

**AUG 31 1994**

**ENGINEERING DATA TRANSMITTAL**

Page 1 of 4  
EDT No 100517

3. From: (Originating Organization) PFP FACILITY SYSTEMS ENGINEERING  
 5. Proj./Prog./Dept./Div.: 15510 / K6C4B  
 6. Cog. Engr.: J.M. MORLEY  
 8. Originator Remarks: ISSUANCE OF TEAM DOCUMENT FOR HARRINGTON HAND CHAIN HOISTS  
 10. System/Bldg./Facility: 41 / 234-SZ  
 12. Major Assm. Dwg. No.: N/A  
 13. Permit/Permit Application No.: N/A  
 14. Required Response Date: N/A

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Impact Level	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-50-CP-	0		PFP HARRINGTON HAND CHAIN HOISTS	3S	2	4	
	TEAM-067							

16. KEY

Impact Level (F): 1. Approved, 2. Approved w/comment, 3. Disapproved w/comment, 4. Reviewed no/comment, 5. Reviewed w/comment, 6. Disapproved w/comment

Reason for Transmittal (G): 1. Approval, 2. Release, 3. Information, 4. Review, 5. Post-Review, 6. Dist. (Receipt Acknow. Required)

Disposition (H) & (I): 1. Approved, 2. Approved w/comment, 3. Disapproved w/comment, 4. Reviewed no/comment, 5. Reviewed w/comment, 6. Disapproved w/comment

(G) (H)	(H) (H)	(J) Name	(K) Signature	(L) Date	(M) MSIN	(U) Name	(V) Signature	(W) Date	(X) MSIN
2	1	Cog. Eng. J.M. MORLEY		8/17/94	74-32			8/17/94	74-32
2	1	Cog. Mgr. G.A. GLOVER		8/18/94	74-20			8/18/94	74-20
2	1	Safety A.G. PINES		8/18/94	74-10			8/18/94	74-10
3	3	Central Files							
3	3	OSTI (a)							

18. Originator Signature of EDT: *J.M. Morley* Date: 8/17/94

19. Authorized Representative for Receiving Organization: \_\_\_\_\_ Date: \_\_\_\_\_

20. Cognizant Manager: *J.M. Morley* Date: 8/18/94

21. DOE APPROVAL (if required) Ltr No. \_\_\_\_\_

Approved  
 Approved w/comments  
 Disapproved w/comments

## **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**

# UNREVIEWED SAFETY QUESTION CHANGES SCREENING FORM

Document Number EDT 700517 <span style="float: right; margin-right: 20px;">2 of 4</span>	USQ Screening Number
---	----------------------

Title 067  
~~068~~ *qu*  
 PFP Harrington Hand Hoists; WHC-SD-CP-TEEM-~~068~~

**QUESTIONS:**

Does the referenced item:	N/A	No	Yes/Maybe
A. Make PROPOSED CHANGES to the facility or procedures which differ from conditions described in the safety basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Make PROPOSED CHANGES that represent conditions that have not been analyzed in the safety basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Describe tests or experiments which differ from those described in the safety basis?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Is a change to the TSRs involved?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**BASIS** (supporting information is required for each question; attach additional pages as necessary):

- A. The system affected by this change is not described in WHC-SD-CP-SAR-021. This change does not affect the authorization basis.
- B/C/D There are no procedures, tests or experiments affected by this change. No tests or experiments are involved.

Agree  
 Disagree (Requires explanation, attach additional pages as necessary)

USQE No. 1  
*Gerald P. Wilson*  
 \_\_\_\_\_  
 Signature August 17, 1994  
 Date

USQE No. 2  
*GA Glover*  
 \_\_\_\_\_  
 Signature 8/18/94  
 Date

Gerald P. Wilson  
 \_\_\_\_\_  
 (Print Name)

*GA Glover*  
 \_\_\_\_\_  
 (Print Name)

SEP 30 1994

8/31/94  
1  
4

UNREVIEWED SAFETY QUESTION (USQ)  
SCREENING AND SAFETY EVALUATION

OSTI 3

1. Identification Number: EDT 700517  
Completion of page one of this form satisfies the Screening Evaluation  
Page 2 of 3

2. Title: PFP HARRINGTON HAND HOISTS; WHC-SD-CP-TEEM-067

3. Qualified USQ Evaluator: G.P. WILSON  
Date: 08/17/94

4. Peer Reviewer: R.J. THOMAS

5. Is the matter being evaluated a CHANGE or a DISCOVERY? (Circle One) CHANGE

6. USQ Screening (Answer the appropriate set of questions.)

Does the proposed change:

A. Make changes in the facility as described in approved safety analyses?  No  Yes/Maybe

B. Make changes in procedures as described in approved safety analyses?  No  Yes/Maybe

C. Involve tests or experiments not described in approved safety analyses?  No  Yes/Maybe

Will response to the discovery:

A. Require changes to the facility as described in the approved safety analyses?  No  Yes/Maybe

B. Require changes in procedures described in the approved safety analyses?  No  Yes/Maybe

C. Require tests or experiments not described in the approved safety analyses?  No  Yes/Maybe

D. Require revision or addition to SAR beyond annual update?  No  Yes/Maybe

BASIS (supporting information is required for each question, attach additional pages as necessary; specifically note SAR section reviewed to come to conclusion):

6A. THE SYSTEM AFFECTED BY THIS CHANGE IS NOT DESCRIBED IN WHC-SD-CP-SAR-021. THIS CHANGE DOES NOT AFFECT THE AUTHORIZATION BASIS.

6B/C PROCEDURES, TESTS, OR EXPERIMENTS ARE NOT AFFECTED BY THIS CHANGE. NO TESTS OR EXPERIMENTS ARE INVOLVED.

7. Safety Analyses

A. Will the proposed change or response to the discovery require a change to the existing Technical Specifications or Operational Safety Requirements?  No  Yes/Maybe

B. Will the proposed change or discovery require additional Technical Specification or Operational Safety Requirements?  No  Yes/Maybe

BASIS (supporting information is required for each question, attach additional pages as necessary; specifically note Technical Specification/Operational Safety Requirements reviewed to come to conclusion):

7A/B. NO CHANGES TO THE OSR'S OR ADDITIONAL OSR'S ARE REQUIRED.

8. Post Review (Required if all questions answered "NO")

Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Safety Qualified USQ Evaluator (Print name, sign and date)

If any question on page one in Blocks 6 or 7 is answered "Yes", completion of page two is required and is the Safety Evaluation

pg 3 of 4

Identification Number: EDT 700517

**SAFETY EVALUATION**

Page 3 of 3

**1. USQ Safety Evaluation:**

These questions shall be answered if any question in block 6 or 7 is answered "YES."

- A. Will the probability of an accident previously evaluated in approved safety analyses be increased?  No  Yes  Maybe
- B. Will the consequences of an accident previously evaluated in the approved safety analyses be increased?  No  Yes  Maybe
- C. Will the probability of a malfunction of equipment important to safety be increased?  No  Yes  Maybe
- D. Will the consequences of a malfunction of equipment important to safety be increased?  No  Yes  Maybe
- E. Will the possibility of an accident of a different type than any previously evaluated in approved safety analyses be created?  No  Yes  Maybe
- F. Will the possibility of a malfunction of a different type than any previously evaluated in the approved safety analyses be created?  No  Yes  Maybe
- G. Will the margin of safety as defined in the basis for any technical specification or safety analysis report be reduced?  No  Yes  Maybe

BASIS (supporting information is required for each question, attach additional pages as necessary):

1A/B/C/D. THE PROBABILITY/CONSEQUENCES OF ACCIDENTS/MALFUNCTIONS DUE TO THIS CHANGE WILL NOT BE INCREASED OVER THAT ANALYZED IN THE FSAR.

1E/F/G. THIS CHANGE DOES NOT CREATE THE POSSIBILITY OF AN ACCIDENT/MALFUNCTION OF A DIFFERENT TYPE THAT THAT ANALYZED IN WHC-SD-HS-SAR-021, CHAPTER 9. THE MARGIN OF SAFETY WILL NOT BE REDUCED.

THIS CHANGE DOES NOT REPRESENT AN UNREVIEWED SAFETY QUESTION.

**2. Plant Review Committee (PRC)\***

Meeting No. NA

\_\_\_\_\_  
PRC Chairman Concurrence  
(Print name, sign and date)

Date: \_\_\_\_\_

**3. Safety Review\*\***

\_\_\_\_\_  
Qualified USQ Evaluator  
(Print name, sign and date)

Date: \_\_\_\_\_

\* If PRC changes any answers, append basis for change.  
\*\* Post-review required if all seven "NO" boxes are checked by PRC.

**RELEASE AUTHORIZATION**

**Document Number:** WHC-SD-CP-TEEM-067

**Document Title:** PFP HARRINGTON HAND CHAIN HOISTS

**Release Date:** 08-30-94

\* \* \* \* \*

**This document was reviewed following the  
procedures described in WHC-CM-3-4 and is:**

**APPROVED FOR PUBLIC RELEASE**

\* \* \* \* \*

**WHC Information Release Administration Specialist:**

*Jamara Kohn for Chris Willingham*

C. Willingham

(Signature)

08-30-94

(Date)

06/31/94

# SUPPORTING DOCUMENT

1. Total Pages 13  
14

2. Title

PFP HARRINGTON HAND CHAIN HOISTS

3. Number

WHC-SD-CP-TEEM-067

4. Rev No.

0

5. Key Words

1 TON THRU 3 TON HAND CHAIN HOISTS

6. Author

Name: J.M. MORLEY

*J.M. Morley*  
Signature

Organization/Charge Code 15510 K6C4D

**APPROVED FOR  
PUBLIC RELEASE**

CW 8/30/94

7. Abstract

DOCUMENT IDENTIFIES VENDOR SUGGESTED MAINTENANCE, DEVIATIONS FROM SUGGESTED REQUIREMENTS AND PROVIDES SUPPORT FOR PREVENTIVE MAINTENANCE PROCEDURES.

8. ~~PURPOSE AND USE OF DOCUMENT - This document was prepared for use within the U.S. Department of Energy and its contractors. It is to be used only to perform, direct, or integrate work under U.S. Department of Energy contracts. This document is not approved for public release until reviewed.~~

~~PATENT STATUS - This document copy, since it is transmitted in advance of patent clearance, is made available in confidence solely for use in performance of work under contracts with the U.S. Department of Energy. This document is not to be published nor its contents otherwise disseminated or used for purposes other than specified above before patent approval for such release or use has been secured, upon request, from the Patent Counsel, U.S. Department of Energy Field Office, Richland, WA.~~

DISCLAIMER - This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

10. RELEASE STAMP

OFFICIAL RELEASE  
BY WHC  
DATE AUG 31 1994  
55 STA. 5

9. Impact Level 3S

TECHNICAL EVALUATION OF EQUIPMENT MAINTENANCE  
WHC-SD-CP-TEEM-067  
**PFP HARRINGTON HAND CHAIN HOISTS**

Issued by  
WESTINGHOUSE HANFORD COMPANY

for the

U.S. DEPARTMENT OF ENERGY  
RICHLAND OPERATIONS OFFICE  
RICHLAND, WASHINGTON

	Name (print or type)	Signature	Date
PREPARED BY:	<u>K.M. BLACK</u> Name/Title	<u>K.M. Black</u>	<u>8/17/94</u>
WHC APPROVALS:	<u>J.M. Morley</u> Cognizant Engineer	<u>J.M. Morley</u>	<u>8/17/94</u>
	<u>GA Glover</u> Manager, COG Eng.	<u>GA Glover</u>	<u>8/18/94</u>
	<u>AG LINES</u> Safety- HSF	<u>AG Lines</u>	<u>8/22/94</u>

Note: Harrington Hand Chain Hoists are a Trade Mark of Harrington Hoists



WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON HAND CHAIN HOISTS

TABLE OF CONTENTS

1.0 - APPLICABLE EQUIPMENT . . . . .	1-2
2.0 - PREVENTATIVE MAINTENANCE EVALUATIONS . . . . .	3
2.1 DAILY OR BEFORE USE CHECKS . . . . .	3
2.2 WEEKLY CHECKS . . . . .	4
2.3 SEMI-ANNUAL CHECKS . . . . .	4
2.4 5 YEAR CHECK . . . . .	7
2.5 ACTIVITIES NOT PERFORMED PER VI RECOMMENDATIONS . . . . .	7
2.6 VENDOR RECOMMENDATIONS THAT ARE NOT APPLICABLE . . . . .	7
3.0 - REFERENCES . . . . .	8
APPENDIX A - EQUIPMENT HISTORY . . . . .	9
APPENDIX B - NAMEPLATE DATA . . . . .	10-11

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON HAND CHAIN HOISTS

**1.0 - APPLICABLE EQUIPMENT**

This Technical Evaluation of Equipment Maintenance (TEEM) is provided principally to document vendor suggested maintenance requirements and deviations from vendor suggested requirements, and provide documentation to support PM procedures. As additional maintenance activities are identified, they will be documented in later revisions.

This equipment is Safety Class 3. Safety class is provided here for reference only. (See WHC-SD-CP-TI-108 Rev 12 for verification)

This TEEM is applicable to the following hoists:

IDENTIFICATION NUMBER	EQUIPMENT
H0044	2 1/2 Ton capacity chain hoist, serial number 702922, located in the tool crib, Room 194 of the 234-5Z building.
H0045	2 1/2 Ton capacity chain hoist, serial number 702920, located in the tool crib, Room 194 of the 234-5Z building.
H0046	2 Ton capacity chain hoist, serial number 664292, located in the tool crib, Room 194 of the 234-5Z building.
H0047	2 Ton capacity chain hoist, serial number 664290, located in the tool crib, Room 194 of the 234-5Z building.
H0048	1 1/2 Ton capacity chain hoist, serial number 664266, located in the tool crib, Room 194 of the 234-5Z building.
H0049	1 1/2 Ton capacity chain hoist, serial number 664265, located in the tool crib, Room 194 of the 234-5Z building.
H0050	1 Ton capacity chain hoist, serial number 664237, located in the tool crib, Room 194 of the 234-5Z building.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON HAND CHAIN HOISTS

- H0051                    1 Ton capacity chain hoist, serial number 663643,  
                          located in the tool crib, Room 194 of the 234-5Z  
                          building.
- H0075                    3 Ton capacity chain hoist, serial number 664303,  
                          located in the tool crib, Room 194 of the 234-5Z  
                          building.
- H0076                    3 Ton capacity chain hoist, serial number 664301,  
                          located in the tool crib, Room 194 of the 234-5z  
                          building.

Equipment Description:

                          These are HARRINGTON hoists, Model M3.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON HAND CHAIN HOISTS

**2.0 - PREVENTIVE MAINTENANCE EVALUATIONS**

**2.1 DAILY OR BEFORE USE CHECKS**

**2.1.1 FUNCTIONAL OPERATION CHECK**

Activity - Check that all possible motions are smooth and regular for all speed steps with no hesitations, vibration, binding, weaving, unusual noise, or other irregularity. If chain binds, jumps or is excessively noisy, clean and lubricate with Lubrease Chain and Cable Spray. Check that hand chain moves freely and without binding, and that the hook stops moving when the hand chain stops moving.

Evaluation - Per REF's 3.2, DOE-RL-92-36, Section 12.12.4.1, and 3.1 VI 22568, pgs 11-16.

**2.1.2 HOOK INSPECTION**

Activity - Ensure that hooks/hook latches show no noticeable damage, wear or deformation.

Evaluation - Per REF's 3.2, DOE-RL-92-36, Section 12.12.4.1, and 3.1 VI 22568, pgs 11 & 12.

**2.1.3 BRAKE OPERATION**

Activity - Ensure that brakes operate smoothly.

Evaluation - Per REF's 3.2, DOE-RL-92-36, Section 12.12.4.1, and 3.1 VI 22568, pgs 13 & 14.

**2.1.4 HOIST CHAINS**

Activity - Visually ensure that hoisting chains are in good condition with no bends, cracks or pitting, and hoist chain feeds smoothly into and away from sprockets. Inspect chain for excessive wear or stretching by measuring 5 links in accordance with vendor instructions.

Evaluation - Per REF's 3.2, DOE-RL-92-36, Section 12.12.4.1, and 3.1 VI 22568, pg 12.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PPF HARRINGTON HAND CHAIN HOISTS

2.1.5 LUBRICANT LEAKAGE

Activity - Ensure that there is no visible leakage of lubricant.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 12.16.6.

2.1.6 CHAIN REEVING

Activity - Inspect load sheave and replace if damaged or worn. Make sure that the welds in standing links are away from load sheave, and that the chain is not capsized, twisted or kinked.

Evaluation - Per REF 3.1 VI 22568, pg 15.

2.2 WEEKLY CHECKS

2.2.1 CHAIN LUBRICATION

Activity - Lubricate load chain, hook, and safety latch pivot points. Use Lubrease Chain and Cable Spray.

Evaluation - Per REF 3.1 VI 22568, pg 17.

2.3 SEMI-ANNUAL CHECKS

2.3.1 GENERAL INSPECTION

Activity - Inspect the hoist for the following:

- deformed, cracked, or corroded members
- loose or missing bolts or rivets
- cracked or worn sheaves, drums, and load or idler sprockets

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PPF HARRINGTON Hand chain HOISTS

- worn, cracked or distorted parts such as pins, bearings, shafts, gears, rollers, locking and clamping devices

Evaluation - As Per REF's 3.1, VI 22568, pgs 11-16, and 3.2, DOE-RL-92-36, Section 12.12.4.1.

### 2.3.2 HOOK INSPECTION

Activity - Dye penetrant, magnetic particle or other suitable crack detecting method should be used for this inspection at the discretion of the COG Engineer. Visually inspect for cracks, increased throat openings, twists, damage to hook retaining nuts, collars, or pins, and welds or rivets used to secure retaining members. Check latch engagement and operation to assure latch is not damaged or bent. Hooks that allow the latch to disengage the tip must be replaced. Look for evidence of heat damage. Causes for rejection include:

- 15% or greater increase in the throat opening
- 10 degree or greater twist of the point away from the shank
- 10% or greater wear in the throat section
- 5% or greater elongation of shank

Note: Actual hook size can be found in the initial JCS work package for new installations. An established base line will have been recorded in the user procedure of PISCES for older equipment.

Any hook that is twisted or has excessive throat opening indicates abuse or over-loading of the unit. Other load sustaining components of the hoist should be inspected for damage.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 5.4.4, and REF 3.1 VI 22568, pgs 11 & 12.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON Hand chain HOISTS

### 2.3.3 LOAD CHAIN INSPECTION

Activity - Visually inspect end connections of wire ropes or chains. Check for stiffening or poor hinging of linkage. Look for evidence of heat damage. Causes for rejection include:

- link wear to less than 90% of the original bar diameter
- nicking, cracking, or corrosion of a link that, when ground out to a smooth surface, leaves less than 90% of the original bar diameter

Note: Original bar diameter can be found in the hoist history file.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 12.14.1

### 2.3.4 FUNCTIONAL OPERATION

Activity - Check functional operating mechanisms.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 12.12.4.1.

### 2.3.5 BRAKE CHECK

Activity - Check brake system parts, pawls, and ratchets. Inspect brake components for worn, glazed, or oil-contaminated friction discs and scoring of the handwheel hub, ratchet, and friction hub. Look for corroded, stretched or broken pawl spring. Ensure free movement of pawl on pawl stud. Apply a thin coat of WD-40 (WD-40 Co.) to the pawl stud before reassembly.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 12.9.2.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON HAND CHAIN HOISTS

2.3.6 LUBRICATION

Activity - When the hoist is disassembled for inspection or cleaning the gears should be lubricated using Calcium soap grease or equivalent.

Be sure to thoroughly clean the old grease from the part before re-lubricating.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 12.16.6, and REF 3.1 VI 22568, pg 17.

2.4 5 YEAR CHECK

2.4.1 LOAD TEST

Activity - The hoist shall be load tested at 125% of its rated capacity. The test load shall be lifted and held for 5 minutes. Raise the load an additional 2 wraps on the load drum and at least 3 feet, for 5 minutes. Lower the load and suspend for an additional 5 minutes. Throughout the procedure, verify that no slippage of more than 1/2 inch occurs. Following the load test, verify that no load bearing part or hook has been damaged.

Evaluation - Per REF 3.2, DOE-RL-92-36, Section 12.17.2.

2.5 ACTIVITIES NOT PERFORMED PER VI RECOMMENDATIONS

None.

2.6 VENDOR RECOMMENDATIONS THAT ARE NOT APPLICABLE

None.



WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PPF HARRINGTON HAND CHAIN HOISTS

**3.0 - REFERENCES**

- 3.1 VI file 22568, dated 3/30/94, titled "*Operation and Safety Instructions for Harrington Peerless CB Chain Hoist Model M3,*" equipment manufacturer - Harrington Hoists Inc.
- 3.2 DOE-RL-92-36, *Hanford Site Hoisting and Rigging Manual*, Westinghouse Hanford Company, latest revision.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON HAND CHAIN HOISTS

APPENDIX A

EQUIPMENT HISTORY

As a result of an audit performed by Stone & Webster for the Richland Operations Office of the Department of Energy, equipment history files for the cranes and hoists at PFP were given a base start date of April 1, 1991. These files are maintained by the Cognizant Engineer with responsibility for the oversight of system 41B.

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON Hand chain HOISTS

APPENDIX B

NAMEPLATE DATA

The nameplate for these hoists should include the following information:

H0044:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	702922
	Weight:	2 1/2 Ton
	Type:	Hand chain
H0045:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	702920
	Weight:	2 1/2 Ton
	Type:	Hand chain
H0046:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664292
	Weight:	2 Ton
	Type:	Hand chain
H0047:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664290
	Weight:	2 Ton
	Type:	Hand chain
H0048:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664266
	Weight:	1 1/2 Ton
	Type:	Hand chain
H0049:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664265
	Weight:	1 1/2 Ton
	Type:	Hand chain

WHC-SD-CP-TEEM-067, REV 0  
Technical Evaluation of Equipment Maintenance  
PFP HARRINGTON Hand chain HOISTS

H0050:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664237
	Weight:	1 Ton
	Type:	Hand chain
H0051:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	663643
	Weight:	1 Ton
	Type:	Hand chain
H0075:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664303
	Weight:	3 Ton
	Type:	Hand chain
H0076:	Manufacturer:	Harrington
	Model #:	M3
	S/N:	664301
	Weight:	3 Ton
	Type:	Hand chain