

CRANE LIFTING OPERATIONS GUIDELINES

LAST UPDATE, 2011

Note: The following PINC's only pertain to personnel or loads lifted with cranes, temporary cranes, or other type of lifting equipment mounted on fixed OCS platforms. The personnel or loads lifted may be on fixed OCS platforms, MODU's, or vessels.

OPERATING PROCEDURES

I-101

WHENEVER THERE IS ANY DOUBT AS TO SAFETY, DOES THE CRANE OPERATOR STOP AND REFUSE TO HANDLE LOADS OR CONTINUE OPERATIONS AS SAFETY DICTATES IN ACCORDANCE WITH API RP 2D, PARAGRAPH 3.1.5a?

Authority: 108

Enforcement Action: W

Note: PINC (Potential incident of Noncompliance List) can only be used if crane operations continued under adverse conditions and caused an accident or near miss which resulted in injury, death, pollution, or property damage.

INSPECTION PROCEDURE:

Verify that crane operations were restricted during periods of bad weather, such as lightning, high winds or high seas, or when the Crane Operator's ability to see the signal person is impaired by darkness, fog, rain, etc.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if inspection reveals that crane was operated under adverse conditions and caused an accident which resulted in injury, death, pollution, or property damage.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-102

ARE PROPER CRANE OPERATING PRACTICES FOR ATTACHING AND MOVING THE LOAD BEING UTILIZED IN ACCORDANCE WITH API RP 2D, PARAGRAPHS 3.2.1, 3.2.2 AND 3.2.3 AND API RP 2C, PARAGRAPH 7.5.4.3. ?

Authority: 108

Enforcement Action: C

INSPECTION PROCEDURE:

1. Verify that the load is attached to the hook by means of slings or other suitable devices. Sling use shall be in accordance with the guidelines of

API RP 2D, Appendix B, paragraph B.3.2.2.c, and Appendix G, paragraph G.5.2.1.

2. Verify that Hooks are equipped with a latch to retain loose lifting gear under non lifting conditions and that the latch is lockable if the hook is used for transporting personnel.

3. Procedures for moving the load are in accordance with the guidelines of API RP 2D, Appendix B, paragraph B.3.2.3.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if procedures for attaching and/or moving the load are not within specified guidelines.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-103

ARE PROCEDURES FOR PERSONNEL TRANSFER PERFORMED IN ACCORDANCE WITH RECOMMENDED PRACTICES SPECIFIED IN API RP 2D, PARAGRAPH 3.4 AND APPENDIX B, PARAGRAPH B.3.4?

Authority: 108

Enforcement Action: C

INSPECTION PROCEDURE:

If at the time of inspection, personnel are being transferred via personnel carrier from vessel to vessel, vessel to platform, or from platform to vessel, verify that:

1. Personnel carrier is of an approved type and is maintained in a safe condition.
2. All hooks used for support of personnel carrier are equipped with a safety latch.
3. Personnel are riding the carrier in a safe manner and are wearing an approved PFD.
4. Personnel are not raised or lowered directly over a vessel.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for a violation of 1 through 4 above.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-104

ARE CRANES WHICH ARE POSITIONED IN THE PROXIMITY OF HELIDECKS OR APPROACH/TAKE-OFF ZONES NOT OPERATED DURING HELICOPTER OPERATIONS IN ACCORDANCE WITH API RP 2D, PARAGRAPH 3.1.5M?

Authority: 108

Enforcement Action: W

INSPECTION PROCEDURE:

If the crane and helicopter operations are in progress at the time of the inspection, verify that the crane boom is positioned and secured as required and the Crane Operator is out of the cab unless he is in direct voice communications with the pilot.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if the crane boom is not positioned and secured as required or if the Crane Operator remains in the cab without direct voice communications with the pilot during landings/take-offs.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane observed.

I-105

IF DEFICIENCIES THAT IMPAIR SAFE OPERATION ARE KNOWN, IS THE CRANE TAKEN OUT OF SERVICE OR ITS OPERATION RESTRICTED TO ELIMINATE THE UNSAFE CONDITION IN ACCORDANCE WITH API RP 2D, PARAGRAPH 3.1.5c?

Authority: 108

Enforcement Action: C

Note: Limited (restricted) service may, in some cases, be continued after the identification and before correction of a deficiency. In such cases, the deficiency must be documented and cautionary notices posted in accordance with API RP 2D, paragraph 1, item c.

INSPECTION PROCEDURE:

1. Check facility crane inspection records to determine if any deficiencies have been identified.
2. If deficiencies have been identified, verify that cautionary notices have been posted.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if deficiencies have been identified and cautionary notices have not been posted.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

CRANE SAFETY DEVICES

I-111 **IS AN OPERABLE SWING BRAKE MECHANISM INSTALLED THAT IS CAPABLE OF SMOOTH STARTS AND STOPS WITH CONTROLLABLE RATES OF ACCELERATION AND DECELERATION AS SPECIFIED IN API SPEC 2C PARAGRAPH 9.1 ON EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, AND ON EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003?**

Authority: 108

Enforcement Action: W/C

INSPECTION PROCEDURE:

Verify that the swing brake mechanisms listed below operate according to the requirements in API SPEC 2C Paragraphs 9.1.3, 9.1.3, and 9.1.4:

1. Parking Brake.
2. Automatic Parking Brake.
3. Dynamic Friction Brake.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC for each crane audit that does not confirm that the operator has records of inspecting each crane swing brake mechanism that does not comply with the requirement in API SPEC 2C, Paragraph 9.1.

Issue a component shut-in (C) INC for each crane swing brake mechanism inspected that does not comply with the requirements in API SPEC 2C, Paragraph 9.1.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-112 **IS AN OPERABLE BOOM HOIST HIGH LIMITER OR SHUTOFF PROVIDED TO AUTOMATICALLY STOP THE BOOM HOIST WHEN THE BOOM REACHES A PREDETERMINED HIGH ANGLE, AS SPECIFIED IN API SPEC 2C, PARAGRAPH 13.1.1, ON EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, AND ON EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003?**

Authority: 108

Enforcement Action: W/C

Note: Low angle limiter or shut off shall not be inspected by BOEMRE.

INSPECTION PROCEDURE:

Verify that the crane boom hoist high limiter or shutoff will automatically stop the boom hoist when the boom reaches a pre-determined high angle.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC for each crane audit that does not confirm that the operator has records of inspecting the boom hoist limiter or shutoff as specified in API RP 2D, Paragraph 4.2.2.

Issue a component shut-in (C) INC for each crane inspected that does not comply with the requirements in API SPEC 2C, Paragraph 13.1.1.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-113

ARE BOOM STOPS PROVIDED TO RESIST THE BOOM FALLING BACKWARDS IN A HIGH WIND OR SUDDEN RELEASE OF THE LOAD, AS SPECIFIED IN API SPEC 2C, PARAGRAPH 13.1.2, ON EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, AND ON EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003?

Authority: 108

Enforcement Action: C

INSPECTION PROCEDURE:

Verify that the crane boom stops provided are designed to resist the boom falling backwards.

Note: Designs for boom stops include one of the following:

1. A fixed or telescoping bumper.
2. A shock absorbing bumper
3. Hydraulic boom elevation cylinder(s).

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for each crane inspected that does not comply with the requirements in API SPEC 2C, Paragraph 13.1.2.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-114

IS A BOOM ANGLE OR LOAD RADIUS INDICATOR READABLE FROM THE OPERATOR'S STATION PROVIDED, AS SPECIFIED IN API SPEC 2C, PARAGRAPH 13.1.4.1, ON EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, AND ON EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003?

Authority: 108

Enforcement Action: W/C

INSPECTION PROCEDURE:

Verify that the crane boom angle or load radius indicator is provided and readable from the operator's stations.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC for each crane audit that does not confirm that the operator has records of inspecting the boom angle/radius indicators over full range for accuracy as specified in API RP 2D, Paragraph 4.2.2.

Issue a component shut in (C) INC for each crane inspected that does not comply with the requirements in API SPEC 2C, Paragraph 13.1.4.1.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-115

HAVE SECURELY FASTENED GUARDS BEEN INSTALLED ON EXPOSED MOVING PARTS WHICH MAY CONSTITUTE A HAZARD, AS SPECIFIED IN API SPEC 2C, PARAGRAPH 13.2, ON EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, AND ON EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003?

Authority: 108

Enforcement Action: C

INSPECTION PROCEDURE:

1. Verify that exposed moving parts such as gears, set screw, projecting keys, chains chain sprockets, and reciprocating or rotating parts which may constitute a hazard under normal operating conditions are guarded.
2. Verify that an appropriate sign is posted if a guard is impractical to install on the above crane components.

IF NONCOMPLIANCE EXISTS:

Issue a component shut in (C) INC for each crane inspected that does not comply with the requirements in API SPEC 2C, Paragraph 13.2.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-116

HAS AN ANTI-TWO BLOCK DEVICE BEEN PROVIDED TO PROTECT HOIST ROPES, STRUCTURAL COMPONENTS AND MACHINERY FROM DAMAGE WHICH MAY OCCUR WHEN TWO SHEAVE GROUPS (e.g., LOAD BLOCK AND BOOM HEAD) COME INTO CONTACT AS THE HOIST CABLE IS DRAWN IN, AS SPECIFIED IN API SPEC 2C, PARAGRAPH 13.7, ON EACH CRANE ON A FIXED PLATFORM INSTALLED BY MARCH 16, 2005?

Authority: 108

Enforcement Action: W/C

Note:

1. **BOEMRE Inspectors do not test stalling mechanisms for hoist drum.**
2. A control override device or proximity warning device may be used. Stalling of the hoist drum is acceptable where damage or loss on control would not result.

INSPECTION PROCEDURE:

1. Verify that a means to protect hoist ropes, structural components and machinery from damage is provided on all cranes.
2. Verify that the operator is documenting the proper inspection of the controls override or proximity warning device as specified in API RP 2D, Paragraph 4.2.2.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC for each crane audit that does not confirm that the operator has records of inspecting the control override or proximity warning devices as specified in API RP 2D, Paragraph 4.2.2.

Issue a component shut in (C) INC for each crane inspected that does not have an operational control override or proximity warning device installed.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-117

IS THERE A FIRE EXTINGUISHER OF APPROPRIATE SIZE AND TYPE KEPT IN THE CAB OR VICINITY OF THE CRANE IN ACCORDANCE WITH API RP 2D, PARAGRAPH 3.5.2?

Authority: 108

Enforcement Action: C

Note: ASME B30.4c recommends a portable fire extinguisher with a basic minimum extinguisher rating of 10 BC. (10 = 10 lbs., B = Flammable Fluids, C = Energized Electrical)

INSPECTION PROCEDURE:

Verify that a fire extinguisher is located in the crane cab or near the crane.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if fire extinguisher:

1. Is not located where required.
2. Is not of the appropriate size or type.
3. Does not exist or is inoperable.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

LOAD RATING AND TESTS

- I-131** **IS THE CORRECT LOAD RATING CHART FOR THE CRANE CONFIGURATION IN USE AT THE PRIMARY CONTROL STATION IN ACCORDANCE WITH API RP 2D, PARAGRAPH 3.2.1?**
Authority: 108 **Enforcement Action:** C
INSPECTION PROCEDURE:
Verify that the load chart is legible, posted and visible in the primary control station for the crane configuration in use.
IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC for the crane if the correct load rating chart is not posted and visible at the primary control station for the crane.
INSPECTION COUNT/ INC
Enter one item checked/ issue one INC for each crane inspected.
- I-132** **ARE WRITTEN REPORTS ON LOAD TESTS PREPARED BY A QUALIFIED CRANE INSPECTOR SHOWING LOAD TEST PROCEDURES AND RESULTS WHEN LOAD TESTS ARE REQUIRED IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.2.3?**
Authority: 108 **Enforcement Action:** C
Note: Load tests are required under the following conditions:
1. New cranes being placed in service.
2. Cranes that are being permanently relocated.
3. Temporary/rental cranes after each rig-up or relocation.
4. When repairs or replacement do not meet the requirements of API RP 2D, paragraph 4.3.3.
INSPECTION PROCEDURE:
Verify from facility crane records that load tests were conducted when required by a qualified crane inspector using API RP 2D, Appendix E, as a reference guide.
IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if load tests are not conducted when necessary by a qualified crane inspector using API RP 2D, Appendix E, as a referenced guide.
INSPECTION COUNT/ INC
Enter one item checked/ issue one INC for each crane inspected.
- I-133** **HAVE STATIC AND DYNAMIC LOAD RATING CHARTS BEEN ESTABLISHED FOR ALL CRANES IN ACCORDANCE WITH API RP 2D, PARAGRAPH 3.1.5h?**
Authority: 108 **Enforcement Action:** C
Note:
1. Static Load Ratings must be established for lifting from or setting on the crane-supporting structure (platform).
2. Dynamic Load Ratings must be established for lifting from or setting on vessels.
INSPECTION PROCEDURE:
Verify from facility crane records that static and dynamic load ratings charts have been established for all cranes.
IF NONCOMPLIANCE EXISTS:
Issue a component shut-in (C) INC if records indicate that:
1. Static and dynamic load ratings have not been established for all cranes.
2. Crane has operated without appropriate load rating charts established and posted.
INSPECTION COUNT/ INC
Enter one item checked/ issue one INC for each crane inspected.

IS THE LOAD BLOCK RATING LABEL(S) PERMANENTLY AFFIXED TO THE HOOK BLOCK, AS SPECIFIED IN AP SPEC 2C, PARAGRAPH 7.5.3.2, ON EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, OR EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003?

Authority: 108

Enforcement Action: C

INSPECTION PROCEDURE:

1. Verify that the load block rating label(s) is permanently affixed to the hook block.
2. Verify that the label includes the following load block requirements.
 - A. The maximum static and personnel rated loads.
 - B. The service temperature and assembly weight.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC for any crane load block that does comply with the requirements in API SPEC 2C, Paragraph 7.5.3.2.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

CRANE INSPECTIONS

I-141

HAVE MANUFACTURER'S RECOMMENDATIONS BEEN INCLUDED IN ESTABLISHING ALL INSPECTION REQUIREMENTS IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.1.2 AND APPENDIX C?

Authority: 108

Enforcement Action: W

INSPECTION PROCEDURE:

Verify that the manufacturer's recommendations have been included in establishing all inspection requirements.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that manufacturer's recommendations have been excluded from establishing inspection requirements.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-142

HAVE NEW OR RELOCATED CRANES RECEIVED AN INITIAL INSPECTION BY A QUALIFIED INSPECTOR WITH RECORDS MAINTAINED AT AN APPROPRIATE LOCATION FOR FOUR YEARS IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.1.2.1 AND 4.2.2?

Authority: 108

Enforcement Action: W/C

Note: Cranes in this category are required to be load tested in accordance with API RP 2D, Appendix E.

INSPECTION PROCEDURE:

Verify that:

1. Records of initial inspection are readily available and are maintained for a period of 4 years.
2. Inspection and load test was performed.
3. Records include date and time of inspection and name/initial of person performing the inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records of initial inspection are not available and/or not maintained for 4 years.

Issue a component shut-in (C) INC if:

1. The crane was not inspected prior to use when new or prior to use after being permanently relocated.
2. The crane was not load tested.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-143

HAVE PRE-USE INSPECTIONS BEEN PERFORMED PRIOR TO USE (TYPICALLY DAILY) BY A QUALIFIED CRANE OPERATOR/INSPECTOR WITH RECORDS, IN ACCORDANCE WITH API RP 2D, PARAGRAPHS 4.1.1.1 AND 4.1.2.2, MAINTAINED AT AN APPROPRIATE LOCATION FOR FOUR YEARS?

Authority: 108

Enforcement Action: W/C

Note: Applies to all cranes, regardless of usage category. The pre-use inspection must be conducted prior to using the crane. Pre-use inspection record can be a record, a record book, a logbook, a computerized data collector, or an electronic data collector. Inspection criteria must be in accordance with API RP 2D, Appendix C, paragraph C.4.1.2a.

INSPECTION PROCEDURE:

Verify that:

1. Pre-use inspections are performed.
2. Records are kept at an appropriate location and are maintained for a period of 4 years.
3. Records include date and time of inspection and name/initial of person performing the inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if:

1. Records indicate that a pre-use inspection was missed or did not occur on schedule, but the most recent pre-use inspection has been performed.
2. Records are not maintained for a period of 4 years.

Issue a component shut-in (C) INC if:

1. Records of pre-use inspections are not available or are not kept at an appropriate location.
2. Records do not indicate that a pre-use inspection has been performed.
3. The pre-use inspection currently due has not been performed.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-144

HAVE MONTHLY INSPECTIONS BEEN PERFORMED BY A QUALIFIED CRANE OPERATOR/INSPECTOR WITH RECORDS, IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.1.2.3 AND 4.2.2, READILY AVAILABLE FOR A PERIOD OF FOUR YEARS?

Authority: 108

Enforcement Action: W/C

Note:

1. Applies to Heavy Usage Category cranes. An Operator's failure to document usage category will cause the crane to default to the Heavy Usage category. Inspection criteria must be in accordance with API RP 2D, Appendix C, paragraph C.4.1.2b.
2. Reference Appendix 24 for definition of "Monthly" and description of "Usage Category."

INSPECTION PROCEDURES:

Verify that:

1. Monthly inspections are performed by qualified personnel.
2. Verify that records are readily available and are maintained for a period of 4 years.
3. Verify that records include date and time of inspection and name/initial of person performing the inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that monthly inspection was missed or did not occur on schedule, but the most recent monthly inspection was completed.

Issue a component shut-in (C) INC if:

1. Records of monthly inspections are not available or are not maintained for a period of 4 years.
2. Records do not indicate that a monthly inspection has been performed.
3. The monthly inspection currently due has not been performed.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-145

HAVE QUARTERLY INSPECTIONS BEEN PERFORMED BY A QUALIFIED CRANE INSPECTOR WITH RECORDS, IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.1.2.4 AND 4.2.2, READILY AVAILABLE FOR A PERIOD OF FOUR YEARS?

Authority: 108

Enforcement Action: W/C

Note:

1. Applies to Moderate Usage Category cranes and Heavy Usage Category cranes. An Operator's failure to document usage category will cause the crane to default to the Heavy Usage category. Inspection criteria must be in accordance with API RP 2D, Appendix C, paragraph C.4.1.2c.
2. Reference Appendix 24 for definition of "Quarterly" and descriptions of "Usage Category."

INSPECTION PROCEDURE:

Verify that:

1. Quarterly inspections are performed by a qualified crane inspector.
2. Records are readily available and are maintained for a period of 4 years.
3. Records include date and time of inspection and name/initial of person performing the inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that quarterly inspection was missed or did not occur on schedule, but the most recent quarterly inspection was completed.

Issue a component shut-in (C) INC if:

1. Records of quarterly inspections are not available or are not maintained for a period of 4 years.
2. Records do not indicate that a quarterly inspection has been performed.
3. The quarterly inspection currently due has not been performed.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-146

HAVE ANNUAL INSPECTIONS BEEN PERFORMED BY A QUALIFIED CRANE INSPECTOR WITH RECORDS, IN ACCORDANCE WITH API RP 2D, PARAGRAPHS 4.1.1.1, 4.1.2.5, AND 4.2.2, READILY AVAILABLE FOR A PERIOD OF FOUR YEARS?

Authority: 108

Enforcement Action: W/C

Note:

1. Applies to all cranes, regardless of usage category. Cranes that have been out of service for 12 months or more must have an annual inspection before being used. Additionally, annual inspections must include inspection of crane critical components in accordance with API RP 2D, Appendix C, paragraph C.4.1.2d, items 22, 23, and 24.
2. Reference Appendix 24 for definition of "Annual" and descriptions of "Usage Category."

INSPECTION PROCEDURE:

Verify that:

1. Annual inspections are performed by a qualified crane inspector.
2. Records are readily available and are maintained for a period of 4 years.
3. Records include date and time of inspection and name/initial of person performing the inspection.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if records indicate that annual inspection did not occur on schedule, but the most recent annual inspection was completed.

Issue a component shut-in (C) INC if:

1. Records of annual inspections are not available or are not maintained for a period of 4 years.
2. Records do not indicate that an annual inspection has been performed.
3. The annual inspection currently due has not been performed.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

HAS A WIRE ROPE INSPECTION PROGRAM BEEN ESTABLISHED IN ACCORDANCE WITH API RP 2D, PARAGRAPH 5.1.2 AND ARE INSPECTION RECORDS MAINTAINED FOR A PERIOD OF FOUR YEARS?

Authority: 108

Enforcement Action: W/C

DEFINITION:

Wire Rope Inspection Program - A wire rope inspection program is an inspection program which takes into consideration crane type, frequency of usage, history of maintenance, wire rope manufacturer's recommendations, and crane manufacturer's recommendations.

Note:

1. Inspection records must be maintained per API RP 2D, paragraph 4.2 to determine the time interval for retirement of the wire rope. Records must be readily available until the specific wire rope is retired. All observed wire rope deterioration as listed in API RP 2D, Appendix G, paragraph G.5.2.1b must be recorded on these inspection records.
2. Reference Appendix 24 for descriptions of "Frequency of Usage."

INSPECTION PROCEDURE:

Verify that:

1. A wire rope inspection program has been established.
2. Wire rope inspection records are available and are maintained for a period of 4 years.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if:

1. Records are not readily available or are not maintained for a period of 4 years.
2. Records are incomplete or inaccurate, but are sufficient to indicate that a wire rope inspection program has been established.

Issue a component shut-in (C) INC if:

A wire rope program has not been established.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

REPAIRS OR ALTERATIONS

I-151

HAS A PREVENTATIVE MAINTENANCE PROGRAM BEEN ESTABLISHED WITH RECORDS, IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.3.1, READILY AVAILABLE FOR A PERIOD OF FOUR YEARS?

Authority: 108

Enforcement Action: W/C

Note:

1. A preventative maintenance program takes into consideration crane type, frequency of usage, history of maintenance, and manufacturer's recommendations.
2. Reference Appendix 24 for descriptions of "Frequency of Usage."

INSPECTION PROCEDURE:

Verify that:

1. A preventative maintenance program has been established.
2. Preventative maintenance records are readily available and are maintained for a period of 4 years.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if preventative maintenance program records are not immediately available or are not maintained for a period of 4 years.

Issue a component shut-in (C) INC if records do not indicate that a preventive maintenance program has been established.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

I-152

ARE WRITTEN REPORTS CONFIRMING ADEQUACY OF REPAIRS OR ALTERATIONS IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.3.3c, MAINTAINED FOR A PERIOD OF FOUR YEARS?

Authority: 108

Enforcement Action: W/C

Note: All replacement parts must be equal to or better than the original equipment. No welding repairs may be made to critical components, such as booms and swing circle assemblies, without specific repair procedures and recommendations from the original crane manufacturer or other similar qualified source.

INSPECTION PROCEDURES:

Verify that:

1. Written reports confirming the adequacy of major repairs or alterations are available.
2. The reports are maintained for a period of 4 years.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if written reports confirming the adequacy of repairs or alterations are not immediately available or are not maintained for a period of 4 years.

Issue a component shut-in (C) INC if written reports:

1. Were not prepared confirming the adequacy of repairs or alterations performed.
2. Are incomplete or inaccurate.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

ARE REPAIRS OR REPLACEMENTS OF CRITICAL COMPONENTS MADE PROMPTLY IN ACCORDANCE WITH API RP 2D, PARAGRAPH 4.3.3b?

Authority: 108

Enforcement Action: C

Note: All replacement parts must be equal to or exceed the original equipment. No welding repairs may be made to critical components, such as booms and swing circle assemblies, without specific repair procedures and recommendations from the original crane manufacturer, or other qualified source. Promptly means "Done Without Delay."

INSPECTION PROCEDURE:

1. Check facility crane records for evidence of crane repair or replacements of critical components.
2. If repair or replacement has been made, verify work was done promptly and accomplished in accordance with API RP 2D, Appendix F, paragraph F.4.3.3, item b.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if records indicate that work is not done promptly or accomplished in accordance with API RP 2D, Appendix F, paragraph F.4.3.3, item b.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

SLINGS

I-161

ARE SLINGS OF ALL TYPE, GRADE, AND CONSTRUCTION IDENTIFIED AS REQUIRED IN API RP 2D, PARAGRAPH 5.2.4b?

Authority: 108

Enforcement Action: C

Note: Sling identification includes sling manufacturer's name, pertinent working load limits, proof test certification number, length, diameter, and date of proof test.

INSPECTION PROCEDURE:

Verify that the slings have the specified ID tags attached.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if sling identification tag is missing.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each facility inspected.

I-162

ARE SLINGS PROPERLY STORED WHEN NOT IN USE IN ACCORDANCE WITH API RP 2D, APPENDIX G, PARAGRAPH G.5.2.1?

Authority: 108

Enforcement Action: W/C

Note: Slings should be stored in an area where they will not be exposed to water, extreme heat, or corrosive fumes, liquids and sprays. Slings should not be stored on the deck. All slings, when not in use, should be kept on a rack. Use of a rack minimizes accidental damage and allows easier monitoring of condition between regular inspections. If space limitations require that slings be stored along the side of the platform, they should be secured in a manner to prevent abrasion due to rubbing and maintained in a manner to minimize corrosion.

INSPECTION PROCEDURE:

Visually inspect areas near cranes for slings which are not properly stored and maintained.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if slings are not properly stored.

Issue a component shut-in (C) INC if slings are not maintained in a manner to prevent loss of integrity due to abrasion or corrosion.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each facility inspected.

CERTIFICATION

I-171

IS THE LESSEE ENSURING THAT THE MANUFACTURER IS CERTIFYING EACH CRANE MANUFACTURED AFTER MARCH 17, 2003, OR THAT EACH CRANE ON A FIXED PLATFORM INSTALLED AFTER MARCH 17, 2003, MEETS THE DESIGN, MATERIAL AND DIMENSIONAL SPECIFICATIONS USED IN THE CALCULATIONS AND HAS BEEN AUTHENTICATED IN ACCORDANCE WITH API SPEC 2C, PARAGRAPHS 5.5 AND 6.2?

Authority: 108

Enforcement Action: C

INSPECTION PROCEDURE:

1. Verify that a nameplate is installed in compliance with API SPEC 2 C.
2. In the absence of the nameplate, verify that the lessee has the required manufacturer's information.

IF NONCOMPLIANCE EXISTS:

Issue one component shut-in (C) INC for each crane certification audited if the Lessee does not comply with API SPEC 2 C, Paragraph 5.5 and 6.2.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each crane inspected.

PERSONNEL QUALIFICATIONS

I-181

DO ONLY QUALIFIED PERSONNEL PERFORM RIGGING OPERATIONS IN ACCORDANCE WITH API RP 2D, PARAGRAPHS 2.44, 3.1.3, AND 3.1.4?

Authority: 108

Enforcement Action: C

DEFINITION:

Rigger - Anyone who attaches or detaches lifting equipment to loads or lifting devices and who has received training in accordance with API RP 2D, paragraph 3.1.4 and Appendix A2.

INSPECTION PROCEDURE:

If rigging operations are in progress at the time of inspection, verify that personnel involved are qualified.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if rigging operations are in progress and personnel involved are not qualified.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each facility inspected.

I-182

ARE CRANES OPERATED ONLY BY QUALIFIED PERSONNEL IN ACCORDANCE WITH API RP 2D, PARAGRAPHS 3.1.1?

Authority: 108

Enforcement Action: W/C

DEFINITION:

Qualified Person:

1. A person who has met and passed the requirements of API RP 2D, paragraphs 2.42 and 3.1.2;
2. A trainee under the direct supervision of a Qualified Crane Operator;
3. Appropriate maintenance and supervisory personnel, when it is necessary for them to do so in the performance of their duties.

Note: No one other than the personnel specified above should enter a crane cab.

INSPECTION PROCEDURE:

Verify from facility records that crane operations were performed by qualified personnel.

If crane is in operation, verify that the person operating the crane is qualified.

Note:

1. A crane operator is not qualified if qualifications are not maintained, at a minimum, every four years.
2. A written document from the facility operator stating that qualifications have been met is sufficient.

IF NONCOMPLIANCE EXISTS:

Issue a warning (W) INC if facility records indicate that the crane was previously operated by unqualified personnel.

Issue a component shut-in (C) INC if the crane in operation during the inspection is operated by unqualified personnel.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each facility inspected.

I-183

ARE CRANE INSPECTORS QUALIFIED IN ACCORDANCE WITH API RP 2D, PARAGRAPH 2.43?

Authority: 108

Enforcement Action: C

DEFINITION:

Qualified Crane Inspector - A person so designated by the employer who by reason of appropriate experience and training, in addition to meeting the requirements of Qualified Crane Operator, has attended formal training in and successfully completed courses on crane maintenance and troubleshooting, hoist troubleshooting and overhaul, and on structural aspects of offshore cranes, which gives a knowledge of structurally critical components and critical inspection areas for non-mechanical and/or mechanical cranes, as applicable.

INSPECTION PROCEDURE:

Verify from facility crane records that duties requiring a qualified crane inspector have been performed by qualified personnel.

Note:

1. A crane inspector is not qualified if qualifications are not maintained, at a minimum, every 4 years.
2. A written document from the Operator stating that qualifications have been met is sufficient.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC if records indicate that duties requiring a qualified crane inspector have been performed by unqualified personnel.

INSPECTION COUNT/ INC

Enter one item checked/ issue one INC for each facility inspected.

MATERIAL HANDLING

I -190

**IS ALL MATERIAL-HANDLING EQUIPMENT OPERATED AND MAINTAINED
IN A MANNER THAT ENSURES SAFE OPERATIONS AND PREVENTS
POLLUTION?**

Authority 30 CFR 250.108(f)

Enforcement Action C

INSPECTION PROCEDURE:

- 1) Verify that material handling equipment is operated and maintained in a safe and pollution free manner.
- 2) Inspect records to ensure material handling equipment is operated per manufacturers and/or operators specifications.

IF NONCOMPLIANCE EXISTS:

Issue a component shut-in (C) INC when;

- 1) Material handling equipment is not operated and maintained in a safe manner.
- 2) Material handling equipment is not operated and maintained in a pollution free manner.

INSPECTION COUNT AND INC COUNT:

Enter one item checked / issue one INC for facility inspected.

NOTE - Material handling equipment includes, but is not limited to; air hoists, hoists, tugger, air tugger, winch, man-riding winch, come-a-long, monorail, gantry crane, jib