

	Instruction	Hendrina Power Station
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Title: **Scope of Work for Supply
of Lifts Spares**

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1. Introduction

At Hendrina Power Station, lifts are essential for transporting goods and staff to various levels and floors throughout the entire station. This document outlines the scope of work for the supply and delivery of lift spares, ensuring the continuous and efficient operation of all lifts within the station. The specified lift spares are vital for maintaining the safety and functionality of these lifts, which play a crucial role in the daily operations across the entire power station.

The lifts at Hendrina Power Station are used in various capacities, including the transportation of heavy equipment, maintenance tools, and personnel. Ensuring that these lifts are operational at all times is critical to maintaining the efficiency and safety of the power station's operations. The lift spares contract covers all lifts within the station, including those in the Blue Building.

This document provides detailed specifications for the required lift spares, including their technical characteristics, quantities, and quality standards. It also outlines the roles and responsibilities of the supplier and the procedures for monitoring and ensuring compliance with Eskom's quality and safety standards. By adhering to this scope of work, suppliers will contribute to the reliable and safe operation of Hendrina Power Station's lift systems.

2. Supporting Clauses

2.1 Scope

This document provides a detailed scope of work for the supply and delivery of lift spares at Hendrina Power Station. The scope includes the procurement, delivery, and quality assurance of various lift components necessary for the maintenance and operation of all lifts within the station.

2.1.1 Purpose

The primary purpose of this document is to specify the technical requirements for supplying and delivering lift spares at Hendrina Power Station. This ensures that all lifts remain operational, safe, and compliant with regulatory standards.

2.1.2 Integrated Business Improvement objectives

This document applies throughout Eskom Hendrina Power Station for the supply of lift spares. It aims to improve operational efficiency, reduce downtime, and enhance the safety and reliability of lift operations.

2.2 Normative/Informative References

Parties using this document shall apply the most recent editions of the following references:

2.2.1 Normative

[1] ISO 9001: 2008, Applicable SABS standard

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[2] 240-75850027 lift Inspection Standard.

[3] Supplier Contract Quality Requirements Specification (QM58)

[4] Foreign Exchange and Commodity Procedure for Importing and Exportation of goods and services (32-1096)

[5] 240-76960420 Guideline for Spares Procurement Technical Evaluation and Quality inspection

2.2.2 Informative

[1] ISO 9000 Quality Management System – Fundamentals and Vocabulary

[2] 32-727 Safety, Health, Environment, and Quality (SHEQ) Policy

[3] Lift, Escalator and Passenger Conveyor Regulations, 2010

2.3 Definitions

N/A

2.4 Abbreviations

AR	As Required
SHEQ	Safety, Health, Environment, and Quality
ISO	International Organization for Standardization
SABS	South African Bureau of Standards
P/N	Part Number
OEM	Original Equipment Manufacturer
GSM	Global System for Mobile Communications
VAC	Volts Alternating Current
VDC	Volts Direct Current
KW	Kilowatt

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UA	Microampere
HT	Height
WD	Width
LG	Length
STL	Steel
ABS	Acrylonitrile Butadiene Styrene
PCB	Printed Circuit Board
IP	Ingress Protection

2.5 Roles and Responsibilities

Role	Responsibility
System Engineer	Responsible for compiling and reviewing the content requirements of this document.
Electrical Maintenance	Ensuring the requirements for supplying, delivering, testing, and repairing lift spares are met.
Quality Officer	Overseeing the quality assurance processes, ensuring that all lift spares meet the specified standards and regulatory requirements. Conducting inspections and audits to verify compliance.
Contract Manager	Managing the contract, coordinating with suppliers, and ensuring timely delivery of lift spares. Addressing any issues related to contract performance.
Safety Officer	Ensuring that all safety protocols are followed during the supply and delivery of lift spares. Conducting risk assessments and implementing safety measures.

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2.6 Process for Monitoring

This document shall be used as the main scope of work for supplying and delivering lift spares. All reviews shall follow the Hendrina Power Station main document center procedures.

2.7 Related/Supporting Documents

N/A

3. Specification

3.1 Supply and Deliver

The supplier is required to supply and deliver the following items as per the Contract Manager's requirements, limited to the maximum quantities specified in the table below:

Table 1: Cables to be supplied and the quantity for the duration of the contract.

Stock No.	Description	Quantity Required
0632812	LOCK: TYPE: ELEVATOR DOOR; DIMENSIONS: WD 53 X LG 147 MM; MATERIAL : STL; COLOR: BLACK; SUPPL P/N: 161	80
0666750	CONTROLLER: TYPE: INSPECTION BOX; RANGE: 0-110 VAC/DC; RATING: 110 V AC/DC; OUTPUT: MANUAL; MANUF P/N: MBA24831A001, 5720579; TOP OF CAR INSPECTION BOX WITH RED AND GREEN INDICATION STATUS; 12 POSITION TERMINAL BLOCK MOUNTED INSIDE OF COVER WITH WIRING SCHEMATIC CONVENIENTLY LOCATED INSIDE SIDE OF CASE	30
0691754	AMPLIFIER: TYPE: ELEVATOR; INPUT: 5-14 V; OUTPUT: 2-7 V; POWER: 10 UA; POTENTIAL: 15 V; CURRENT: 1 UA; OEM P/N: 1-P0812 E3; 7G5452-1-34016G; 32 PIN; WD 14 X LG 42 MM; PROGRAMMED ACCORDING TO OVF 20 LCB II BOARD PARAMETERS HSL3 AT27C010	60
0719448	CONTROLLER: TYPE: GSM QUAD BAND; RANGE: 10 SECONDS RECORDS; RATING: 12VDC, 7AMP, INPUT 220; APPLICATION: GSM LIFT INTERCOM; OUTPUT: 12VDC OPERATIONAL; MOUNTING: BOLTED; INPUT: 220; GSM LIFT INTERCOM EMERGENCY COMMUNICATION SYSTEM, OPERATED FROM PRE-PAID SIM CARDS. GUAD MODULE 10 SECONDS VOICE RECORD AND PLAYBACK FOR EMERGENCY BUTTON. 12VDC OPERATION WITH 7AMP BATTERY CHARGER. EXCEPTIONAL VOICE QUALITY. GSM ONLINE LED INDICATION. ALARM BUTTON	24

CONTROLLED DISCLOSURE

Stock No.	Description	Quantity Required
0632995	SMS CAN BE SENT TO UP TO 5 CELL PHONE. MAINS ON AND OFF REPORTING VIA SMS. SMALL LIFT SPEAKER AND LARGE EMERGENCY SPEAKER SENSOR: TYPE: ELEVATOR LEVEL; RANGE: 90 DEG C; RATING: 1.1 KW AT 16 A; ELECTRICAL CONNECTION: PLUG; MOUNT: SCREW; DIMENSIONS: WD 40 X LG 350 X HT 255 MM; SUPPL P/N: GAA22439E12; COMPLETE OTIS PRS FOR SH AFT-GAA22439W12	42
0632744	CONVERTER: TYPE: SEMICONDUCTOR; INPUT: 380 V 3 PH; OUTPUT: 0-400 V; MANUF P/N: GBA21150YW1; REFERENCE NO: 003867; SEMICONDUCTOR CONVERTOR; TYPE OVF 20IV; 22KW	10
0677899	GOVERNOR: TYPE: OVERSPEED; APPLICATION: ELEVATORS; MANUF P/N: LK200; NOMINAL SPEED 1M/S; TRIPPING SPEED 0.40 M/S; SUPPLY IN A SET WITH ALL ACCESSORIES	24
0632986	LOCK: TYPE: LIFT LANDING; DIMENSIONS: WD 80 X LG 210 MM; MATERIAL: PLASTIC/STL; COLOR: SILVER; SPECIFICATION: NL10-400-1002-125-01; SUPPL P/N: SPX-4	80
0632811	DOUBLE SLIDE; DIMENSIONS: WD 138 MM X LG 2.25 M X THK 80 MM; MATERIAL: STAINLESS STEEL; CONSTRUCTION: FIRE RETARDANT	12
0633102	GEARBOX: TYPE: DRIVE; RATIO: 1:58; SPEED: 1450 RPM; POWER: 22 KW; MANUF P/N: 10A02033/1	3
0633725	Elevator transformer C-CORE; 50 A; 220-240 VAC; 110-24 VAC output	30
0632988	SWITCH: TYPE: SHAFT; POTENTIAL: 240 VAC/DC; CURRENT: 16 A; CONTACT ARRANGEMENT: 1NO 1NC; ACTION: SP; MOUNT: SCREW; APPLICATION: BROKEN TAPE TRIPPER; SUPPL P/N: O-841D5; 6098D5	60
0732946	BRAKE CONTROL; VOLTAGE: 110 V; APPLICATION: LIFT BRAKES; MODEL NO:	
Stock no.	Description	Quantity required

CONTROLLED DISCLOSURE

0733000	LANDING INDICATOR; DIMENSIONS: HT 95 x LG 70 MM; MATERIAL: ACRYLONITRILE BUTADIENE STYRENE ABS; VIALS: 5 levels MM; MANUF P/N: IP56-686-228; RATING 24 TO 32 VDC, SPECIFICATION ISO 9001	128
0732713	ELEVATOR DOOR HEADER; DIMENSIONS: 2573 LENGTH MM; MATERIAL: MILD STEEL; SUPPL P/N: 19-AAA409JK2	16
0732947	DEVICE, INTELLIGENT ELECTRONIC: TYPE: LOAD CELL CONTROL; VOLTAGE: 65-440 V; APPLICATION: ELEVATORS; MODEL NO: SUMT-QZX(A); VER 2.0; 2000KG RATED LOAD.	40
0732948	BRAKE CONTROL; VOLTAGE: 97 -118 V; APPLICATION: PASSENGER LIFT; MANUF P/N: FRENO 30B0/1	20
0718733	LIFTS CAR FLOORING ALUMINIUM TREAD PLATE CHEQUER KICK PLATE TREAD PLATE 5BAR SHEET CHECKER 5754-H114 2500MM X 1250MM DIMENSIONS. EXCELLENT CORROSION RESISTANCE. MATERIAL ALUMINIUM 5754. THICKNESS OF 6MM.	150
0632255	CONVERTER: TYPE: SEMICONDUCTOR; INPUT: 380-480 V; OUTPUT: 15 KW; APPLICATION: LIFT DRIVE; MANUF P/N: GAA21344G1; PHASE INPUT 3AC; PHASE OUTPUT 3AC; FREQUENCY INPUT 50 TO 60 HZ; FREQUENCY OUTPUT 0 TO 60 HZ; VOLT INPUT 380 TO 480; VOLT OUTPUT 0 TO U INPUT; AMPS RATED INPUT 40A; AMPS RATED OUTPUT 45A; AMPS MAXIMUM 60A; AMPS MAXIMUM 90A	6
0654646	CONTROLLER, ELECTRONIC: TYPE: LEVEL ENCODER; POTENTIAL: 220 V; OUTPUT: 24 VAC; INPUT: 24 VAC; MOUNTING: PLUG IN; SUPPL P/N: GGA21240D10	40

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0718835	TREAD PLATE CHEQUER; LIFTS CAR WALL INTERIOR ALUMINIUM TREAD SHEET CHEQUER KICK PLATE TREAD PLATE 5BAR SHEET CHECKER	128
0677902	BOARD, PRINTED CIRCUIT: TYPE: COMMUNICATION; FEATURES: LIFTS; SPECIFICATION: ISO9001; OEM P/N: RS18	60
0633106	BOARD: TYPE: PCB; WIDTH: 220 MM; LENGTH: 240 MM; THICKNESS: 1.5 MM; MATERIAL: GLASS PROXY RS14 communication board	300
0691758	Rubber buffers SPRING; MATERIAL: POLYURATHANE; DIMENSIONS: DIA 140 X HT 210 MM; SUPPL P/N: P2-60219 03 03 0; USED ON LIFTS WITH SPEED UP TO 1 M/S AND LOADS UP TO 3200 KG	24
0719496	CONTROLLER: TYPE: GSM QUAD BAND; RANGE: 5 LEVELS MM; RATING: 24VDC; APPLICATION: ELEVATORS; OUTPUT: 24VDC OPERATIONAL; MOUNTING: BOLTED; INPUT: 24; INFORMATION THAT WILL APPEAR ON THE PO) CAR CALLS. FIVE LANDINGS LEVEL 1 TO 5 STATING FROM GROUND FLOOR. ALARM/GSM AND DOOR OPEN BUTTONS. DIMENSION HEIGHT = 800MM, WIDTH=200MM; BUTTONS HOLES 20MM; LOAD CONTROL DEVICE INDICATION; LEVEL AND UP/DOWN INDICATIONS, ALARM SPEAKER; LOCKS (IN-SERVICE, FAN SERVICE, LIGHT) LIFTS CABIN OPERATING PANEL, COP. GIVES THE COMMAND OF LANDING CALLS AND GIVES INDICATION FOR OFFERING	24
0653388	RETIRING CAM; MATERIAL: STL; APPLICATION: ELEVATORS; SUPPL P/N: EMT17; POTENTIAL: 110VDC; 100PCT ED-6090898	24
0718799	EMERGENCY LIGHT UNIT; VOLTAGE: 12; CURRENT: 1 A; POWER: 220 V; BATTERY TYPE: SEALED LEAD ACID; BATTERY QUANTITY: 1; LAMP TYPE: LED; LAMP QUANTITY: LED; TERMINAL TYPE: SCREW; MOUNTING METHOD: SCREW; APPLICATION: LIFTS CAR; COMPLETE EMERGENCY LIGHT UNIT EML0103/Q PCB, QUAD SOUND BOMB, 12VDC 7AH BATTERY TO INSIDE.	30
0677896	ENCODER: TYPE: ROTARY INCREMENTAL; CLASSIFICATION: IP65; POTENTIAL: 24 V; CURRENT: 30 MA; POWER: 0.72 W; SPECIFICATION: ISO9001; MANUF P/N: KS48-8-102ZT-1	40
0719495	DEVICE: TYPE: AUXILIARY CONTACT; APPLICATION: LIFT DOOR; ELEVATOR LOCK CONTACT HALL DOOR AUXILIARY SWITCH LIFT ACCESSORIES. VOLTAGE 220VAC. MODEL AQ1H78. CONTACT POINTS X 2	80

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0666028	ELEVATOR LIFT CAR; OUTPUT: 3 A; MOUNTING: BOLTED; INPUT: AC; SUPPL P/N: GBA24350BH 1; SEMICONDUCTOR CONVERTER: TYPE: DCSS5-E, PART NO: GBA2435DBH1IP20	50
0666329	Door Encoder: TYPE: TACHOMETER; CLASSIFICATION: IPX4; POTENTIAL: 24 V; CURRENT: 50 MA; POWER: 40 W; SUPPL P/N: AAA633AE1/DAA63321	40
0655746	GEARBOX: REDUCER;01.16;1440 RPM;11 KW	4
0691797	PULLEY GRV: TRACTION SHEAVE;125 MM;OD 750	5
0741965	ROPE: MATERIAL: STEEL WIRE; DIMENSIONS: DIA 8 MM; STRUCTURE: A GRADE; STRENGTH: 1620 MPA; TYPE: OVERSPEED GOVERNOR; SPECIFICATION: ISO4344 EN12385; ISO 4344 COMPLIANCE, TRACTION SHEAVE LIFTING SPEED LESS THAN 2.5M/S. 30.4KN BRAKING LOAD. SYNTHETIC FIBRE CORE, 8 STRAND, STRAND CONSTRUCTION SEALE. 100% QUALITY ASSURANCE, LONG SERVICE LIFE.	1600m
0741961	ROPE: MATERIAL: STEEL; DIMENSIONS: DIA 16 MM; STRUCTURE: A GRADE; STRENGTH: 1620 MPA; TYPE: ELEVATORS; SPECIFICATION: ISO4344 EN12385; MINIMUM BREAKING LOAD 133KN. TRACTION SHEAVE LIFTING SPEED LESS THAN 2.5M/S. MADE NATURAL FIBLE CORE, STRAND CONTRUCTION SEALE, BRIGHT(UNGALVANIZED). HIGH ADAPTABILITY. 100% QUALITY ASSURANCE, LONG SERVICE LIFE.	5600m
0741973	CLOSER: TYPE: HEAVY DUTY GRADE 1; DIMENSIONS: LG 311 X WD 85 MM; MATERIAL: ALUMINIUM; APPLICATION: ELEVATOR DOOR; STYLE: BI DIRECTIONAL; MANUF P/N: LH816; 5000 OPENINGS PER DAY. ADJUSTABLE CLOSING FORCE. FIRE RATED, PARALLEL MOUNTING.	80
0742143	BELT: TYPE: ELEVATOR DOOR; WIDTH: 30 MM; LENGTH: 5 M; THICKNESS: 8 MM; MATERIAL: RUBBER; COMMERCIAL SIZE: 5M; COLOR: BLACK; MANUF P/N: 535-5M-15	300m
0741941	CONTROLLER: TYPE: TWO SPEED AC; RANGE: 9 KW; RATING: 25A; APPLICATION: PASSENGER ELEVATOR; OUTPUT: 9 KW; MOUNTING: BOLTED; INPUT: 380 V; MANUF P/N: GBA21150D1 9KW; CAT NO: OVF20 9KW	5
0675255	FAN, ELECTRIC: TYPE: EXTRACTION; SIZE: SQ 300 MM; POTENTIAL: 230 V; CURRENT: 0.17 A; VOLUME RATING: 360 DM3/HR; INSULATION CLASS: IP20; BLADE LENGTH: 300 MM; SUPPL P/N: FB3P	60

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0633083	ROLLER: TYPE: LIFT UPER HANGER; DIMENSIONS: DIA 85 X HT 20.5 X WD 20 MM; PART NO: FDA2215Z72	150
633085	PUSH BUTTON: TYPE: SWITCH; PART NO: GB2-EW3561	60
633084	GUIDE: TYPE: LIFT CAR DOOR; DIMENSIONS: SQ 18 MM; MATERIAL: PLASTIC; PART NO: FAA5390131	150
0677901	DEVICE: TYPE: LH SAFETY GEAR; APPLICATION: TRACTION ELEVATOR; MANUF P/N: AP672BB; WD 200 X LG 100 X THK 17MM	30
0755814	15KW MCS220 GEN 2 MICROPROCESSOR CONTROLLER STATION, COMPLETE WIRED SET WITH OVF20 15KW DRIVE AND LCBII BOARD WITH PARAMETERS. AC SPEED 1 M/S. TWO SPEED. THE RANGE PERIPHERAL CONSISTS OF ERO-BOX, MACHINE ROOM WIRING, SPEED ENCODER FOR OVF20, POSITION REFERENCE SYSTEM AND AUXILLIARY TRAVELLING CABLE FOR PRS.	6
0755796	22KW MCS220 GEN 2 MICROPROCESSOR CONTROLLER STATION, COMPLETE WIRED SET WITH OVF20 15KW DRIVE AND LCBII BOARD WITH PARAMETERS. AC SPEED 1 M/S. TWO SPEED. THE RANGE PERIPHERAL CONSISTS OF ERO-BOX, MACHINE ROOM WIRING, SPEED ENCODER FOR OVF20, POSITION REFERENCE SYSTEM AND AUXILLIARY TRAVELLING CABLE FOR PRS.	4
0755782	COUNTERWEIGHT SOLID GUIDE SHOE, 600020. SPL C-3033. GUIDE ENGAGEMENT LENGTH = 152MM.	60
0755820	ELEVATOR CAR TRACTION BOTTOM GUIDE SHOE, SIZE 200MM, F6261C7 RAIL APPLICATION.	60
0755780	LIFT CONTROLLER RELAY 110VAC COIL VOLTAGE 50HZ, 4NO 4NC 22E, EN 50011 3TH4022. 400V RATED OPERATING VOLTAGE. PROTECTION CLASS IP00	250
0755822	LIFT CONTROLLER RELAY 24VDC COIL VOLTAGE, 4NO 4NC 22E, EN 50011 3TH4262. 400V RATED OPERATING VOLTAGE. PROTECTION CLASS IP00	250

4. SHEQR requirements

The SHEQ (Safety, Health, Environment, and Quality) requirements for the supply and delivery of lift spares at Hendrina Power Station are as follows:

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1. Safety:

- All work must comply with Eskom's safety standards and regulations.
- Suppliers must conduct risk assessments and implement appropriate safety measures to prevent accidents and injuries.
- Personal protective equipment (PPE) must be worn by all personnel involved in the delivery and handling of lift spares.

2. Health:

- Suppliers must ensure that all activities are conducted in a manner that protects the health of workers and minimizes exposure to hazardous materials.
- Regular health checks and monitoring should be conducted for personnel involved in the project.

3. Environment:

- Suppliers must adhere to environmental regulations and policies to minimize the environmental impact of their activities.
- Waste generated during the supply and delivery process must be managed and disposed of in an environmentally responsible manner.
- Efforts should be made to reduce emissions and conserve resources.

4. Quality:

- All lift spares supplied must meet the specified quality standards and be free from defects.
- Suppliers must implement a quality management system in accordance with ISO 9001:2015 standards.
- Quality control plans must be developed and approved before the commencement of work.
- Inspections and audits will be conducted to ensure compliance with quality requirements.

By adhering to these SHEQ requirements, suppliers will contribute to the safe, healthy, environmentally responsible, and high-quality operation of Hendrina Power Station's lift systems.

5. Records to be Kept.

Here are the records that must be kept for the supply and delivery of lift spares:

- **Purchase Orders:** Documentation of all purchase orders issued for lift spares.
- **Delivery Notes:** Records of all deliveries made, including dates, quantities, and condition of items received.
- **Inspection Reports:** Detailed reports of inspections conducted on received lift spares to ensure they meet quality standards.
- **Quality Control Plans:** Approved quality control plans outlining the procedures and standards for ensuring the quality of lift spares.

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- **Compliance Certificates:** Certificates demonstrating compliance with ISO 9001:2015 and other relevant standards.
- **Risk Assessments:** Documentation of risk assessments conducted to identify and mitigate potential hazards.
- **Safety Records:** Records of safety measures implemented and any incidents or accidents that occurred during the supply and delivery process.
- **Environmental Impact Reports:** Reports detailing the environmental impact of the supply and delivery activities and measures taken to minimize this impact.
- **Health Monitoring Records:** Records of health checks and monitoring conducted for personnel involved in the project.
- **Communication Logs:** Logs of all communications between the supplier, contract manager, and other stakeholders.
- **Audit Reports:** Reports from audits conducted to verify compliance with SHEQ requirements and other contractual obligations.
- **Training Records:** Documentation of training provided to personnel on safety, quality, and environmental procedures.
- **Maintenance Records:** Records of any maintenance performed on the lifts as part of the supply and delivery process.
- **Final Acceptance Documents:** Signed documents indicating the final acceptance of the lift spares by the contract manager or relevant authority.

These records ensure transparency, accountability, and compliance with all contractual and regulatory requirements.

6. Notes / Forms / Appendices /Annexures

Annexure A - Supplier Contract Quality Requirement Specification (QM58)