	SCOPE OF WORK	TRANSMISSION
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**Title: Supply, Deliver, Assemble,
Erect, Commission and Testing
of a 12Ton Tower Crane**

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1. Introduction

Eskom Tower Test Station is situated in Rosherville, Johannesburg. The main function of the facility is to conduct full scale testing on prototype structures. In order to prepare these towers for testing, an onsite 8ton rail mounted tower crane is currently being utilised for offloading, assembling, erecting and dismantling of these structures.

The above-mentioned crane has been in operation for 44 years (commissioned in 1979). Due to various factors a decision was taken to dismantle the existing crane and to replace it with a new one.

2. Supporting Clauses

2.1 Scope

- a) Supply, deliver, assemble, erect, commission and test of a 12Ton Tower crane.
- b) Decommission, dismantle, and dispose of 8Ton Tower crane.

2.1.1 Purpose

The purpose of this document is to provide information on the requirements of a tower crane to be procured. It also includes high level detail of the existing 8ton tower crane to be decommissioned, dismantled, and removed from site.

2.1.2 Applicability

This document shall apply at Eskom Tower Testing Station facility, Rosherville.

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

ISO/TR 27245:2007, International standards for the Tower Crane designs.

ISO 9001:2015, Quality Management System

ISO 3834-2, Quality requirements for fusion welding of metallic materials

2.2.2 Informative

- a) EN 14439, Cranes — Safety — Tower cranes
- b) FEM 1.001, Rules for the design of hoisting appliances

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- c) FEM 1.004, Recommendation for the calculation of tower crane structures in out of service condition
- d) EN 1090-2, Technical requirements for the execution of steel structures
- e) AS 1418.4, Cranes, hoists and winches — Tower cranes
- f) AS 2550.4, Cranes, hoists and winches — Safe use — Tower cranes
- g) BS 7121:1, Code of practice for safe use of cranes — Part 1: General
- h) BS 7121:2, Code of practice for safe use of cranes — Part 2: Inspection, testing and examination
- i) BS 7121:5, Code of practice for safe use of cranes — Part 5: Tower cranes
- j) ASME B30.3-2004, Construction Tower Cranes

2.3 Abbreviations

Abbreviation	Explanation
ISO	International Organisation for Standards
EN	European Standard
BS	British Standard
AS	Australian Standard
FEM	European Materials Handling Federation
ASME	Standards Associated with the art, science, and practice of mechanical engineering.

2.4 Specifications for the supply of a 12Ton Tower crane

Type:	Flat top tower crane
Foundation/Base:	8m wide undercarriage rail track with ballasts
Load Capacity:	12Ton
Maximum hook height:	70m
Maximum reach/radius:	65m
Tip Load:	2.1Ton (minimum)
Remote operated option:	Yes
Rubber/hydraulic buffers:	Yes
Aviation warning lights:	Yes
Branded:	Yes

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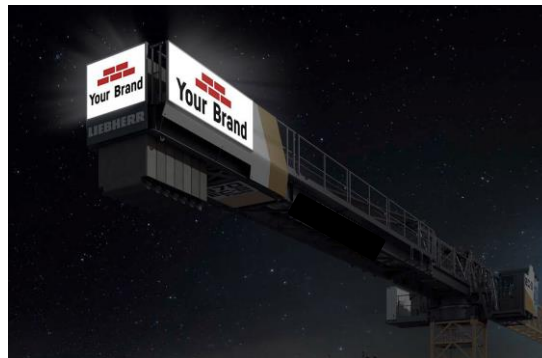
Additional requirements

- Evidence of pin checks for mast bolts
- Proof & Overload test on installation
- Rated Capacity Indicator (RCI) / Electronic Monitoring System (EMS)
- High Power LED Lighting on Strategic Positions
- Anemometer
- Aircraft warning lights
- 9m² of Advertising space with LED lighting (for Eskom Transmission Corporate logo)
- Access Ladder locking Trap Door
- Operator/Maintenance Worker Emergency Rescue Kit
- Pre-erection inspection approval certificate
- Co2 Fire extinguisher fitted on cab entry platform

Typical Illustrations



Flat Top Tower Crane



Advertising Space

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2.5 Details of 8Ton Tower crane to be decommissioned and dismantled

Type:	Topkit tower crane with counterweights
Foundation/Base:	Undercarriage rail track with ballasts
Load Capacity:	8Ton
Height of the crane:	65m
Jib Length:	41.5m
Counter jib:	16.2m

Note: Contractor to conduct detailed assessment of existing 8 ton tower crane to be dismantled including electrical works.

2.6 Evaluation Criteria for

Elements	Weight	Returnable with the tender
1. Warranty	15	Signed letter stating a minimum warranty of 2 years. Scoring No letter = 0% Signed letter stating a minimum warranty of 2 years = 15%
2. OEM Supplier	20	Letter confirming that the supplier of the crane is the OEM. Scoring No conformation letter = 0% OEM confirmation letter submitted = 20%
3. Three method statements or safe work procedures to be submitted: <ul style="list-style-type: none"> • Dismantling, • Assembling • Erection of Tower Cranes. 	15	Three method statements or safe work procedures indicating safe dismantling, assembling and erection of tower cranes. Scoring No method statements or safe work procedures submitted = 0% One method statements or safe work procedure submitted = 5% Two method statements or safe work procedures submitted = 10% Three method statements or safe work procedures submitted = 15%

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4. Specification		
a) Type: Flat top tower crane	5	Submit specification sheet/brochure confirming all listed requirements. Scoring: No specification = 0% Specification sheet/brochure confirming all listed items submitted = 50%
b) Foundation/Base: 8m wide undercarriage rail track with ballasts	10	
c) Load Capacity: 12Ton	10	
d) Height of the crane: 70m	10	
e) Maximum reach/radius: 65m	10	
f) Hoist Gear (Micro movement): 45kW	5	

Threshold 75%

3. Acceptance

This document has been seen and accepted by:

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

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