

MAINMAN ASSESSMENT REPORT

KONECRANES[®]
Lifting Businesses[™]

Report created: Jul 31, 2021, 12:34:56 PM

Customer and Service Information

Customer	CMI Management Inc		
Business Location	US Army Reserve - New Windsor		
Address	910 Raz Ave, New Windsor		
Agreement	U262-US Army Reserve - New Windsor		
Service Request	1-93851994761		
Description	NHV (NY)- July/2021 Routine Maintenance, MAINMAN Assessment		
PO Number	Credit Card - Joe Bayne		
Billing Type	Fixed		
Customer Contact	Joe Bayne 703-738-5304 joe.bayne@cmimgmt.com	Konecranes Contact	Bettina Highlen bettina.highlen@konecranes.com

Summary

Service Request Status:	Completed
Service Products:	Routine Maintenance, MAINMAN Assessment
Assets Serviced:	1

Findings and Actions

Findings and Actions by Asset (Top 5)

1 Safety Risks

7.5 Ton Bridge Crane 1

1 Quotes

Note! The condition of certain components on serviced/inspected cranes cannot be directly verified through visual inspection without further disassembly and/or the use of other inspection methods. These advanced services are excluded from the scope of this service. Inspection frequency for these components should follow OEM recommendations and/or governing regulations. These components are listed separately and identified as follows:

Undetermined Conditions (Unable to Inspect - Not in Scope)

Findings and Actions (1 Assets)

 7.5 Ton Bridge Crane

Single girder EOT - 1 trolley wire rope hoist

Manufacturer	KONECRANES	Model	A31500
Serial Number	1190936	Span	20ft
Criticality	High	Lift	19.7ft
Site Location	Maintenance Bay #6	Volt/Ph/Hz	480-3-60
Capacity/SWL	7.5 Ton	Duty Class	2m
		Environment	Indoors

Service Products Routine Maintenance & MAINMAN Assessment

✓ / ! **Comment**

Maintenance log book

✓
✓ **Markings** – Visual assessment

✓ **Documentation** – Visual assessment

✓ **Service platform** – Visual assessment

✓ **Handrails** – Visual assessment

✓ **Ladders** – Visual assessment

Bridge

Structure

Main girder

✓ **Main girder beam and markings** – Visual assessment

✓ **Main girder connection** – Visual assessment

✓ **Trolley rail** – Visual assessment

✓ **Trolley rail end stops** – Visual assessment

✓ **Service platform** – Visual assessment

✓ **Handrails** – Visual assessment

✓ **Ladders** – Visual assessment

✓ **Storm lock device** – Visual assessment, Operational assessment

End truck

✓ **End truck structure** – Visual assessment

✓ **Crane driving wheel and bearings** – Visual assessment, Lubricate, Operational ass...

✓ **Open gear transmission** – Visual assessment, Lubricate, Operational assessment

✓ **Crane idle wheel and bearings** – Visual assessment, Lubricate, Operational assess...

✓ **Crane bumpers** – Visual assessment

✓ **Guide roller** – Visual assessment, Lubricate, Operational assessment

✓ **Rail sweeps** – Visual assessment

End truck

✓ **End truck structure** – Visual assessment

✓ **Crane driving wheel and bearings** – Visual assessment, Lubricate, Operational ass...

✓ **Open gear transmission** – Visual assessment, Lubricate, Operational assessment

✓ **Crane idle wheel and bearings** – Visual assessment, Lubricate, Operational assess...

✓ **Crane bumpers** – Visual assessment

✓ **Guide roller** – Visual assessment, Lubricate, Operational assessment

✓ **Rail sweeps** – Visual assessment

Crane travelling machinery

✓ **Travelling gear** – Visual assessment, Lubricate, Operational assessment

✓ **Travelling coupling** – Visual assessment, Lubricate, Operational assessment

✓ **Travelling power transmission shaft and bearings** – Visual assessment, Lubricate, Op...

✓ **Travelling motor** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Travelling brake** – Adjust, Visual assessment, Clean, Operational assessment

✓ **Travelling encoder** – Visual assessment, Operational assessment

✓ **Protection guards and covers** – Visual assessment

Crane travelling machinery

✓ **Travelling gear** – Visual assessment, Lubricate, Operational assessment

✓ **Travelling coupling** – Visual assessment, Lubricate, Operational assessment

✓ **Travelling power transmission shaft and bearings** – Visual assessment, Lubricate, Op...

✓ **Travelling motor** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Travelling brake** – Visual assessment, Adjust, Clean, Operational assessment

✓ **Travelling encoder** – Visual assessment, Operational assessment

✓ **Protection guards and covers** – Visual assessment

Trolley

Structure

✓ **Trolley intermediate structure** – Visual assessment

Trolley idle side

✓ **Trolley idle side structure** – Visual assessment

✓ **Trolley idle wheel and bearings** – Visual assessment, Lubricate, Operational assess...

✓ **Trolley idle wheel and bearings** – Visual assessment, Lubricate, Operational assess...

✓ **Trolley bumpers** – Visual assessment

✓ **Rail sweeps** – Visual assessment

Trolley driving side

✓ **Trolley driving side structure** – Visual assessment

✓ **Trolley driving wheel and bearings** – Visual assessment, Lubricate, Operational as...

✓ **Trolley driving wheel and bearings** – Visual assessment, Lubricate, Operational as...

✓ **Open gear transmission** – Visual assessment, Lubricate, Operational assessment

✓ **Trolley bumpers** – Visual assessment

✓ **Rail sweeps** – Visual assessment

Trolley traversing machinery

✓ **Traversing gear** – Visual assessment, Lubricate, Operational assessment

✓ **Traversing coupling** – Visual assessment, Lubricate, Operational assessment

✓ **Guide roller** – Visual assessment, Lubricate, Operational assessment

✓ **Traversing motor** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Traversing brake** – Adjust, Visual assessment, Clean, Operational assessment

✓ **Traversing encoder** – Visual assessment, Operational assessment

✓ **Protection guards and covers** – Visual assessment

Hoisting machinery

✓ **Hoisting gear** – Visual assessment, Lubricate, Operational assessment

✓ **Hoisting coupling** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Hoisting motor** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Micro motion motor** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Micro motion coupling** – Visual assessment, Lubricate, Operational assessment

✓ **Hoisting brake - holding** – Visual assessment, Adjust, Clean, Operational assessment

✓ **Hoisting brake - control** – Adjust, Visual assessment, Clean, Operational assessment

✓ **Hoisting encoder** – Visual assessment, Operational assessment

✓ **Rope drum** – Visual assessment, Operational assessment

✓ **Rope guide** – Visual assessment, Lubricate, Operational assessment

✓ **Rope clamps** – Visual assessment

✓ **Rope drum bearings** – Visual assessment, Lubricate, Operational assessment

✓ **Rope anchorage** – Visual assessment

✓ **Hoisting wire rope** – Visual assessment, Lubricate, Operational assessment

✓ **Upper block** – Visual assessment

✓ **Upper block structure** – Visual assessment

✓ **Rope sheave and bearings** – Visual assessment, Lubricate, Operational assessment

Hook block

- ✓ **Hook block structure and markings** – Visual assessment
- ✓ **Rope sheave and bearings** – Visual assessment, Lubricate, Operational assessment
- ✓ **Crosshead** – Visual assessment, Operational assessment
- ✓ **Thrust ball bearing** – Lubricate, Operational assessment
- ✓ **Hook forging** – Visual assessment
- ✓ **Latch** – Visual assessment, Operational assessment

Electrics

Power supply

- ✓ **Runway mainline disconnect** – Visual assessment, Operational assessment
- ✓ **Runway power supply** – Visual assessment, Operational assessment
 - ✓ **Tow arm** – Visual assessment
 - ✓ **Collector assembly** – Visual assessment, Operational assessment
 - ✓ **Conductor** – Visual assessment
 - ✓ **Festoon cable** – Visual assessment
 - ✓ **Cable trolley** – Visual assessment, Operational assessment
- ✓ **Crane main switch** – Visual assessment, Operational assessment
- ✓ **Trolley power supply** – Visual assessment, Operational assessment
 - ✓ **Tow arm** – Visual assessment
 - ✓ **Collector assembly** – Visual assessment, Operational assessment
 - ✓ **Conductor** – Visual assessment
 - ✓ **Festoon cable** – Visual assessment
 - ✓ **Cable trolley** – Visual assessment, Operational assessment
- ✓ **Pendant power supply** – Visual assessment, Operational assessment
 - ✓ **Connection box** – Visual assessment
 - ✓ **Festoon cable** – Visual assessment

Control system

- ✓ **Bridge cubicle** – Visual assessment
 - ✓ **General wiring and conduits** – Visual assessment
 - ✓ **Operation control** – Visual assessment, Operational assessment
 - ✓ **Travelling inverter** – Visual assessment, Clean, Operational assessment
- ✓ **Trolley cubicle** – Visual assessment
 - ✓ **General wiring and conduits** – Visual assessment
 - ✓ **Operation control** – Visual assessment, Operational assessment

✓ **Traversing inverter** – Visual assessment, Clean, Operational assessment

✓ **Hoist cubicle** – Visual assessment

✓ **General wiring and conduits** – Visual assessment

✓ **Operation control** – Visual assessment, Operational assessment

✓ **Traversing inverter** – Visual assessment, Clean, Operational assessment

✓ **Hoisting inverter** – Visual assessment, Clean, Operational assessment

! **Pushbutton pendant**

Quote

Date Reported: Jul 29, 2021

Technician: Ryan Argus

Task Type: Operational assessment

Fault Code: Damaged controls

Risk: Safety Risk

Recommendation: Repair

Comment: Estop button is broken recommend repairing

✓ **Pushbutton pendant cable** – Visual assessment

✓ **Crane travelling limit switches** – Visual assessment, Adjust, Operational assessment

✓ **Trolley traversing limit switches** – Adjust, Visual assessment, Operational assessment

✓ **Hoisting limit switches** – Adjust, Visual assessment, Operational assessment

✓ **Overload protector** – Visual assessment, Lubricate, Clean, Operational assessment

✓ **Condition monitoring unit** – Measure, Operational assessment

✓ **Warning devices** – Operational assessment

✓ **Interlocks and switches** – Visual assessment, Operational assessment

✓ **Operation control** – Visual assessment, Operational assessment

✓ **Indicating devices** – Visual assessment, Operational assessment

✓ **Resistor cubicle** – Visual assessment

✓ **Resistor cubicle** – Visual assessment

✓ **Resistor cubicle** – Visual assessment

✓ **Radio controller** – Visual assessment, Operational assessment

✓ **Balancer** – Visual assessment, Operational assessment

✓ **Lighting** – Visual assessment, Operational assessment

Runway

Beam

✓ **End stops** – Visual assessment

Beam

✓ **End stops** – Visual assessment

7.5 Ton Bridge Crane, Pushbutton pendant, damaged controls



7.5 Ton Bridge Crane, Pushbutton pendant, damaged controls



MAINMAN ASSESSMENT REPORT

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Jul 30, 2021 Joe Bayne, Customer



Jul 30, 2021 Ryan Argus, Technician

Undetermined Conditions: Unable to Inspect - Not in Scope (1 Assets)



7.5 Ton Bridge Crane

Single girder EOT - 1 trolley wire rope hoist

Jul 29, 2021

! Hoisting gear - internal

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Notification

Jul 29, 2021

! Hoisting coupling - internal

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Notification

Jul 29, 2021

! Mechanical load brake

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Notification

Jul 29, 2021

! Hook forging - internal

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Notification

Jul 29, 2021

! Hook nut and locking parts

Fault Code: Not in Scope

Risk: **Undetermined Condition**

Recommendation: Disassemble/Inspect

Comment:

Disassembly is required to inspect this component. Inspection frequency is as required by the OEM and/or governing regulations

Notification

Component Condition

- ✓ Acceptable (No issues detected)
- ! Need Attention

Findings and Actions

Safety Risk **WARNING**

Indicates an unsafe condition. Failure to remedy such condition before continued operation of the identified asset may result in personal injury, including death, or property damage.

Production Risk

Indicates an inefficient condition. Failure to remedy such condition before continued operation of the identified asset may result in inefficient asset performance or an interruption in production.

Undetermined Condition

Unable to Inspect - Not in Scope

Indicates that the component condition could not be directly verified through visual inspection without further disassembly and/or the use of other inspection methods.

These advanced services are generally excluded from the scope of typical compliance and preventive maintenance inspections. Consultation Services may be added to a Service Program or offered on a stand-alone basis to assess the condition of these components.

Inspection frequency for these components should follow OEM recommendations and/or governing regulations. If these are not readily available, Konecranes recommendations may be used.

If no records are available, disassembly/inspections of these components should be carried out without delay to determine their current condition and to establish a baseline for subsequent inspections.

Undetermined Condition

Not able to Complete

Indicates that the component condition could not be directly verified through visual inspection as a result of asset configuration and/or obstruction. In this case, the visual inspection was part of the service scope but it was not completed.

Improvement Opportunity

Indicates a potential opportunity to improve the safety, productivity, application or useful life of the asset.

Acceptable / Repaired Item

Component condition is verified by Konecranes service technician. No actions required. If a component or other object has been repaired within the service visit, green color code is shown as well.

Repaired Items correspond to those repairs performed by, observed by or reported to the Konecranes Technician during the delivery of the referenced Service Request.

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