

1.0 Purpose

- 1.1 To define the specification for the procurement of Magnetic Particle Testing (MPT) services.

2.0 Scope

- 2.1 Hooks used on Harrington's hoist and crane products.

3.0 Items & Services Supplied by Vendor

3.1 The Vendor shall

- a. Obtain necessary certification for test operator, test examiner, and test supervisor per ASNT SNT-TC-1A.
- b. Perform MPT in accordance with appropriate standards.
- c. Evaluate the results of the MPT.
- d. Send immediate (brief) written notification to Harrington as to pass/fail status.
- e. Provide certification for each individual item that passes the MPT.
- f. Mark items that fail the MPT to indicate those characteristics that caused the failure.
- g. Provide documentation explaining the failure for each individual item that fails the MPT.
- h. Return all items and appropriate certification/reports to Harrington based on assigned serial number.

4.0 Standards

- 4.1 ASTM Standard E 1444, "Standard Practice for Magnetic Particle Examination".
- 4.2 ASTM Standard A275/A275M, "Standard Test Method for Magnetic Particle Examination of Steel Forgings".

5.0 References

- 5.1 NAVSEA Technical Publication T907-AS-GIB-010/271, "Requirements for Nondestructive Testing Methods".
- 5.2 Harrington Hoists EDOC0339
- 5.3 ASM Materials Handbook; Volume 17: "Nondestructive Evaluation and Quality control."

6.0 Definitions

- 6.1 Indication – The evidence of a mechanical imperfection by the retention of magnetic particles.

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6.2 Relevant Indications – Indications having any dimension greater than 1/16 inch.

6.3 Linear Indication – An indication having a length greater than 3 times its width.

7.0 Acceptance Criteria

7.1 Surface relevance should be noted based on figure 1.

7.2 All surfaces examined shall be free of:

a. Relevant linear indications

7.3 Any questionable or doubtful indications shall be reexamined to determine whether or not they are relevant.

7.4 An indication of an imperfection may be larger than the imperfection causing the indication; however, the size of the indication is the basis for acceptance evaluation.

8.0 Cleaning and Demagnetization of Hooks

8.1 Final cleaning, with a self-evaporating cleaner, will be performed to ensure that there are no residual magnetic particles remaining on the hook.

8.2 All hooks that are tested will be demagnetized per ASTM E1444

9.0 Hook Identification

9.1 Upon completion of testing, hook tags will be re-attached to corresponding hooks before shipping.

END

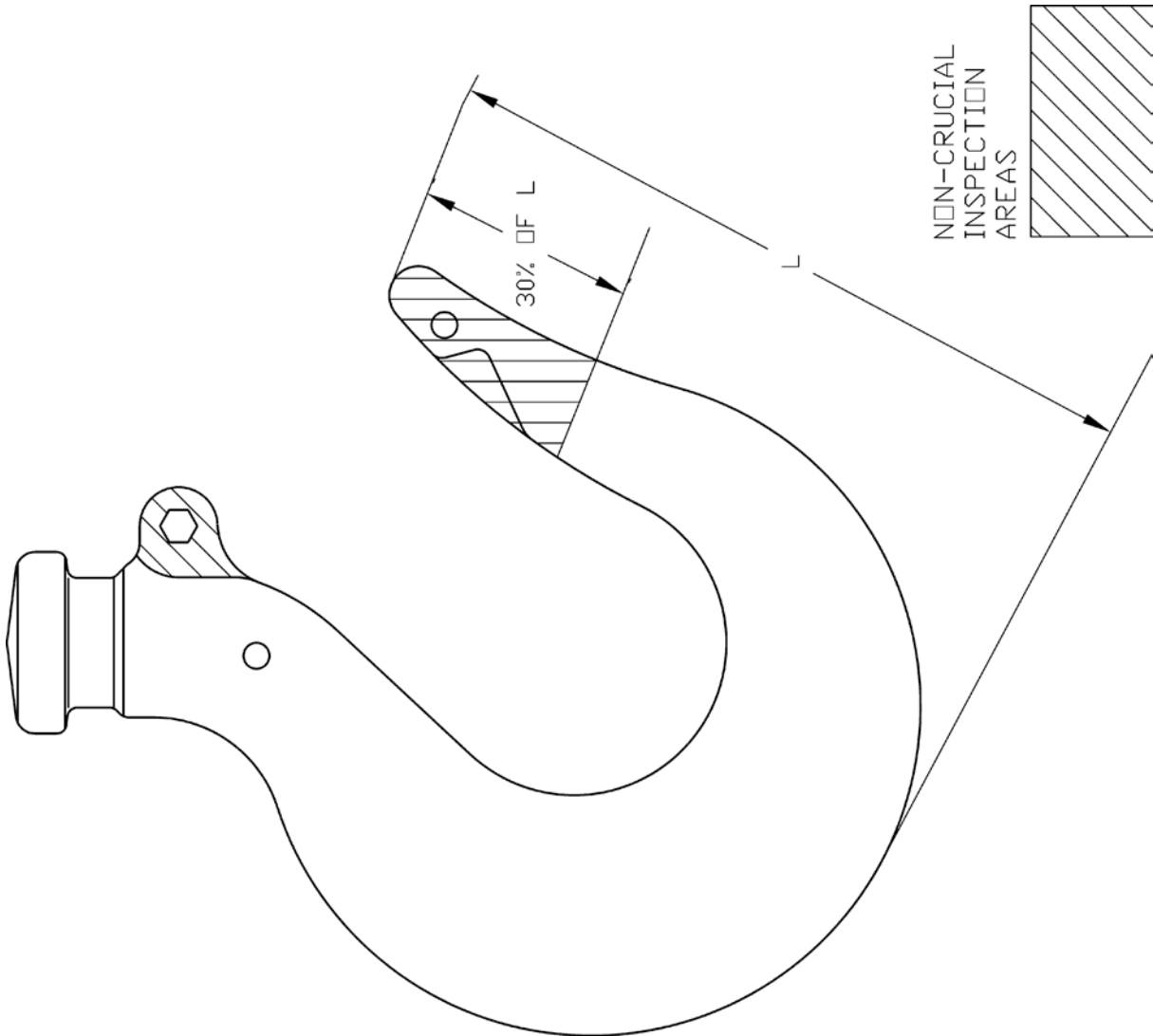


FIGURE 1

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