

# MAINMAN ASSESSMENT REPORT

**KONECRANES**  
Lifting Businesses™

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

## Customer and Service Information

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

## Summary

<b>Service Request Status:</b>	Completed
<b>Service Products:</b>	Routine Maintenance, MAINMAN Assessment
<b>Assets Serviced:</b>	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

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



NA

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Jul 30, 2021 Joe Bayne, Customer



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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

Notification

**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

Jul 29, 2021

### ! Hoisting coupling - internal

Notification

**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

Jul 29, 2021

### ! Mechanical load brake

Notification

**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

Jul 29, 2021

### ! Hook forging - internal

Notification

**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

Jul 29, 2021

### ! Hook nut and locking parts

Notification

**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

## 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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