

Title: **Scope of Work for Supply and  
Delivery of Valve Spares**

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## **1. INTRODUCTION**

This document defines the contract works to be executed by the successful bidder, of which is evaluated and selected using the Tender Technical Evaluation process. The Scope of Work (SOW) for this contract entails the supply and delivery requirements of valve spares for the outside plant at Hendrina Power Station. These services will be outsourced to a suitably qualified, experienced, and well-established contractor on an as and when required basis.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

The scope comprises of, but is not limited to, the supply and delivery of all required ash handling plant piping spares such as pipes, flanges, couplings, etc. All spares supplied must be accompanied by quality control documentation.

#### **2.1.1 Purpose**

The purpose of this scope of work is to outline all the spare materials required, the contract work to be performed by the contractor, and the responsibilities of all parties involved. The contract scope of work serves to support the tender technical evaluation process.

#### **2.1.2 Applicability**

This document is applicable to Hendrina Power Station.

### **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] 240-168966153: Generation Tender Technical Evaluation Procedure
- [2] HSTTPMM057 Tender Technical Evaluation Strategy for Supply and Delivery of Valve Spares
- [3] QM-58 Supplier Contract Quality Requirements Specifications
- [4] 240-105691858: Materials Management Safe Work Procedures Transportation Requirements for Material Handling

#### **2.2.2 Informative**

- [5] ISO 9001 Quality Management Systems
- [6] 32-1-34 Eskom Procurement Policy

### **2.3 DEFINITIONS**

<b>Term</b>	<b>Definition</b>
Contractor	Service provider contracted for supplying a specific service to Eskom Hendrina Power Station. Used interchangeably with the term <i>Supplier</i> .
Employer	The organization (Eskom) to which the supplier will be contracted for this tender and contracts that may result therefrom
Employer's Premises	Hendrina Power Station

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<b>Term</b>	<b>Definition</b>
Industrial Storage Facility	Physical space suitable for the storage of the items specified in the scope of work
Returnable	Document submitted by tenderer for evaluation in support of tender bid
Spares	Parts that can be used for replacement, including the whole valve as a unit.

### 2.3.1 Classification

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

### 2.4 ABBREVIATIONS

<b>Abbreviation</b>	<b>Description</b>
μ	Micro
BS	British Standard
CI	Cast Iron
CS	Carbon Steel
DI	Ductile Iron
FPT	Female Pipe Thread
GI	Galvanized Iron
kPa	Kilopascal
LG	Length
m	Metre
mm	Millimetre
MPT	Male Pipe Thread
OD	Outer Diameter
OEM	Original Equipment Manufacturer
ID	Inner Diameter
IN	Inch
ISO	International Organisation of Standardisation
QCP/QIP	Quality Control Plan / Quality Inspection Plan
PS	Power Station
SABS	South African Bureau of Standards
SCRWD	Screwed
SOW	Scope of Work
SS	Stainless Steel
STL	Steel
TET	Technical Evaluation Team
THD	Threaded

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## 2.5 ROLES AND RESPONSIBILITIES

### 2.5.1 The Employer

The responsibilities of the employer include the following:

- a) Make all necessary arrangements, including permit to work (PTW), for the contractor to gain site access and perform work required.
- b) Send a representative to the contractor's premises/workshop if there are any inspection, witness, or hold points.

### 2.5.2 Contractor

The responsibilities of the employer include the following:

- a) Comply with the employer's environmental, health, and safety standards, policies, and procedures.
- b) Inform the employer's representative at least 48 hours prior to any hold points that may require the employer.

## 2.6 PROCESS FOR MONITORING

N/A

## 2.7 RELATED/SUPPORTING DOCUMENTS

N/A

## 3. SCOPE OF WORK

The contractor's scope of work includes the supply and delivery of the spares listed in *table 1*, as well as the following:

- Transport the valve from site within 24 hours after notification from the employer's representative.
- All parts to be suitably marked and stored in suitable containers or in a manner such that the parts may not incur accidental damage.
- Submit scope of work based on inspection report, as well as a QCP for the works to be performed to the employer's representative.
- Submit a comprehensive quotation alongside a time schedule for the works to be executed to the employer's representative for acceptance/approval.
- Transport the valves and valve components to site.

### 3.1 EFFECTIVE DATE

This document will be effective from the date that the contract is authorised.

### 3.2 WORKS

A list of the valves to be supplied and delivered by the contractor upon notification is shown on *table 1* below.

**Note:** All valve sizes are specified in nominal size (i.e., Nominal Bore, NB) unless otherwise stated.

## CONTROLLED DISCLOSURE

Table 1: Spares List

0717865	VALVE: FIRE HYDRANT; 80 NB INLET - 65 NB OUTLET	VALVE: TYPE: FIRE HYDRANT; VALVE SIZE: 80 INLET - 65 OUTLET MM; DESIGN RATING: 1600 KPA; TEMPERATURE RATING: 45 DEG; CONNECTION: FLANGE; OPERATED: MANUAL; BODY MATERIAL: CAST IRON; SPECIAL FEATURES: TEMPER PROOF; VALVE: TYPE. FIRE HYDRANT RIGHT ANGLE VALVE SIZE 80 MM INLET X 65MM OUTLET-CONNECTION FLANGE OBLIQUE DIA 18MM, PCD 146MM BS10 TABLE D 4 HOLES AT 18MM DRILLED: DOUBLE OPPOSING LOG-C1 BODY MATERIAL SUPPLIED COMPLETE WITH T KEY: TEMPER PROOF
0500080	DIAPHRAGM VLV: DIA 50 NB MM; BUTYL RUBBER; A	DIAPHRAGM, VALVE: DIMENSIONS: DIA 50 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 50 MM; VALVE TYPE: A; WTP, A TYPE
0500082	DIAPHRAGM VLV: DIA 90 NB MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 90 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 90 MM; WTP, A TYPE
0500083	DIAPHRAGM VLV: DIA 100 NB MM; BUTYL RUBBER; A	DIAPHRAGM, VALVE: DIMENSIONS: DIA 100 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 100 MM; VALVE TYPE: A; WTP, A TYPE
0500089	DIAPHRAGM VLV: DIA 125 MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 125 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 125 MM; WTP, A TYPE
0500092	DIAPHRAGM VLV: DIA 100 MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 100 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 100 IN; WTP, KB TYPE
0500093	DIAPHRAGM VLV: DIA 150 MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 150 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 150 MM; WTP, A TYPE
0500094	DIAPHRAGM VLV: DIA 80 MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 80 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 80 MM; WTP, A TYPE
0500095	DIAPHRAGM VLV: DIA 125 MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 125 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 125 MM; WTP, KB TYPE
0500096	DIAPHRAGM VLV: DIA 200 MM; BUTYL RUBBER	DIAPHRAGM, VALVE: DIMENSIONS: DIA 200 MM; MATERIAL: BUTYL RUBBER; VALVE SIZE: 200 MM; WTP, KB TYPE
0717867	VALVE: STRAIGHT THROUGH; 1600 KPA; 45 DEG	VALVE: TYPE: STRAIGHT THROUGH; VALVE SIZE: 80 INLET-65 OUTLET MM; DESIGN RATING: 1600 KPA; TEMPERATURE RATING: 45 DEG; CONNECTION: FLANGE; OPERATED: MANUAL; BODY MATERIAL: CAST IRON; STYLE: STRAIGHT THROUGH; VALVE: TYPE. FIRE HYDRANT STRAIGHT THRU VALVE SIZE 80 MM INLET X 65MM OUTLET-CONNECTION FLANGE OBLIQUE DIA 18MM, PCD 146MM BS10 TABLE D 4 HOLES AT 18MM DRILLED: DOUBLE OPPOSNG LOG-C1 BODY MATERIAL SUPPLIED COMPLETE WITH T KEY: TEMPER PROOF.
063568	VALVE DIAPH:80 MM;10 BAR; FLANGE; CI; GR Q	VALVE, DIAPHRAGM: VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; UNDRILLED; TYPE: SAUNDERS A, BONNET COMPLETE WITH BALL THRUST

**CONTROLLED DISCLOSURE**

		BEARINGS, PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY
063597	VALVE GATE:80 MM; WEDGE; THD; BRS; HANDWHEEL	VALVE, GATE: VALVE SIZE: 80 MM; TYPE: WEDGE; CONNECTION: THD; BODY MATERIAL: BRS; OPERATED: HANDWHEEL; STEM DESIGN: NON RISING; STYLE: THD BONNET; TEMPERATURE RATING: 175 DEG C; DESIGN RATING: 2000 KPA; REFERENCE NO: CLASS 125, UNK; TRIM DISC AND STEM; SUPPLIER NOTE TO BE SUPPLIED ACCORDING TO S.A.B.S. SPECIFICATION WITH A PRESSURE CERTIFICATE
063668	VALVE, CHECK: SWING;25 MM;25 BAR; THD; BRS	VALVE, CHECK: TYPE: SWING; VALVE SIZE: 25 MM; DESIGN RATING: 25 BAR; CONNECTION: THD; BODY MATERIAL: BRS; STYLE: THD CAP; TRIM: DISC/SEAT GUNMETAL; SUPPLIER NOTE-THE ITEM MUST BE PROTECTIVE PACKED AND CLEARLY MARKED, TEMPERATURE RATING 10.5 BAR @ 186 DEG C
063802	VALVE GATE:50 MM; WEDGE; THD; BRS	VALVE, GATE: VALVE SIZE: 50 MM; TYPE: WEDGE; CONNECTION: THD; BODY MATERIAL: BRS; TRIM: DISC/STEM BRS; OPERATED: HANDWHEEL; STEM DESIGN: NON RISING; STYLE: THD BONNET; TEMPERATURE RATING: 198 DEG C; DESIGN RATING: 1600 KPA; REFERENCE NO: 1070-125, UNK; SUPPLIER NOTE; TO BE SUPPLIED ACCORDING TO S.A.B.S. SPECIFICATION WITH A PRESSURE CERTIFICATE
073231	VALVE GATE:250 MM; FLANGE; CI; HANDWHEEL	VALVE, GATE: VALVE SIZE: 250 MM; CONNECTION: FLANGE; BODY MATERIAL: CI; TRIM: WEDGE SGI NBR COVERED; OPERATED: HANDWHEEL; SOFTGOODS: STL; SEAL RESILIENT; STEM DESIGN: RISING; STYLE: BOLTED BONNET; TEMPERATURE RATING: 90 DEG C; DESIGN RATING: 16 BAR; FIG NO: 9754; DOUBLE FLANGED; CLOCKWISE CLOSING; DRILLED TO T10; PRESSURE TEST CERTIFICATES TO BE SUPPLIED ON DELIVERY
073260	VALVE DIAPH:100 MM;10 BAR; FLANGE; CI	VALVE, DIAPHRAGM: VALVE SIZE: 100 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: GR 300/214; OPERATED: HANDWHEEL; STYLE: WEIR; SOFT RUBBER LINED; MAKE: SAUNDERS TYPE A; DRILLED TO TABLE D; PRESSURE TEST CERTIFICATE TO BE SUBMITTED ON DELIVERY
073339	VALVE DIAPH:125 MM;10 BAR; FLANGE; CI/STL	VALVE, DIAPHRAGM: VALVE SIZE: 125 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 85 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI/STL; DIAPHRAGM MATERIAL: GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; DRILLED TABLE D; SOFT RUBBER LINED, PRESSURE TEST CERTIFICATE TO BE SUPPLIED ON DELIVERY
0591442	VALVE PINCH: ISOLATING;150 MM;10 BAR	VALVE, PINCH: TYPE: ISOLATING; VALVE SIZE: 150 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 375 MM; OPERATED: ACTUATED; SPECIFICATION: PVE150AV10-803L; VALVE TO HAVE POSITION INDICATOR; FLANGED TO BE BS 10 TABLE D; 8 HOLES ON THE FLANGE; AIR TO OPEN SPRING TO CLOSE; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR

**CONTROLLED DISCLOSURE**

0591443	VALVE PINCH: ISOLATING;150 MM;10 BAR	VALVE, PINCH: TYPE: ISOLATING; VALVE SIZE: 150 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 375 MM; OPERATED: ACTUATED; REFERENCE NO: PVE150AV10; VALVE TO HAVE POSITION INDICATOR; FLANGED TO BE BS 10 TABLE D; 8 HOLES ON THE FLANGE; AIR TO CLOSE SPRING TO OPEN; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0591468	VALVE PINCH: ISOLATING;125 MM;10 BAR	VALVE, PINCH: TYPE: ISOLATING; VALVE SIZE: 125 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 310 MM; OPERATED: ACTUATED; SPECIFICATION: PVE125AV10-803L; VALVE TO HAVE POSITION INDICATOR; FLANGES TO BE BS 10 TABLE D; 8 HOLES ON THE FLANGE; AIR TO CLOSE SPRING TO OPEN; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0591479	VALVE PINCH: ISOLATING;100 MM;10 BAR	VALVE, PINCH: TYPE: ISOLATING; VALVE SIZE: 100 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGED; FACE TO FACE LENGTH: 250 MM; OPERATED: ACTUATED; SPECIFICATION: PVE100AV10-803L; VALVE TO HAVE POSITION INDICATOR; FLANGES TO BE BS10 TABLE D; 4 HOLES ON THE FLANGE; AIR TO CLOSE SPRING TO OPEN; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0591480	VALVE PINCH: ISOL;100 MM;10 BAR; EPDM10	VALVE, PINCH: TYPE: ISOL; VALVE SIZE: 100 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 250 MM; OPERATED: ACTUATED; SPECIFICATION: PVE100AV10-803L; VALVE TO HAVE POSITION INDICATOR; FLANGED TO BE BS 10 TABLE D; 4 HOLES ON THE FLANGE; AIR TO OPEN SPRING TO CLOSE; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0591481	VALVE PINCH: ISOLATING;200 MM;10 BAR	VALVE, PINCH: TYPE: ISOLATING; VALVE SIZE: 200 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 500 MM; OPERATED: ACTUATED; SPECIFICATION: PVE200AV10-803L; VALVE TO HAVE POSITION INDICATOR; FLANGED TO BE BS10 TABLE D; 8 HOLES ON THE FLANGE; AIR TO CLOSE SPRING TO OPEN; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0591482	VALVE PINCH: ISOLATING;80 MM;10 BAR	VALVE, PINCH: TYPE: ISOLATING; VALVE SIZE: 80 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 200 MM; OPERATED: ACTUATED; SPECIFICATION: PVE80AV10; VALVE TO HAVE POSITION INDICATOR;

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		FLANGED TO BE BS 10 TABLE D; 4 HOLES ON THE FLANGE; AIR TO OPEN SPRING TO CLOSE; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0591483	VALVE PINCH: ISOL;80 MM;10 BAR; EPDM10	VALVE, PINCH: TYPE: ISOL; VALVE SIZE: 80 MM; WORKING PRESSURE: 10 BAR; TEMPERATURE RANGE: -10 TO 175 DEG C; BODY MATERIAL: CI EPOXY COATED; GRADE: EPDM10; SLEEVE MATERIAL: EPDM; CONNECTION TYPE: FLANGE; FACE TO FACE LENGTH: 200 MM; OPERATED: ACTUATED; SPECIFICATION: PVE80AV10-803L; VALVE TO HAVE POSITION INDICATOR; FLANGED TO BE BS 10 TABLE D; 4 HOLES ON THE FLANGE; AIR TO CLOSE SPRING TO OPEN; ENCLOSED VALVE BODY; AIR PRESSURE 5 TO 6 BAR
0070912	VALVE BTRFLY: WAFER;150 MM;1000 KPA; CI	VALVE, BUTTERFLY: TYPE: WAFER; VALVE SIZE: 150 MM; DESIGN RATING: 1000 KPA; CONNECTION: COMPRESSION; BODY MATERIAL: CI; FACE TO FACE LENGTH: 54 MM; OPERATED: HANDWHEEL, GEARBOX; TRIM: DISC SS; SEAT RUBBER; TEMPERATURE RATING AMBIENT; RUBBER LINED; FITTED WITH GEARBOX; OPERATING PRESS 8BAR; APPLICATION DEMIN AND RAW WATER; PRESSURE TEST CERTIFICATE TO BE SUBMITTED/SUPPLIED
0063950	VALVE DIAPH:80 MM;10 BAR; FLANGE; CI; GR Q	VALVE, DIAPHRAGM: VALVE SIZE: 80 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: -10 TO 100 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: GR Q; OPERATED: HANDWHEEL; STYLE: WEIR; HARD RUBBER LINED; SAUNDERS; TYPE: A; VIBRATION BONNET; RISING SPINDLE INDICATOR, FLANGES DRILLED TO B.S TABLE D, PRESSURE TEST CERTIFICATE TO BE SUBMITTED/SUPPLIED
0073264	VALVE DIAPH: STRAIGHT WAY;50 MM;10 BAR; CI	VALVE, DIAPHRAGM: TYPE: STRAIGHT WAY; VALVE SIZE: 50 MM; DESIGN RATING: 10 BAR; TEMPERATURE RATING: 5-140 DEG C; CONNECTION: FLANGE; BODY MATERIAL: CI; DIAPHRAGM MATERIAL: GR 214/226/300; OPERATED: HANDWHEEL; REFERENCE NO: CV167; GLASS LINED; KB; SAUNDERS; DRILLED BST TABLE D; PRESSURE TEST CERTIFICATES TO BE SUPPLIED ON DELIVERY
0232842	VALVE GATE:300 MM; WEDGE;16 BAR; -10 TO 40	VALVE, GATE: VALVE SIZE: 300 MM; TYPE: WEDGE; DESIGN PRESSURE: 16 BAR; DESIGN TEMPERATURE: -10 TO 40 DEG C; CONNECTION: FLANGE; FACE TO FACE LENGTH: 305 MM; BODY MATERIAL: CI; TRIM: CI; OPERATED: HANDWHEEL; SOFTGOODS: ASB GRAPHITE; STEM DESIGN: RISING SPINDLE; STYLE: BOLTED BONNET; TEMPERATURE RATING: 80 DEG C; APPLICATION: ASH WATER; GRADE: SG42; DESIGN RATING: 16 BAR; PITCH CIRCLE DIAMETER 406 MM; DRILLED TO TABLE HOLE INSIDE DIAMETER 22 MM; 12 HOLE; FOR ASH PLANT; PRESSURE TEST CERTIFICATE TO BE SUPPLIED WITH DELIVERY; EACH TO BE DELIVERED WITH A UNIQUE IDENTIFICATION NUMBER WHICH WILL APPEAR ON THE TEST CERTIFICATE
0073156	VALVE GATE:250 MM; RESILIENT SEATED; DI	VALVE, GATE: VALVE SIZE: 250 MM; TYPE: RESILIENT SEATED; CONNECTION: FLANGE; FACE TO FACE LENGTH: 273 MM; BODY MATERIAL: DI; TRIM: CI; OPERATED: HANDWHEEL; SOFTGOODS: ASB GRAPHITE; STEM DESIGN: RISING SPINDLE; STYLE:

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		BOLTED BONNET; TEMPERATURE RATING: AMBIENT; DESIGN RATING: 16 BAR; FIG NO: 9654; TEMPERATURE RATING AMBIENT; SLUICE; CLASS 2C; FLANGED AND DRILLED TO BS 10/D; PRESSURE TEST CERTIFICATES TO BE SUPPLIED ON DELIVERY
0624885	VALVE: SLIDING GATE;200 MM;16 BAR; FLANGE	VALVE: TYPE: SLIDING GATE; VALVE SIZE: 200 MM; DESIGN RATING: 16 BAR; TEMPERATURE RATING: 25 DEG C; CONNECTION: FLANGE; OPERATED: HAND; BODY MATERIAL: CRS HIGH; DUAL SLIDE GATE VALVE WITH PROTECTIVE PLASTIC COVER; NON-RISING SPINDLE; NOMINAL BORE 200 MM; FACE TO FACE 156 MM; PCD 324 MM; 8 HOLES; HOLE DIAMETER 16MM
0642486	VALVE GATE:300 MM; ROTATING DISC;16 BAR	VALVE, GATE: VALVE SIZE: 300 MM; TYPE: ROTATING DISC; DESIGN PRESSURE: 16 BAR; DESIGN TEMPERATURE: 60 DEG C; CONNECTION: FLANGE BS 10 TABLE D; FACE TO FACE LENGTH: 305 MM; BODY MATERIAL: CAST IRON; TRIM: ROCK TUFF; OPERATED: MANUAL; HIGH CHROME CAST IRON; HANDWHEEL OPERATED WITH EXTENDED SPINDLE 1.8M MEASURED FROM HANDWHEEL TO VALVE BODY CENTRELINE; VALVE TO UNDERGO STATIC PRESSURE TEST ACCORDING TO ESKOM REQUIREMENTS BEFORE DELIVERY

### 3.3 MATERIAL CERTIFICATES AND GUARANTEES

The following documentation must be supplied to the *Employer's* representative before any item is accepted on site:

- Material Certificate for all valves
- Applicable guarantee/warranty, where applicable.

### 3.4 GENERAL REQUIREMENTS

Other valve related spares not listed in the spares list can and will be required on an as and when basis subject to approval by both the *employer* and the *contractor*.

#### 3.4.1 Storage

The *contractor* must have a suitably sized storage facility where a minimum amount of all the spares listed in section 3.2 are to be kept for when the *Employer* requires them urgently. It is the responsibility of the *contractor* to ensure the safekeeping of spares, and that the quality of spares is not negatively impacted whilst in storage.

#### 3.4.2 Handling And Transportation

The *contractor* is expected to practice safe handling techniques during the onloading, offloading, and throughout the transportation of the spare listed in section 3.2. The *Employer's* representative will not accept responsibility for any damaged items upon delivery.

Should the delivered spares be found to be defective or non-functional during or after delivery, the contractor remains responsible for the handling and transportation during the replacement process of the item(s).

## 4. AUTHORISATION

This document has been seen and accepted by:

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## **5. REVISIONS**

## **6. DEVELOPMENT TEAM**

The following people were involved in the development of this document:

## **7. ACKNOWLEDGEMENTS**

N/A

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