



Scope of Works

**Eskom Rotek
Industries**

Title: **Scope of works for the Supply & Fabrication, Corrosion Protection, Transport to site Structural Steelwork 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. The scope has been extended and access has been given to commence with the construction of Unit 5 Dust Handling Plant. The first phase of the construction execution is the installation of the structural steel. This scope depicts the requirements of the supply of the items.

2. SUPPORTING CLAUSES

2.1 SCOPE

The scope of works includes the Supply & Fabrication, Corrosion Protection, and Transport to site of Structural Steelwork 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 Supply & Fabrication, Corrosion Protection, and Transport to site of Structural Steelwork to Unit 6 Dust Handling Plant 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 Kusile/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 5	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, verify that the NDT supplier is an approved Eskom NDT supplier.
- 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 works are carried out to specifications.
- Ensure that all relevant returnables (Data Books) are reviewed and approved by both ERI and KET.
- Ensure that ERI inspections on hold points are honoured.

2.5.3 Supplier

- Ensure that the works data books are submitted for approval prior to works commencement.
- Ensure that the works data book are kept up to date as the works progresses.
- Ensure that the submission of ITPs (Inspection and Testing Plan), WPS (Welding Procedure Specification) along with Welders Qualifications.

2.6 PROCESS FOR MONITORING

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

2.7 RELATED/SUPPORTING DOCUMENTS

Structural Steel Tables (Blue Book – 10th Edition)

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3. SPECIFICATION

3.1 GENERAL

The following are the general requirements for the Supply & Fabrication, Corrosion Protection, and Transport to site of Structural Steelwork to Unit 6 Dust Handling Plant at Kusile Power Station.

3.1.1 STRUCTURAL WORKS

ANNEXTURE A – UNIT 6 DUST HANDLING PLANT BILL OF QUANTITIES

		Unit	Qty
Bank 1			
1	Detail of Structural Steel (Ton)	Ton	19,131
2	Supply and Fabricate of Structural Steel (Ton)	Ton	19,131
3	Painting of Structural Steel - 3 Coat System DCS200	Ton	19,131
4	Detail of Tubular Handrail - LM	Lm	230,433
5	Supply of Tubular Handrail - LM	Lm	230,433
6	Detail of RS40 40*4,5 Grating (m2)	m2	162,53
7	Supply of Tubular Handrail - LM	m2	162,53
8	Trail Assembly of RS 40* 40*4,5	m2	162,53
9	Supply of FL8*130 Kick flat Galv (m2)	m2	230
10	Transport to Site	EA	1

Bank 2			
1	Detail of Structural Steel (Ton)	Ton	19,131
2	Supply and Fabricate of Structural Steel (Ton)	Ton	19,131
3	Painting of Structural Steel - 3 Coat System DCS200	Ton	19,131
4	Detail of Tubular Handrail - LM	Lm	230,433
5	Supply of Tubular Handrail - LM	Lm	230,433
6	Detail of RS40 40*4,5 Grating (m2)	m2	162,53
7	Supply of Tubular Handrail - LM	m2	162,53
8	Trail Assembly of RS 40* 40*4,5	m2	162,53
9	Supply of FL8*130 Kick flat Galv (m2)	m2	230
10	Transport to Site	EA	1

Bank 3			
1	Detail of Structural Steel (Ton)	Ton	19,131
2	Supply and Fabricate of Structural Steel (Ton)	Ton	19,131
3	Painting of Structural Steel - 3 Coat System DCS200	Ton	19,131
4	Detail of Tubular Handrail - LM	Lm	230,433

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5	Supply of Tubular Handrail - LM	Lm	230,433
6	Detail of RS40 40*4,5 Grating (m2)	m2	162,53
7	Supply of Tubular Handrail - LM	m2	162,53
8	Trail Assembly of RS 40* 40*4,5	m2	162,53
9	Supply of FL8*130 Kick flat Galv (m2)	m2	230
10	Transport to Site	EA	1

Bank 4

1	Detail of Structural Steel (Ton)	Ton	19,131
2	Supply and Fabricate of Structural Steel (Ton)	Ton	19,131
3	Painting of Structural Steel - 3 Coat System DCS200	Ton	19,131
4	Detail of Tubular Handrail - LM	Lm	230,433
5	Supply of Tubular Handrail - LM	Lm	230,433
6	Detail of RS40 40*4,5 Grating (m2)	m2	162,53
7	Supply of Tubular Handrail - LM	m2	162,53
8	Trail Assembly of RS 40* 40*4,5	m2	162,53
9	Supply of FL8*130 Kick flat Galv (m2)	m2	230
10	Transport to Site	EA	1

Pipe End Support

1	Detail of Structural Steel (Ton)	Ton	1,4288
2	Supply and Fabricate Structural Steel (Ton)	Ton	1,4288
3	Painting of Structural Steel - 3 Coat System DCS200 (Ton)	Ton	1,4288
4	Transport to Site	EA	1

Switch Valve Access Platform

1	Detail of Structural Steelwork (Ton)	Ton	6,169
2	Supply and Fabricate of Structural Steel (Ton)	Ton	6,169
3	Painting of Structural Steel - 3 Coat System DCS200 (Ton)	Ton	6,169
4	Detail of Tubular Handrailing - LM	Lm	16
5	Supply only of Tubular Handrailing (Fabricated Panels) - LM	Lm	16
6	Detail of RS40 40*4.5 Grating - m ²	m ²	18,632
7	Supply of RS40 40*4,5 Grating (Including Kick Flat) - m ²	m ²	18,632
8	Trail Assembly of RS40 40*4,5 Grating (Galv) - m ²	m ²	18,632
9	Supply of FL8*130 Kick Flat (Galv) - m ²	m ²	14
10	Transport to Site	EA	1

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3.1.2 ELECTRICAL WORKS

N/A.

3.1.3 MECHANICAL WORKS

See Bill of Materials above.

3.2 REQUIRED INFORMATION

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

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

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16 May 2022	0	Tshidiso Lekalakala	First Draft

6. ACKNOWLEDGEMENTS

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