



PRODUCT AND DEVELOPMENT FOUNDRY

Prepared By: Mukovhe Mashawana Engineer

Signature : M. Mashawana **Date:** 11/07/2019

Authorised By: Maje Phasha Principal Engineer

Signature : [Signature] **Date:** 11/07/2019

1. Introduction

X-ray is the process of inspecting metal castings using a non-destructive method such as Radiographic to examine the solidity of metal castings.

2. Scope

This specification applies to the x-ray of various castings manufactured at Koedoespoort Foundry. The specification covers the requirements when inspecting metal castings non-destructively (Radiography and Ultrasonic).

3. Laboratory Requirements

This section covers the requirements that the laboratory must have in order to qualify for consideration. Potential suppliers must supply all the documents specified in the check list table 1 below.

4. Process Requirements

- The Process shall be performed by a qualified and trained personnel.
- The metal cast components shall be scanned thoroughly according to the requirements requested.
- The equipment used should be able to examine components up to 2.3m x 0.5m.
- The process used must conform to ASTM E446 OR DIN EN 12681.
- Clear films must be produced
- A test report indicating the solidity and classification of the discontinuities must be supplied with a mark-up drawing

5. Personnel Qualifications

Personnel performing the examination shall be qualified in accordance with an acceptable written procedure (Minimum Level 1) and the report shall be signed-off by competent person who is qualified to authorize such documents.