE SIZE: 50 NB; DESIGN RATING: 900 KPA; CONNECTION: FLANGED CONNECTIONS TO BS4504 PN10	EA	28
7	VALVE, BUTTERFLY: TYPE: DOUBLE ACTING; VALVE SIZE: 80 NB; DESIGN RATING: 900 KPA; CONNECTION: FLANGED CONNECTIONS TO BS4504 PN10	EA	8
8	PIFFP CONVEYING 300NB INLINE DOME VALVE ASS PHO 10% STRETCH	EA	4
9	PIFFP CONVEYING 300NB BULKHEAD DOME VALVE PHO 10% STRETCH	EA	28
10	PIFFP CONVEYING 80NB INLINE DOME VALVE PHO 10% STRETCH	EA	30
11	300NB Rubber Below c/w 1 x 12 Hole Flange BS4504 T10/3 & 1 x 6 Hole SP Flange BS4504 T10/3; 300NB x 260 Compensator	EA	28
12	80NB Rubber Below c/w 2 x 8 Hole Flanges BS4504 10/3 Raised Flange; 80NB x 205 Compensator	EA	28
13	Vibronic Point Level Detection, Soliphant FTM50, FTM50-AGG2A5A32SC	EA	28
14	Socla - 207 NRV, DN 50, Stainless Steel, Viton Seal (100 Degrees)	EA	112

3.1.2 ELECTRICAL WORKS

N/A.

3.1.3 MECHANICAL WORKS

N/A.

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3.2 REQUIRED INFORMATION

- Eskom Rotek Industries to ensure that the supplier has the relevant Eskom Specification governing

3.3 TESTING AND CONFORMANCE

- All applicable National and Eskom Standards.

4. AUTHORIZATION

This document has been seen and accepted by:

- Khomotso Mothata.
- Tshidiso Lekalakala
- Dewald Denton.

5. REVISIONS

Date	Rev.	Compiler	Remarks
17 May 2022	0	Tshidiso Lekalakala	First Draft

6. ACKNOWLEDGEMENTS

- K Mothata
- T Lekalakala.
- Dewald Denton.

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