

	SCOPE OF WORK	GENERATION
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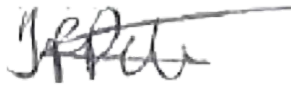
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1. Introduction

The Materials & Plant Integrity (M&PI) Department of the Generation Engineering Business Unit located in Rosherville, is the only metallurgical consulting group in Eskom. The Department is responsible for materials and plant integrity assessment of Eskom plant components and for providing solutions to material related problems to prevent/minimise catastrophic failures on both power generating plants and the Eskom grid. To provide this service to Eskom a properly functioning materials testing facility and latest technologies are required to prepare and test metallurgical and mechanical samples. Various analysis equipment, including hardness testers, are used for this work. These items are valuable tools critical to the business as they support failure investigations, component condition assessment, quality assurance and materials research.

This document gives a technical specification to procure a new hardness tester for the laboratories within M&PI.

2. Supporting Clauses

2.1 Scope

2.1.1 Purpose

The purpose of the document is to define the scope of work for the supply of a new Fully Automated Micro Hardness Testing Machine to the M&PI department.

2.1.2 Applicability

This document shall only apply at M&PI department of Generation Engineering.

2.1.3 Effective date

This document shall be effective once authorised.

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

Not applicable

2.2.2 Informative

[1] 32-1034 Eskom Procurement and Supply Chain Management Procedure

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2.3 Definitions

Not applicable

2.4 Abbreviations

Abbreviation	Explanation
M&PI	Materials and Plant Integrity
kgf	Kilogram force

2.5 Roles and Responsibilities

Not Applicable

2.6 Process for Monitoring

The effectiveness of scope of work will be monitored through management review, meetings, self-assessments and internal audits.

2.7 Related/Supporting Documents

Not Applicable

3. Scope of work/Supply

- Supply of the new **Fully Automated Micro Vickers Hardness Testing Machine**
- Training of personnel after commissioning the machine

4. Specification of Products or Goods

- Fully automated micro-Vickers hardness tester
- External PC system and control software supporting the functions of the machine
- The test load should be as low as 0.2kgf.
- Sample image camera with high resolutions/megapixels.
- Automatic turret with extra position(s) for additional indenters (test diamond) such as Knoop and/or Brinell (The machine should be upgradable to perform either Knoop and/or Brinell)

5. Materials and/or facilities

Eskom the Employer, will provide:

- *Access to facilities as and when required*

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6. Acceptance

This document has been seen and accepted by:

Name	Designation
Mhakamuni Makamu	Senior Technologist
Dr Thobeka Pete	Chief Engineer
Thendo Mphaphathi	Section Manager

7. Revisions

Date	Rev.	Compiler	Remarks
September 2024	0	Mhakamuni Makamu	New document

8. Development Team

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

- Mhakamuni Makamu
- Dr Thobeka Pete
- Thendo Mphaphathi

9. Acknowledgements

- None

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