

### **Lifting Equipment Inspection Report**

**Collins Reseach Hall** 

Periodic Inspection

Collins Research Lab Collins Research Lab Collins Research Lab



**Inspection Date:** 

4/6/2022

InspectionID: 042058163

Prepared For:

Prepared By:

Powell Barber (FL) - Operations

Inspection Team JN

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### Introduction

#### **Inspections in Perspective**

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CRANE & HOIST

The combination of timely inspections and a thorough preventative maintenance program are not only required by law but are also essential to the safe, efficient, and cost-effective operation of overhead lifting equipment. Ace Industries' Certified Crane Care Inspection Program is specifically designed to provide inspections and preventative maintenance guidelines in accordance with all appropriate governing bodies, safety codes, manufacturer's guidelines, and industry best practices surrounding overhead lifting equipment.



Ace's Certified Crane Care Inspection Program rigorously follows the guidelines for the construction, maintenance, inspection, and operation of Overhead and Gantry Cranes required by OSHA and ANSI. OSHA regulations define the requirement for frequent operational inspections and documented, periodic inspections for Overhead Bridge, Monorails, and Gantry Cranes. All Ace inspectors are highly trained in the interpretation and application of Occupational Health and Safety Administration (OSHA) Code of Federal Regulations 1910.179, American National Standards Institute (ANSI) part B30, and the Crane Manufacturer's Association of America (CMAA) Specification 78.

#### **Company At-a-Glance**

Ace Industries, Inc., founded in 1932, is one of the largest overhead crane and hoist distribution, manufacturing, and service companies in the United States. Ace has fully stocked warehouses, service centers, and sales offices in Atlanta, Georgia; Birmingham, Alabama; Decatur, Alabama; Charlotte, NC; Cincinnati, Ohio; Columbus, Ohio; Nashville, Tennessee; Chattanooga, Tennessee; and Knoxville, Tennessee. Ace associates number over 180 and have a strong determination to serve our customers faithfully and knowledgably.

#### Parts & New Units:

We specialize in the distribution of electric chain hoists, wire rope hoists, hand chain hoists, trolleys, crane components, replacement parts, and accessories. Complete inventories of these products are stocked in regional facilities located throughout the United States. Our distribution abilities are noted for having parts and new units available for same day shipment. For stocked products, ask us about our best price guarantee.

#### Manufacturing & Engineering:

The design, manufacturing and distribution of overhead bridge cranes, gantry cranes, jib cranes, work station cranes and runway systems are handled in-house by our employees. A qualified and experienced engineering staff with specialists in structural, mechanical and electrical engineering insure we exceed our customers' expectations. Multiple manufacturing facilities provide the ability and scheduling flexibility to meet the delivery dates of our customers.

#### Services & Inspections:

Field service operations utilize the Certified Crane Care inspection program developed by Ace Industries Inc. The Certified Crane Care inspection program provides our technicians the ability to perform a thorough and standardized equipment inspection. Customers benefit by receiving a detailed equipment inspection, with fast turnaround time on inspection reports and transparent repair quotations.

#### <u>Slings & Rigging:</u>

Lifting and rigging equipment is available through multiple rigging division locations. We distribute the Stren-Flex<sup>®</sup> brand sling, which are the highest quality domestic synthetic web slings. Synthetic web slings are customizable with multiple options to fit your needs. We also inventory a large selection of "in stock" chain, wire rope, sling and rigging products.

#### - Introduction -

#### **Certified Crane Care Inspection Program**

CRANE & HOIST

Ace Industries, Inc. is unwavering in its commitment to providing the most effective, highest quality, and most valuable services for our customers. Ace's uncompromising pursuit of excellence is encompassed in the four primary goals of Ace's Certified Crane Care Inspection Program.

-Safety -Industry Best Practices -Preventative Maintenance -Compliance – OSHA & ANSI Regulations



Ace engineered each component of the Certified Crane Care Inspection Program to fuse the elements of safety, industry best practice, preventative maintenance, and compliance into one program. Every aspect of Ace's 250+ point inspection provides appropriate and rapid feedback to our customers. For more information about the goals of Ace's Certified Crane Care Inspection Program, see the following detailed explanations of Ace's commitment to its inspection goals.

#### <u>Safety</u>

Safety is the primary goal of Ace's inspection program. At Ace, safety begins with every inspector, which follows Ace's commitment to a safe working environment for all our associates. Ace inspectors are trained to identify safety hazards and bring any danger or serious risk to the attention of our customers immediately.

#### **Best Practices**

As an industry leader in the overhead material handling industry for over 85 years, Ace provides years of expertise, resources, and equipment to all Ace associates to benefit our customers and vendors. Ace maintains a rigorous training and certification program to ensure that all Ace inspectors understand industry best practices that go beyond mere compliance for construction, maintenance and operation of overhead material handling equipment. Ace's training is designed to leverage our years of knowledge and expertise to provide the greatest value for our customers.

#### Preventative Maintenance

Ace's 250+ point inspection reports are designed to provide a rapid, easy-to-read format for our customers to address preventative maintenance and repair efforts. Ace inspectors understand that preventative maintenance is a key component to any effective inspection program, and our inspectors are trained to make our customers aware of any problems or defects in equipment so our customers may turn maintenance efforts towards enhancements and corrective actions which are vital to the safety and success of their company.

#### <u>Compliance</u>

The inspection program is designed to ensure our customers' lifting equipment conforms to applicable OSHA, ANSI and CMAA regulations regarding safety, construction, and reliability for overhead lifting equipment. Inspectors are trained in the interpretation, application, and understanding of OSHA, ANSI, and CMAA codes. The program is designed to ensure that our customers have the proper documentation for maintenance and inspections as required by law. The inspection history information is stored in a database and can be accessed whenever needed.

#### - Introduction -

#### **Conventions Found in this Report**

All inspections were based on visual and operational observations at the time of inspection and do not guarantee the reliability or safety of the equipment noted.

The following conventions have been used in this report:

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#### Conditions

Good: condition of an item, component, or piece of equipment that requires no special attention at this time.

Fair: condition of an item, component, or piece of equipment that could possibly cause a breakdown, malfunction, or unsafe condition before the next scheduled periodic inspection.

Poor: condition of an item, component, or piece of equipment that will likely cause a breakdown, malfunction, or unsafe condition before the next scheduled periodic inspection.

Unsatisfactory: condition of an item, component, or piece of equipment that should be repaired as soon as possible as it is in violation of OSHA or ANSI standards as they pertain to overhead cranes and hoists or is an immediate danger or safety concern.





#### **Actions Required**

Disassembly Required: condition of an item, component, or piece of equipment that requires disassembly for further evaluation. By marking items with Disassembly Required, Ace recommends planned maintenance unless otherwise noted.

Preventative Maintenance: indicates that preventative maintenance should be performed to the flagged issue marked to prevent a more serious problem.

Corrective Action Made: action was taken during the time of inspection to correct, repair, or modify an existing problem, malfunction, or unsafe condition before the inspection was completed. By marking items with Corrective Action Taken, Ace inspectors denote specific actions taken during the time of inspection and note requirements for future repairs, modifications, or monitoring required if applicable.

Testing Required: indicates further testing required to evaluate the working condition of the item being inspected.

Please note that these designations are assigned based on visual observations only at the time of the inspection. All inspections are made visually and without disassembling components to check for concealed defects (unless otherwise noted). No load tests or magnaflux tests have been made unless specifically noted.

**Inspection Report** 

					U
quipment ID: LIN	IAC Hall				
escription: 4 T	on Ursg With Aux. Girder	By Vulcan Crane			
ocation: Co	llins Research Lab - Collins	s Reseach Hall (27367)		Signature	
ummary: An	nual Inspection by Kipp (J	ordan) Carter on 4/6/2	.022	Viel	71
-	6 <mark>G</mark>			REPL	Fb-
Component	Туре	Manufacturer	Model #	Serial #	Capacity
Runway	Under-Running				
Bridge	Under Running Single Girder	Vulcan Crane		587	4 TON
Hoist	Electric	Chester	ELM-0400S	ELM-3892	4 TON
Trolley	Electric	Chester	ELM-0400S	ELM-3892	4
Pendant / Remote	Pendant PB	Telemecanique	XAC-A04H7	NA	
Pendant / Remote	Remote	Alpha (Fomotech)	ALPHA 600	08022308	
G Electrification	Ton				
lge - Vulcan Crane 4 G Markings & G Structure G End Trucks G Bridge Drive	Ton Warnings etrain				
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Please note that these designations are assigned based on visual observations only at the time of the inspection. All inspections are made visually and without disassembling components to check for concealed defects (unless otherwise noted). No load tests or magnaflux tests have been made unless specifically noted.

#### Bridge - Vulcan Crane 4 Ton

Point: 8 - Trolley Stop

Condition: G

Comments: Trolley hits bridge hand chain guide and wheel. Need to relocate south trolley stop.

CRANE & HOIST



**Inspection Report** 

GRANE & HUISI						
Equipment Summa	ary				Unit #4	
Equipment ID: Target Room 2 South						
Description: 2 Ton Bridge Crane						
Location: Collins Research Lab - Collins Research Hall (27367) Signature						
Summary: Annual Inspection by Kipp (Jordan) Carter on 4/6/2022						
Conditions:						
Component	Туре	Manufacturer	Model #	Serial #	Capacity	
Runway	Under-Running					
Bridge	Under Running Double Girder	Gorbel		614650	2 TON	
Hoist	Electric	Coffing	JLC4008	JMB1247YV	2 TON	
Trolley	Push	Gorbel		613650	2 TON	
	gs & Warnings					
	cks cation / Power g Devices					
Runway - 2 Ton						
G Runway G Rail / Ba	r Structure ar cation / Power					
Hoist - 2 Ton Electri	c Chain Hoist					
G Lifting M G Suspens G Electrifi G Mechar	sion / Lower Block cation / Power nical Components ntton (2 btn only)					
Trolley - 2 Ton Urdg	g Push					
G Trolley	nical Components					

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**Inspection Report** 

	У				
quipment ID: ٦	Farget Room 2 North				
escription: 2	2 Ton Bridge Crane				
Location: Collins Research Lab - Collins Reseach Hall (27367)			7)	Signature	
Summary: Annual Inspection by Kipp (Jordan) Carter on 4/6/2022			/2022	Vint	A A
onditions:	81 <mark>G</mark>			per la	The -
Component	Туре	Manufacturer	Model #	Serial #	Capacity
Runway	Under-Running				
Bridge	Under Running Double Girder	Gorbel		614550	2 TON
Hoist	Electric	Coffing	JLC4008	JMB1246YV	2 TON
	Durah	Carda al	614550	614550	2 TON
Trolley	Push	Gorbel	014550	014550	21011
ection Observat Good F = Fair way - 2 Ton Urdg G Runway S G Rail / Bar	ions P = Poor U = Unsati	1	1		

- G End Trucks
- G Electrification / Power
- G Warning Devices
- G Safety Cables

#### Hoist - 2 Ton Elect Chain Hoist

- G Markings & Warnings
- G Lifting Medium
- G Suspension / Lower Block
- G Electrification / Power
- G Mechanical Components
- G Push Button (2 btn only)
- G Safety Cables

olley	- 2 Ton Urdg Push	
(	G Markings & Warnings	
(	G Trolley Frame	
	<ul><li>G Markings &amp; Warnings</li><li>G Trolley Frame</li><li>G Mechanical Components</li></ul>	
	G Safety Cables	

Please note that these designations are assigned based on visual observations only at the time of the inspection. All inspections are made visually and without disassembling components to check for concealed defects (unless otherwise noted). No load tests or magnaflux tests have been made unless specifically noted.

Equi	ipment Summary
EQU	ipinent summary

Equi	pm	ent	Sur	nm	arv

Equipment ID:	Target Room 1				
Description:	8000lb Hoist And Trolly				
Location:	Collins Research Lab - Collins Reseach Hall (27367) Signature				
Summary: Conditions:	Annual Inspection by Kip 2 🕛 88 G	o (Jordan) Carter on 4/6/20	022	Kepp Te	1 The
Component	Туре	Manufacturer	Model #	Serial #	Capacity
Runway	Top-Running				
Bridge	Top Running Doubl Girder	e NA		UNKNOWN	4 Ton
Hoist	Electric	P&H	HEVI-LIFT	R-21916	4 Ton
Trolley	Hand Geared	NA			4 Ton

J – 0000	F = Fair	P = Poor	U = Unsatisfactory	N = Not Applicable	I = Incomplete		
lunway - I	Runway						
G	Runway S	tructure					
G	Rail / Bar						
G	Electrifica	tion / Power					
Bridge - Bu	ldow 8000l	b Capacity					
G	Markings	& Warnings					
U	Structure						
	light Mini	s. Need to re mum clearar	move old unused light the of 3 in. Yoverhead	nt fixtures. OSHA - 1910	II be provided and main		Repaired:// By:
G	End Truck	S					
G	Bridge Dr						
G		tion / Power					
G	Warning I						
G	Safety Ca	oles					
loist - P&l	Н						
G	Markings	& Warnings					
G	Lifting Me	dium					
U	Suspensic	n / Lower Bl	ock				
	(U) 25: L	ower Safety	Latch - No safety lato	h is installed, universa	l latch is needed. (2 Pic	tures)	Repaired:// By:
G	Electrifica	tion / Power					
G	Mechanic	al Componer	nts				
G	Push Butt	on (2 btn onl	y)				
G	Safety Ca	oles					
rollev - B	udow Trolle	ey .					
/	Markings	& Warnings					
G	inter Kings						
	Trolley Fr	-					
G	Trolley Fr	-	nts				

Please note that these designations are assigned based on visual observations only at the time of the inspection. All inspections are made visually and without disassembling components to check for concealed defects (unless otherwise noted). No load tests or magnaflux tests have been made unless specifically noted.

#### Bridge - Budow 8000lb Capacity

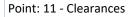
Point: 11 - Clearances

Condition: U

Comments: Approximately 1-1/2" clearance over hoist. Broken parts hanging down out of old lights. Need to remove old unused light fixtures. OSHA - 1910.179 (b) (6) (i)

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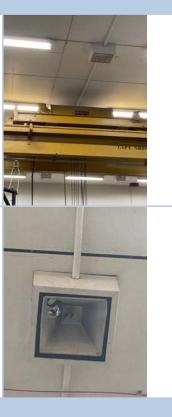
Minimum clearance of 3 in. Yoverhead and 2 in. laterally shall be provided and maintained between crane obstructions in conformity with CMAA # 61



Condition: U

Comments: Approximately 1-1/2" clearance over hoist. Broken parts hanging down out of old lights. Need to remove old unused light fixtures. OSHA - 1910.179 (b) (6) (i)

Minimum clearance of 3 in. Yoverhead and 2 in. laterally shall be provided and maintained between crane obstructions in conformity with CMAA # 61





Point: 25 - Lower Safety Latch

Condition: U

Comments: No safety latch is installed, universal latch is needed.

Point: 25 - Lower Safety Latch

Condition: U

Comments: No safety latch is installed, universal latch is needed.



**Inspection Report** 

	CRANE & HOIS	5 <b>T</b>			пізресної кер
quipment Summa	ary				Unit
Equipment ID:	Tandem Vault				
Description:	2 Ton TRSG Hand Geared	Crane			
Location:	Collins Research Lab - Coll	ns Reseach Hall (27367	')	Signature	
Summary:	Annual Inspection by Kipp				1
•			2022	lere 1	The
Conditions:	1 🕕 122 <mark>G</mark>			/ -1 / L	
Component	Туре	Manufacturer	Model #	Serial #	Capacity
Runway	Top-Running				
Bridge	Top Running Single Girder	Unknown		UNKNOWN	2 Ton
Hoist	Hand Chain	Harrington	CF4-0321	C038478	2 Ton
Hoist	Electric	P&H	HEVI-LIFT	RA56069	2 Ton
Trolley	Push	Budgit		M-5129	2 Ton
Trolley	Hand Geared	P&H		RA56069	2 Ton
	Structure				
Runway - Runway					
G Rail / Ba	ar				
G Electrifi	cation / Power				
ridge - Bridge					
	0.11/				
	gs & Warnings				
G Structu					
G End Tru	cks				
G Bridge I	Drivetrain				
G Electrifi	cation / Power				
G Warnin	g Devices				
G Safety C					
rolley - Budgit 2 Tr					
	gs & Warnings				
G Trolley					
G Mechar	nical Components				
G Safety C	Cables				
oist - Harrington 2	Ton Chain Hoist				
G Marking	gs & Warnings				
G Lifting N	/ledium				
_	sion / Lower Block				
Juspen					
	nical Components				
G Mechar	nical Components Itton (2 btn only)				
G Mechar G Push Bu	itton (2 btn only)				
G Mechar G Push Bu G Safety C	itton (2 btn only)				
G Mechar G Push Bu G Safety C Ioist - P&H 2 Ton	itton (2 btn only) Cables				
G Mechar G Push Bu G Safety C loist - P&H 2 Ton G Marking	itton (2 btn only) Cables gs & Warnings				
G Mechar G Push Bu G Safety C loist - P&H 2 Ton G Marking G Lifting N	itton (2 btn only) Cables gs & Warnings Medium				
G Mechar G Push Bu G Safety ( oist - P&H 2 Ton G Marking G Lifting N U Suspensi	atton (2 btn only) Cables gs & Warnings Aedium sion / Lower Block		installation (4 Dirich)		indu ( ) S
G Mechar G Push Bu G Safety C Hoist - P&H 2 Ton G Marking G Lifting M U Suspens (U) 25	atton (2 btn only) Cables gs & Warnings Medium sion / Lower Block : Lower Safety Latch - Missin	ng safety latch requires	installation. (1 Picture)	Repa	ired://By:
G Mechar G Push Bu G Safety C Ioist - P&H 2 Ton G Lifting N U Suspens (U) 25 G Electrifi	atton (2 btn only) Cables gs & Warnings Aedium sion / Lower Block	ng safety latch requires	installation. (1 Picture)	Repa	ired:/By:

	CRANE & HOIST	Inspection Rep
G	Push Button (2 btn only)	
G	Safety Cables	
Trolley - I	P&H Trolley	
G	Markings & Warnings	
G	Trolley Frame	
G	Mechanical Components	
G	Safety Cables	

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#### Hoist - P&H 2 Ton

Point: 25 - Lower Safety Latch

Condition: U

Comments: Missing safety latch requires installation.



#### Trolley - P&H Trolley

Point: 1 - Adjustment to Beam Condition: G Comments:

