Eskom	**Works Information**	**Kendal Power Station**

Title: **Kendal Power Station Submerge Scraper Conveyor Flights Supply**

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Content

1. Introduction

There are 6 submerge scraper conveyors (SSC) and thus one per unit at Kendal Power Station. The SSC and grizzly conveyor consist of powerpack, hydraulic motor, flights, chain, tail-end pulley, drive pulley and gearbox. These are long lead time spares and not having them when needed will lead to longer downtime of the downtime which will impact production in long run. To avoid unavailability and downtime of the SSC, the spares must be available.

1.1 Scope

This document covers the works information for the purchase, fabrication, supply, and off-loading SSC flights/scraper bars at Kendal Power Station.

1.1.1 Purpose

The purpose of this document is to provide the scope of *works* for the procurement, fabrication, supply, delivery to site, off-loading, of SSC flights at Kendal Power Station.

1.1.2 Applicability

This document shall apply throughout Kendal Power Station.

1.1.3 Effective date

This document is effective from the date of authorization.

1.2 Normative/Informative References

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

1.2.1 Normative

[1] ISO 9001 Quality Management Systems

1.2.2 Informative

[1] ISO 14001:2004 - Environmental Management Systems
[2] ISO 900:2008 - Quality Management Systems – Fundamentals and Vocabulary
[3] 32-95 - procedure manual for Perform occupation Health and Safety
[4] NEC3 - National engineering Contract
[5] *1017401 - Integrated Risk Management Procedure

1.3 Definitions

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

1.4 Abbreviations

Abbreviation	Description
ASME	American Society of Mechanical Engineers
GO	General Outage
ISO	International Organization for Standardization
LDE	Lead Discipline Engineer
NCR	Non Conformance Report
OEM	Original Equipment Manufacturer
PEIC	Production Engineering Integration Coal
PAH	Primary Air Heater
PQR	Pre-Qualification Record
PS	Power station
RT&D	Research testing and development
SAT	Site acceptance test

1.5 Roles and Responsibilities

The *Contractor* is responsible for the entire *works* as prescribed in this Works Information.

The *Employer* is responsible to provide the design requirements as well as the scope of the *works.*

1.6 Process for Monitoring

N/A

1.7 Related/Supporting Documents

N/A

2. Employer's Scope

(1) Procures, fabricates, supplies, delivers, and off-loads of SSC and Grizzly conveyor spares at Kendal.

3. The *Contractor's* Scope

3.1 General Requirements for the *Works*

1) The *Contractor* procures, supplies, delivers, and off-loads the SSC spares at Kendal Power Station.

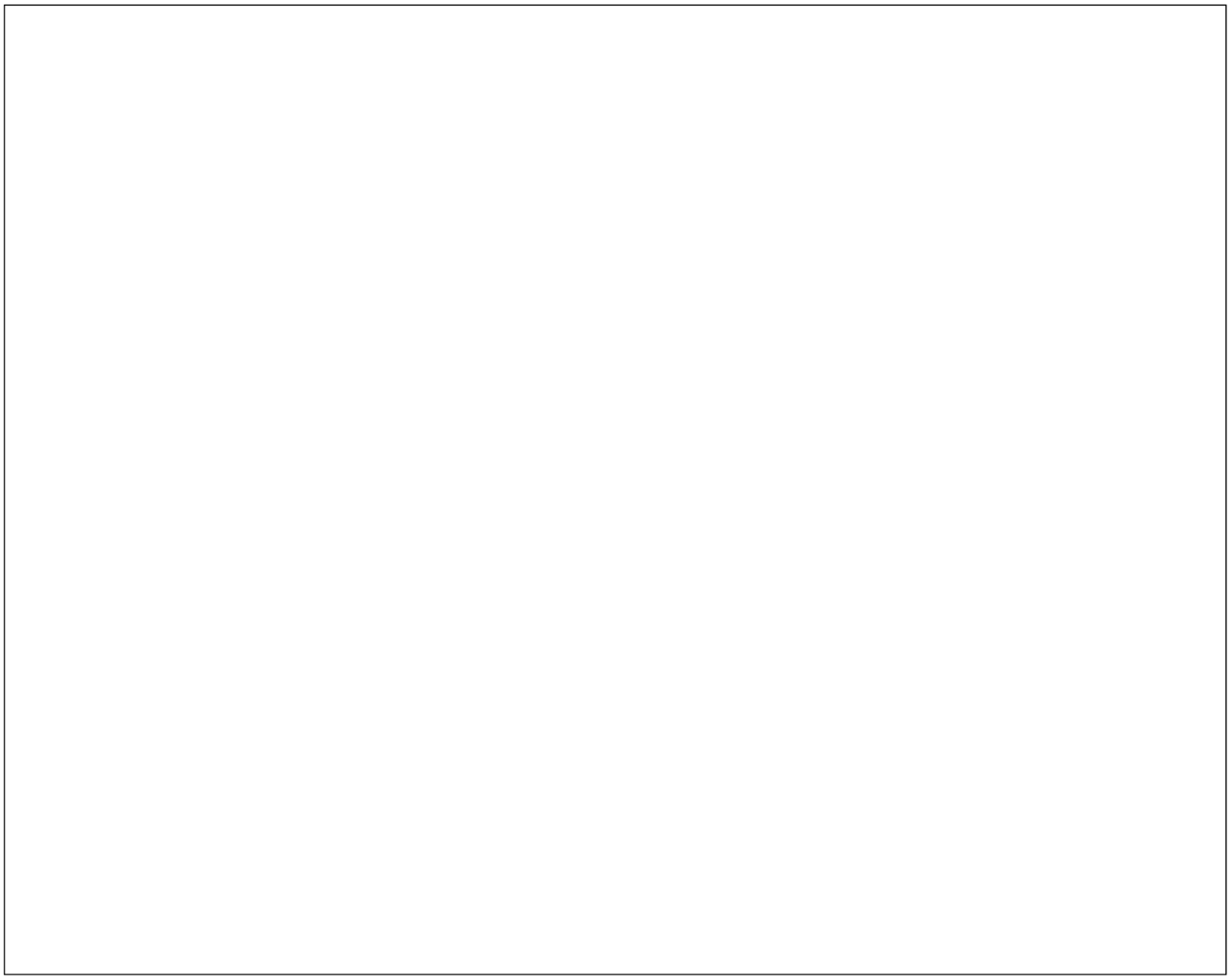
3.2 Detailed Scope of Work

3.2.1 General

The following are all the SSC flights required to be supplied, included in the table are material numbers, material descriptions and quantities:

Plant	Description	Stock number	Qty
	SSC		
	ATTACHMENT(Scraper bar/flights): DRAWING NO:27.64/41008;CHAIN MOUNT	38719	249

SSC flight drawing:



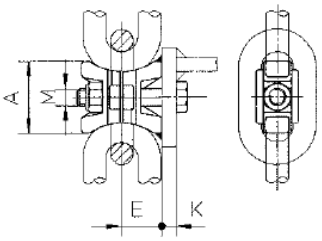
SSC attachment data sheet:

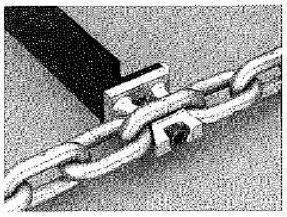
Steckmitnehmer SDS
Flight attachments SDS

Steckmitnehmer für schwere Betriebsbedingungen in Doppel- und Mehrstrangkettenförderer einsetzbar, Lauf über Zahnkettenräder und Umlenkrollen mit und ohne Rillen; zwei SDS-Hälften – geschmiedet und einsatzgehärtet, hochverschleißfest, eine SDS-Hälfte zum Anschweißen an der Kratzereisenkopfplatte; einfache Montage und Demontage auch an der gespannten Kette, Kratzereisen im vorgesehenem Kratzereisenabstand auf vertikal stehende Kettenglieder mit der zweiten Schließhälfte verschrauben, Verbindungsschraube mit erforderlichem Anziehdrehmoment anziehen, alternativ eine SDS-Hälfte mit bereits angeschweißter Distanzplatte erhältlich.

Flight attachment for severe service in two strand and multiple chain strand conveyors, runs over chain sprockets and plain chain wheels with or without groove, two SDS-halves – forged and case hardened, highly wear resistant, one SDS-half to weld onto the head plate of the flight bar, simple assembly and disassembly even on the tensioned chain system, install the flight bar on the vertical chain links in the required flight spacing, insert 2nd locking half and tighten the attachment bolt to the specified torque; alternativ one SDS-half already welded to distance plate available.

Schweißelektrode / *Stick electrode:* ISO 2560: E 51 5 B110 20 (H)
EN 499: E 42 5B4 2 H5
AWS A5.1-ASME II/C, SFA5.1: E 7018-1





Type	Kette *Chain*	E*	A	M	K**	Gewicht ca. *Weight apprx.*
	d x t	[mm]				[kg/*pc.*]
SDS 14 x 50	14 x 50	34	40	10	10	0,2
SDS 14 x 64	14 x 64	23,5	53	10	10	0,3
SDS 16 x 64	16 x 64	37	51	12	10	0,5
SDS 19 x 75	19 x 75	33,5	61	14	10	0,7
SDS 22 x 86	22 x 86	52	70	16	15	1,0
SDS 26 x 100	26 x 100	60	80	20	15	1,3
SDS 30 x 120	30 x 120	71	100	20	15	1,8

* Andere Größen und Abmessungen E auf Anfrage. / *Any other sizes and dimensions E on request.*
** empfohlene Stärke der Platte / *recommended plate thickness*

Oberflächenausführung: sandgestrahlt – gewachst
Surface finish: shotblasted – waxed

Lieferumfang: 2 Stk. Hälften, 1 Stk. Sechskantschraube DIN 931-8.8, 1 Stk. Sicherungsmutter DIN 980-8.
Größe der Distanzplatte und Schraubenlänge ist zu vereinbaren.

Scope of delivery: *2 pcs. halves, 1 pc. hex. bolt DIN 931-8.8, 1 pc. locking nut DIN 980-8.*
Size of the distance plate and bolt length has to be specified.

Bestellbeispiel:
80 Stk. Steckmitnehmer SDS 22 x 86 mit kompletter Verschraubung.

Example of the order:
80 pcs. flight attachments SDS 22 x 86 with mounting bolt and nut.

3.2.2 Corrosion Protection

The contractor will provide the necessary coating required to preserve for storage purposes.

3.2.3 Codes and Standards

The design codes and standards which need to be adhered to are given below.

Governing

(1) OHS Act - Operational Health and Safety Act No.85 of 1993
(2) 240-51544462 - Integrated Demand Management Supplier Contract Quality Requirements Specification

Corrosion protection

(1) 36-681 Eskom Protective Coating Standard

Configuration management:

(1) 240-76992014 - Project/Plant specific technical documents and records management work instruction

3.2.4 Drawings

The drawings will be provided at request, otherwise a sample will be provided.

3.2.5 Documentation Requirements

All documents supplied by the *Contractor* shall be of good quality and shall be subject to the *Employer's* approval.

The following documentation to be supplied for SSC and Grizzly conveyors spares:

(1) Material specification.

3.3 Decommissioning and Removal of Existing Equipment

N/A

3.4 Scaffolding

N/A

3.5 Tender Returnable

3.5.1 Gate keepers

- See technical evaluation strategy.

3.5.2 Qualitative Returnable

- See technical evaluation strategy.

4. Completion, testing, commissioning and correction of defects

4.1.1 Installation

N/A

4.1.2 Commissioning & Performance testing

N/A

4.1.3 Operational maintenance after Completion

N/A

5. Plant Outages

N/A.

6. Quality Management

6.1 Contract Quality Management Plan Requirements

The Contractor shall comply with the ISO 9001:2008 Quality Management System and Employer's Quality Requirements of as specified in Eskom QM58 document: 240-51544462

7. Health and Safety Management

7.1 General

The Contractor shall comply with the following:

- Eskom Safety Health procedure.
- Construction regulation
- Adhere to the OHS Act 85 of 1993.

- All staff will undergo Safety Induction, presented by Employer's Safety Risk Department.
- Contractor must obtain a safety clearance and adhere to Plant Safety Regulation used at Kendal Power Station before carrying out any work.

7.2 SHE Documentation required from the contractor

The Contractor complies with the following:

- Construction regulation Requirement –Safety File Approval
- Safety File Approval Form

8. Environmental management

Contractors must comply with the following

- Environmental Management System (ISO 14001, 2004)
- National Environmental Management Act (Act 107 of 1998)
- Eskom SHEQ policy (32-727)
- Kendal Environmental Aspect and Impact Identification, Rating and Management Procedure (*1015586)
- Kendal Environmental Communication Procedure (*1015692)
- Kendal Emergency Preparedness Plan (*1015702)
- Kendal Non-conformance, Corrective and Preventive Actions Procedure (*1017357)
- Kendal Waste Management procedure (*1024102)
- Hazardous substance procedure (*1018300)
- Eskom Flash report
- SHEQ File Index (*1027127)
- Site Inspection Checklist (*1027246)

9. Authorisation

This document has been seen and accepted by:

Name	Designation
	System Engineer
	Snr. Boiler Engineer
	Boiler Engineering Manager

10. Revisions

Date	Rev.	Compiler	Remarks
June 2021	00		SOW

11. Development Team

The following people were involved in the development of this document