

	<b>Scope of Work</b>	<b>Tutuka Power Station</b>
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**Title: Tutuka Power Station Supply and Delivery of Various Boiler Tubes**

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## **1. Introduction**

The Boiler tubing spares are installed in all units at Tutuka Power Station. This document therefore specifies the scope of work that will be an input for the open tender contract between Eskom – Tutuka power Station and service provider for the Supply and Delivery of Various Boiler tubing stock items at Tutuka Power Station for five years on an “As and When “required basis.

## **2. Supporting Clauses**

### **2.1 Scope**

This document specifies the scope of work that will be an input to a contract between Eskom – Tutuka power Station and service provide for the supply and delivery of various Boiler tubing for stock items at Tutuka Power Station for five years on an “as and when “required basis.

#### **2.1.1 Purpose**

The purpose of the document is to provide technical governance in terms of a scope of work supply and delivery of various Boiler tubing for stock items at Tutuka Power Station. This document is intended to be the input to the NEC Part 3: Scope of Work.

#### **2.1.2 Applicability**

This document is applicable to Tutuka Power Station and services provide to supply and delivery of various boiler tubing.

#### **2.1.3 Effective date**

This document will be effective from the date of its authorisation.

## **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] ISO 9001 Quality Management Systems

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[2] Occupational Health and Safety Act (Osh Act; Act 85 of 93)

[3] 36-681 Generation Plant Safety Regulations

[4] 32-727 SHEQ Policy

[5] 240-84513751: Material Specification and Certification Guideline for Power Generation Plant

### **2.2.2 Informative**

N/A

### **2.3 Definitions**

<b>Definition</b>	<b>Explanation</b>
Contractor	Service provider contracted to provide a specific spares & documentation to Tutuka Power Station. Referred to as the Supplier on this document.
Employer	Tutuka Power Station
Disclosure Classification	Controlled Disclosure to external parties (either enforced by law, or discretionary).

### **2.4 Abbreviations**

<b>Abbreviation</b>	<b>Description</b>
ISO	International Organisation for Standardisation
BOQ	Bill of Quantities
NEC	New Engineering Contracts suites
OEM	Original Equipment Manufacturer
OHS	Occupational Health & Safety
SHEQ	Safety, Health, Environmental & Quality
SOW	Scope Of Work

### **2.5 Roles and Responsibilities**

#### **2.5.1 Contractor**

- a) To Supply and Delivery of Various Boiler Tubes for Tutuka Power Station in accordance to the specifications and technical requirements on this document.
- b) Contractor shall submit all documentation as requested by the Employer.
- c) Contractor to provide schedule on deliveries of spares.
- d) Material certification shall be in accordance with EN 10204 3.2 in all cases.

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### 2.5.2 Employer

- a) Compiles and submit scope of work with technical specifications and technical drawings where required.
- b) Performs Quality Control of all spares on delivery at the Employer premises.

### 2.6 Process for Monitoring

The QCPs on incoming product and services rendered by the supplier will be done and all materials are to be signed off by the system engineer and/or maintenance supervisor/outage co-ordinator and hold/witness points should be marked to ensure the quality of the supplied goods is according to standard.

### 2.7 Related/Supporting Documents

N/A

## 3. The Works

The *works* is the Supply and Delivery of Various Boiler Tubing at Tutuka Power Station for five years on an “as and when “required basis.

### 3.1 Description of the works

The works is to Supply and Delivery of Various Boiler Tubing for Tutuka Power Station with technical specification as per the list. The Boiler Tubes are listed in Table 1.

Table 1: Boiler Tubes list

No	Eskom Stock Number	Material	QTY
1	598158	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 26.9 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; FLOW 48; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.01 A OR 3.1 C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS	3420

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		MUST BE PRESENT ON EACH, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	
2	598162	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: 16M03; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
3	50883	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW WEB; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	4920
4	50885	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 4.5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 72, 74; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE W HOLE	58 340

**CONTROLLED DISCLOSURE**

		LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	
5	50886	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 75, 76; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	11 856
6	50977	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 44.5 MM; WALL THICKNESS: 5.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 39; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; DRAWING NO: STEIN/M-KIE 26207C REV 1; SLING, WITH SQUIRE ENDS, TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	42 941
7	50887	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 26.9 MM; WALL THICKNESS: 5 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; FLOW 48; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.01 A OR 3.1 C, ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	27 930
8	51080	WYE: TYPE: BIFURCATION; SIZE: OD 44.5 MM; MATERIAL: 13CRMO44; TO GO WITH BOILER TUBE; WALL THK 5.6 MM; TO BE DELIVERED WITH A DIN 50049-3.1 A / 3.1C OR EN10204 3.2; MATERIAL CERTIFICATES TO BE SUPPLIED WITH DELIVERY; PIECES TO BE STAMPED EVERY 500 MM/VERIFIED BY THIRD PARTY STAMP	2964

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9	50890	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 113; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, COLOUR CODE RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN 10204	126 723
10	52464	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: MIN 5.6 MM; MATERIAL: 15M03; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: ECONOMIZER; SPECIFICATION: EN10216-2; FLOW SCHEME 13, WALL TUBING, MATERIAL CERTIFICATES TO BE SUPPLIED WITH ALL TUBES, ALL TUBES TO BE CAPPED, ALL TUBES TO BE COLOUR CODED, ALL TUBES TO BE HARD STAMPED WITH LOW STRESS STAMPS, MATERIAL AND TEST CERTIFICATES TO BE ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	64 212
11	50893	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 5.6 MM; MATERIAL: 15MO3 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 10, 13; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; FINNED TUBES, TOTAL THICKNESS 65MM, TEST CERTIFICATES TO BE SUPPLIE D ACCORDING TO TYPE	3750

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		3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODED RED, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	
12	50880	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 82; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	16 092
13	598217	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 48.3 MM; WALL THICKNESS: 3.6 MM; MATERIAL: 10CRMO9-10; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	12 141
14	50892	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY CR10MO910	8 245

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		HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 111, 114; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE GREEN, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	
15	50879	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN SQ CUT; TYPE: FLOW 82; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	3 348
16	50881	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: 4.5 MM; MATERIAL: STL ALLOY CR13MO44 HOT DRAWN; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN; TYPE: FLOW 90; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO TYPE 3.1 A OR 3.1 C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE, END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE SILVER, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	342
17	598364	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: 13CRM04-5; LENGTH: 6-11.8 M; STRUCTURE: SMLS; DELIVER AS PER SPEC UNIQUE IDENTIFIER: 474-10206 REV 2; EN10204 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER	14 836

**CONTROLLED DISCLOSURE**

		STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
18	56210	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: SUPERHEATER 3 AND 4; GRADE: 3; SPECIFICATION: EN10216-2; FLOW 100; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2. COLOUR CODE BLUE; ALL TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP , AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	3270
19	56212	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4.5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS;	16000

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		<p>ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA</p>	
20	56211 Fin 102	<p>TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 5 MM; MATERIAL: X20CRMOV12-1/X20CRMOV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES</p>	16 000

**CONTROLLED DISCLOSURE**

		PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
21	56213	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 5.6 MM; MATERIAL: X20CRM0V12-1/XCRM0V1-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 103; GRADE: 3; SPECIFICATION: EN10216-2; ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EAC H TUBE, COLOUR CODE BLUE, TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	16 000
22	56214	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 6.3 MM; MATERIAL: X20CRM0V12-	16 000

**CONTROLLED DISCLOSURE**

		1/XCRMOV1-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 104, 105; GRADE: 3; SPECIFICATION: EN10216-2; ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EAC H TUBE, COLOUR CODE BLUE, TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204:2004 TYPE 3.2; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	
23	56215	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 3.6 MM; MATERIAL: STL ALLOY X20CRMOV121; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 129, 130; GRADE: 3; SPECIFICATION: DIN 50049; EN 10216-2; TEST CERTIFICATES TO BE SUPPLIED ACCORDING TO DIN 50049 TYPE 3.1.A OR 3.1.C, ALL TUBING TO BE STAMPED, EVERY 500MM AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED, HEAT NUMBERS MUST BE PRESENT ON EACH TUBE, COLOUR CODE BLUE, EN3.2 DOCUMENT CERTIFICATE ACCORDING TO EN10204	3 349
24	665726	SHIELD, TUBE: DIMENSIONS: DIA 50.5MM X LG 2.45M; STYLE: BEND; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-122 REV 0; 0.61-02133 REV 2 REV 0; PROTECTION LHS SHIELD: ID 44.5MM X WALL THICKNESS 3MM; VENDOR TO CONFIRM LATEST REVISION DRAWING	300

**CONTROLLED DISCLOSURE**

		BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	
25	665727	SHIELD, TUBE: DIMENSIONS: DIA 45MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 67.SH2.SD.08.11 REV 0; PROTECTION SHIELD: ID 38MM X WALL THICKNESS 3MM; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 44 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	700
26	665728	SHIELD, TUBE: DIMENSIONS: DIA 50.5MM X LG 2.45M; STYLE: BIFURCATION; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-118 REV 0; 60.ST.SDBIF3PB.10.11 REV 0; TUT-PP-GEN-119 REV 0; 60.ST.SDBIF3PB.08.11 REV 0; PROTECTION SHIELD: ID 44.5MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFORE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT	300

**CONTROLLED DISCLOSURE**

		AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	
27	665729	SHIELD, TUBE: DIMENSIONS: DIA 57MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 67.RH2.SD.08.11 REV 0; PROTECTION SHIELD: ID 51MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 57 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	300
28	665730	SHIELD, TUBE: DIMENSIONS: DIA 54.3MM X LG 2.45M; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: 71.RH1.SD48.08.11 REV 0; PROTECTION SHIELD: ID 48.3MM X WALL THICKNESS 3MM; RH OFFSET; VENDOR TO CONFIRM LATEST REVISION DRAWING BEFRE COMMENCING WITH MANUFACTURING; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; BANGLES AND THE PROTECTION SHIELDS TO BE INCLUDED IN THE DELIVERY; AND BE CHARGED; BUT SUPPLIED AS SEPARATE ITEMS; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH	300

**CONTROLLED DISCLOSURE**

		ANY MANIPULATION; PROCURING OF HP PIPEWORK SHOULD BE IN LINE WITH ESKOM STANDARD: 204-87733094; MATERIAL: SS 310; DIMENSIONS: OD 52 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	
29	665734	SHIELD, TUBE: DIMENSIONS: DIA 56 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; DRAWING NO: TUT-PP-GEN-111 REV 0; PROTECTION SLOTTED SHIELD BANGLE; ID 51 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 56 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	1 000
30	665736	SHIELD, TUBE: DIMENSIONS: DIA 57 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; PROTECTION SHIELD BANGLE; ID 51 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 57 X WT 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	1 000
31	665739	SHIELD, TUBE: DIMENSIONS: DIA 50.5 X LG 50 MM; STYLE: STRAIGHT; MATERIAL: SS GR310; PROTECTION SLOTTED SHIELD BANGLE; ID 44.5 X WALL THICKNESS 3MM; PROTECTING SHIELD TO COVER 180DEG AND THE BANGLE 180DEG + 10 DEG BOTH SIDES; RADIUS TO FIT TIGHT AROUND THE APPLICABLE BOILER TUBE; QCP FOR PRESSING TO BE APPROVED BY ESKOM BEFORE	1 000

**CONTROLLED DISCLOSURE**

		COMMENCING WITH ANY MANIPULATION; MATERIAL: SS 310; DIMENSIONS: OD 50.5 X WD 3MM; EACH BANGLE AND SHIELD SHOULD BE HARD STAMPED; HEAT NUMBER WITH LOW STRESS STAMPS; MATERIAL CERTIFICATE 3.1 I.A.W REQUIRED ON EVERY DELIVERY; STANDARD EN1024 3.1; VENDORS ARE RESPONSIBLE FOR ENSURING THAT THEY ARE PERFORMING AGAINST THE CORRECT DRAWING REVISION NUMBER (IF APPLICABLE).	
32	665740	BRACKET: TYPE: U-BEND; MATERIAL: INCOLOY 800; DIMENSIONS: WD 60 X LG 200 X THK 4 MM; SPECIFICATION: EN10216-2; APPLICATION: SUPERHEATER SUPPORT; 180DEG BEND AT 100MM (CENTRE); MATERIAL CERTIFICATE EN10204 3.1 REQUIRED ON EVERY DELIVERY; MATERIAL TO BE HARD STAMPED 'O' WITH LOW STRESS STAMPS	1 000
33	665748	BRACKET: TYPE: ALIGNMENT; MATERIAL: INCOLOY 800; DIMENSIONS: DIA 20 X LG 940 MM; APPLICATION: SUPERHEATER 2 SUPPORT; RADIUS: 27.5; CONSIST OF ROD AND HOOK; MATERIAL CERTIFICATE 3.1 IS REQUIRED ON EVERY DELIVERY; STAMPED; ESKOM WELDING STANDARD REQUIRED 240-106628253; WPS I.A.W EN ISO 15609-6 REQUIRED; QCP/ITP TO BE APPROVED BY ESKOM BEFORE WORK COMMENCE BENDING METHOD AND QCP TO BE APPROVED	380
34	665749	BRACKET: TYPE: ALIGNMENT; MATERIAL: INCOLOY 800; DIMENSIONS: DIA 20 X LG 70 MM; APPLICATION: REHEATER 2 SUPPORT; RADIUS: 22.5; CONSIST OF ROD AND HOOK; MATERIAL CERTIFICATE 3.1 IS REQUIRED ON EVERY DELIVERY; STAMPED; ESKOM WELDING STANDARD REQUIRED 240-106628253; WPS I.A.W EN ISO 15609-6 REQUIRED; QCP/ITP TO BE APPROVED BY ESKOM BEFORE WORK COMMENCE BENDING METHOD AND QCP TO BE APPROVED	380
35	665750	BRACKET: TYPE: RETAINING; MATERIAL: INCOLOY 800; DIMENSIONS: WD 30 X LG 69 X THK 6 MM; SPECIFICATION: EN10216-2; APPLICATION: REHEATER LUG SUPPORT; MATERIAL CERTIFICATE 3.1A IS REQUIRED ON EVERY DELIVERY; I.A.W STANDARD EN1024 3.1; HARD STAMPED WITH LOW STRESS STAMPS; HEAT NUMBERS	1 500
36	665751	BRACKET: TYPE: RETAINING; MATERIAL: INCOLOY 800; DIMENSIONS: WD 45 X LG 82 X THK 6 MM; SPECIFICATION: EN10216-2; APPLICATION: REHEATER LUG SUPPORT; MATERIAL CERTIFICATE 3.1A IS REQUIRED ON EVERY DELIVERY; I.A.W STANDARD EN1024 3.1; HARD STAMPED WITH LOW STRESS STAMPS; HEAT NUMBERS	1 500

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37	665752	LUG: TYPE: CASTLE; DIMENSIONS: WD 35 X HT 25 MM; MATERIAL: INCOLOY 800; RADIUS 24 MM; WALL THICKNESS: 12 MM; SMALL CASTLE LUG WITH 40 MM BASE SUPERHEATER 4; MATERIAL CERTIFICATE EN10204 3.1 IS REQUIRED; STANDARD EN10216-2	2 400
38	56212	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 38 MM; WALL THICKNESS: MIN 4.5 MM; MATERIAL: X20CRMV12-1/X20CRMV11-1; LENGTH: 6 M; STRUCTURE: SMLS; ENDS: PLAIN FLAT SQ CUT; TYPE: FLOW 101; GRADE: 3; SPECIFICATION: EN10216-2; TEST CERTIFICATE TO BE SUPPLIED ACCORDING TO BS EN 10204: 2004 TYPE3.2; ALL TUBING TO BE STAMPED, EVERY 500M AND VERIFIED BY THIRD PARTY STAMP, AND COLOUR CODED ALONG THE WHOLE LENGTH OF THE TUBE END CAPS TO BE FITTED; HEAT NUMBERS MUST BE PRESENT ON EACH TUBE; COLOUR CODE BLUE; ADHERE TO ESKOM GOODS INFORMATION REQUIREMENTS AND THE SUPPLIER WILL COMPLY TO THE FOLLOWING STANDARD (SEE PROCUREMENT OF HIGH PRESSURE PIPEWORK AND BOILER TUBING MATERIAL STANDARD IN THE GENERATION DIVISION 240-87733094 LATEST REVISION); MATERIAL CERTIFICATION TO EN10204/3.2; CONDUCT A MATERIAL ANALYSIS (SPECTROMETER TEST) ON EACH BATCH OF MATERIAL AT THE SUPPLIER'S PREMISES PRIOR DELIVERY TO THE POWER STATION; THE POWER STATION AIA WILL BE PRESENT TO REVIEW AND VERIFIED THE SPECTROMETER RESULTS. MATERIAL NOT MEETING THE REQUIREMENTS WILL BE REJECTED; THE SPECTROMETER RESULTS MUST CORRESPOND WITH THE MATERIAL CERTIFICATE; ALL THE DOCUMENTATION WILL BE EVALUATED BY ENGINEERING INCLUDING THE SPECTROMETER TEST RESULTS SIGNED BY POWER STATION AIA UPON DELIVERY BEFORE ACCEPTANCE OF THE MATERIAL; NOTE MATERIAL WILL NOT BE ACCEPTED WITHOUT THE MATERIAL CERTIFICATES AND THE SPECTROMETER TEST CERTIFICATE SIGNED AND VERIFIED BY POWER STATION AIA	16 000
39	225683	TUBE, BOILER STRAIGHT: NOMINAL SIZE: 51 MM; WALL THICKNESS: 5.6 MM; MATERIAL: STL ALLOY 15MO3 HOT DRAWN; LENGTH: 8 M; STRUCTURE: SMLS; ENDS: CAPS PLASTIC ENDS; TYPE: TEST CATEGORY 2 (TC2); SPECIFICATION: EN10216-2; MATERIAL TO COMPLY WITH ESKOM STANDARD 240-240-87733094 REV 3; 15MO3; RESISTANCE WELDING TO TUBES AT 20MM CENTRES (DRAWING AVAILABLE); SEAMLESS ACCORDING TO EN 10216-2; RED OXIDE CORROSION PROTECTION LAYER ON TUBE AND FINS. 3.2 CERTIFICATION IAW EN 10204:2004 ; MATERIAL SUPPLIED WITH H FIN SIZE 120MM	16 000

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		X 3MMTHK; FIN GAP 20MM CENTRE TO CENTRE APART; ALL TUBING TO BE STENCILED AND VERIFIED BY THIRD PARTY AND COLOUR CODED RED PLASTIC END CAPS TO BE FITTED; ALL WELDING DONE MUST BE ACCORDING TO ESKOM STANDARD 240-106628253; CONTROL OF REPAIR AND MACHINE WELDING CERTIFICATES AND QUALITY CERTIFICATE ACCORDING TO EN ISO 15609-1; MUST BE USED FOR WELDING THE FIN TO WELDS AND A QCP MUST BE APPROVED AND THE WELDING MUST BE TO ESKOM STANDARD AND BOILER DEPT MUST APPROVE AND QC BEFORE ACCEPTING DELIVERY; ESKOM STANDARD WELDING SPECIFICATION MUST BE COMPLIED TO SANS 3834 CERTIFICATION AND SANS ISO 9606; WELDER QUALIFICATIONS AND SANS AND BS EN 15614 AND WELDING PROCEDURE; EN 3.2 DOCUMENTATION IAW EN 10204:2004 MUST BE INCLUDED ON EVERY DELIVERY; DELIVERY COST TO TUTUKA POWER STATION INCLUDE	
40	51088	BEND, PIPE:15M03 HOT DRAWN;180 DEG;3; U bends, OD 51 WT 5.6	11820

### 3.2 Documentation

The following are the *Supplier's* requirements:

- a) As per tender returnable *and*
- b) The *Supplier* will ensure proper handling of the spares (from procurement of equipment, storage and transportation).
- c) The *Supplier* shall supply preservation and storage procedure/s, where applicable.

### 3.3 Acceptance of Spares

#### 3.3.1 Spares Identification

Each spare is identifiable by means of an Eskom SAP Material number (as is used in the Power Station), part description, OEM and/or OEM part number.

#### 3.3.2 Obsolescence

Not applicable

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### **3.3.3 Packaging**

- I. All supplied spares shall be packaged in such a manner that they will be transported and stored without damage. This includes preventing damage due to moisture ingress, dust and foreign objects. The contractor's procedure shall be used Transportation and Storage.
- II. Delivery packaging shall include as a minimum the following details:
  - a) Purchase Order Number
  - b) Part Description
  - c) Part number
  - d) Eskom SAP Material number
  - e) Drawing number, where applicable
  - f) Physical address of Tutuka Power Station and the *Supplier*
  - g) Contact details of the *Supplier*
  - h) Delivery note number
  - i) Certificates according to EN 10204 including all detailed results for destructive, mechanical and non-destructive testing

### **3.3.4 Acceptance of spares**

- a) No incorrect, damaged or faulty spares will be accepted.
- b) All the spares will be inspected and accepted by Engineering and/or OEM Technician before payment could be processed.
- c) Data capturing forms information must be supplied and must meet an acceptable level.
- d) The Supplier must ensure that the supply and preservation of spares is done in compliance with preservation specifications and good engineering practice.
- e) The Supplier to advise the Purchasers warehouse/stores on effective storage of spares and preservation.
- f) Upon delivery of the goods at the Eskom stores, an inspection of goods and the receipt must be conducted by the End-user and the Supplier with 48 hours of delivery. There must be an

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approved list of appointed quality inspectors available with specimen signatures and this must be updated annually. As per Work Instruction, Receive Materials – 240-54820279.

- g) The Supplier must supply the Purchaser with warrantee certificates, test certificates and the complete data book of spares at the time of delivery which shall be uploaded into the SAP system Goods Receipt document as per Work Instruction, Receive Materials - 240-54820279.
- h) The Supplier must deliver the goods as per the agreed to delivery times.
- i) The Supplier to provide 3.1 Material certificates as a minimum, where applicable.

### **3.3.5 Information to be provided to the Supplier.**

As per the tender returnable's

### **3.4 Spares Management**

The Purchaser may request the Supplier to provide accurate description of all spare parts included in the spares list.

### **3.5 Equipment Required**

The Supplier and his sub-suppliers must possess the tools and equipment to satisfy the requirements for the scope.

### **3.6 Consumables Required**

The Supplier must supply his own consumables to satisfy the requirements for scope.

### **3.7 Workshop**

The Supplier and his sub-suppliers are required to have suitable premises with the required tools and equipment to be able to conduct the scope of work. Eskom reserves the right to inspect the workshop premises to make sure that it is kept up to standard.

### **3.8 Standards, Specification and Procedures**

All material and equipment shall be new and of the standard and quality specified. The design and manufacture of equipment and the complete installation shall be carried out and tested in accordance with the latest issue or amendments of the following Standards and Regulations, as applicable:

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**Table 2: Relevant Standards and Codes**

Document Number	Title
<b>Eskom Standards</b>	
4. 240-28463367	SHE Organization
5. 240-30008949	Safety, Health and Environmental Specifications for Contractors
6. 240-49230111	Hazard and Operability Analysis (HAZOP) Guideline (Rev 1)
7. 240-55944466	Supplier Contract Quality Requirement's Specification
8. 32-421	Cardinal Rules
9. 36-681	Generation Plant Safety Regulations
10. OPS 0158	AKZ Power Plant Classification System
11. QM 58	Supplier Contract Quality Requirements
<b>General Standards</b>	
Document Number	Title
12. ISO 9001	Quality Management Systems.
13. OSH Act 85 of 1993	Occupational Health and Safety Act and Regulations Act 85 of 1993.

### 13.1 Planned KEY PERFORMANCE INDICATORS (KPI)

- a) The KPI's will be used to determine the successful performance of the scope. The Supplier is required to perform in order to meet these targets. The KPI's are to be agreed to between parties and are subject to change on an annual basis, based on the need.
- First committed delivery date
  - Quality
  - Non-compliance to the agreed Scope of Work, hold points and Quality Control Plans

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## **14. Acceptance**

This document has been seen and accepted by:

<b>Name</b>	<b>Designation</b>
	Materials Manager
	Boiler Maintenance Manager
	Boiler Engineering Senior Engineer
	Engineering Middle Manager
	Middle Manager Maintenance
	Snr MRP
	Outage Co-ordinator

## **15. Revisions**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
Sep 2025	1	I Uyangaphi	First revision

## **16. Development Team**

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

## **17. Acknowledgements**

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