



ACE INDUSTRIES
CRANE & HOIST

CRANE INSPECTION & MAINTENANCE SERVICES





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WHAT MAKES ACE UNIQUE?



“WE’RE NOT CRANE COPS! OUR APPROACH IS TO HELP YOU BE COMPLIANT, SAFE AND TOTALLY PREPARED IN CASE OF AN AUDIT.”

SEATTLE, WA ACE BRANCH MANAGER
Jeff Kopp

The most important thing in doing an inspection *right* is being hands on—opening covers, visually inspecting brakes, looking at the most critical components. We’re not trying to sell you things you don’t need and we won’t make you wait to discuss your crane’s issues with you. Our customers appreciate that they can read our reports with very little explanation and the photos really help.



“I HEAR IT FROM CUSTOMERS, OUR REPORTS ARE EASY TO READ, FAST AND THE DATA IS EASY TO DIGEST.”

NORCROSS, GA ACE TECHNICIAN
Tim Holman

The format of our inspection reports is superior. The first thing we do is make sure the customer is safe. We don’t cut corners and we don’t have a sales quota to reach or an OEM product to sell so you’re going to get straight up honesty with Ace. I think the best thing we offer is highly technical, knowledgeable technicians and complete transparency.



WE'RE EFFICIENT



ACCOUNT REVIEWS

Our goal is to serve you in the best way possible and to help spend your maintenance dollars in a way that makes the most out of your budget and keeps your equipment reliable during the course of its operational lifetime.

With a complimentary once a year Account Review, we'll take the data from our service history with you and analyze your spending habits to see where we can improve on any inefficiencies. For example, suppose the data reveals that you're spending more on breakdowns than inspections in a year. In that case, we could advise that it would make more sense to add a regular PM routine, so you'll see those hefty breakdown service costs go down and enjoy the benefits of an over-all more reliable crane.

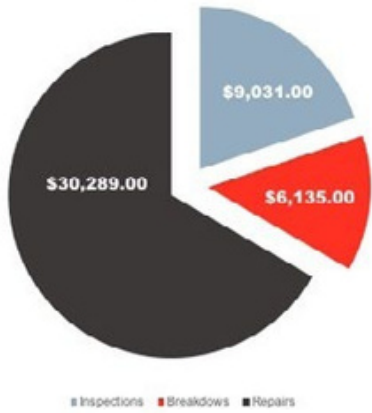
Ask your Ace Rep for an Account Review today to see if what you're putting into and getting out of the overhead cranes in your facilities matches up to your new service and preventative maintenance strategy.

CURRENT SERVICE ★



SPEND BY CATEGORY ★

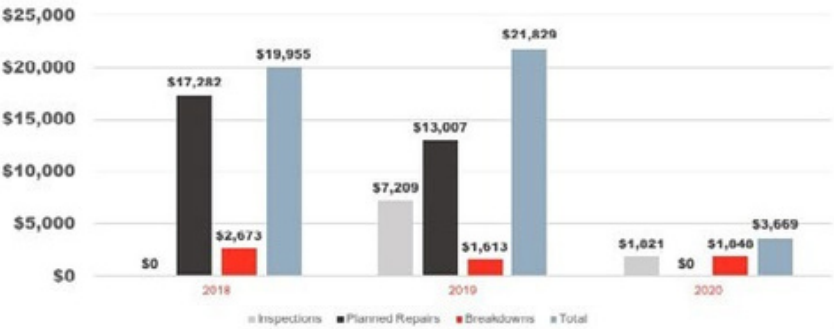
SALES



TOTAL SPEND: \$45,455

ACE

YEARLY COMPARISON ★



ACE



PREVENTATIVE MAINTENANCE

Preventative maintenance is imperative to the safety and reliability of overall system performance. When you establish a PM program with Ace, we perform the regular needed maintenance on your overhead cranes and hoists, make repairs and implement parts replacements to prevent failures before they ever have the chance to occur. We know a breakdown on production equipment can bleed your time and money. The type of PM needed for your material handling equipment will be custom to the type of application, the load your crane carries and the role it performs in your business.



The benefits of a Preventative Maintenance plan include:

Increased safety and reliability— Following a routine PM program will help to identify small issues before they become major failures. Routine maintenance increases safety, maintains equipment performance, allows component integrity to be monitored, and reduces the likelihood of unplanned downtime.

Prolonged life— Certified technicians will ensure the manufacturer's recommendations are followed as well as unique system needs to limit stress to components that could result in premature loss. Routine maintenance should follow strict servicing intervals based on time or usage to prevent early wear and tear and monitor areas of concern.

Reduced downtime— Preventative maintenance programs will include inspections that may require scheduled downtime. During these scheduled inspections, system components will be evaluated for potential integrity risks. This allows concerns to be resolved before large-scale failures occur—keeping operations running more efficiently and for less money in repairs.

Lower total maintenance costs— Due to a lowered rate of breakdowns and catching symptoms before they result in major operational problems on overhead cranes there will be a lesser impact to the company's bottom line. Scheduled maintenance requires fewer technician hours compared to most emergency troubleshooting and repair scenarios.

Contact your Ace Rep and set up your Preventative Maintenance plan today!

CERTIFIED CRANE CARE

At Ace, we unite excellent customer service with solid technical knowledge to make life better for industrial businesses across the nation. We give our best effort to our work, and we put people first. When an Ace technician inspects your crane, you can expect to hear straight forward results that include direct, actionable recommendations if needed or the assurance from a skilled professional that your crane is in top shape.

Ace inspections cover up to 250 points on your crane, all the potential problem areas we've seen in our decades of experience servicing material handling equipment. We inspect the most critical components and their supporting elements, and where practical, we'll take a hands-on approach and open covers when a simple visual scan is not possible.

Your easy-to-read Inspection Report will document any problem areas and needed repairs. The photos generated will help you get a visual sign-off for any issues or deficiencies involved.

SAFETY

A safety inspection is a systematic assessment of your working equipment to ensure it won't result in anyone getting hurt. Therefore, our reports reveal safety hazards and deficiencies found on your crane or hoist as per our inspection Report detail. In addition, Ace inspectors are trained to identify safety hazards and bring any danger or serious risk to our customers' attention immediately when you need it, not days or weeks later.

BEST PRACTICES

Ace has been an industry leader in overhead material handling for over 90 years. Our associates benefit from years of industry expertise, resources,

- PREVENTATIVE MAINTENANCE
- OUR PROGRAM
- SAFETY STANDARDS
- INDUSTRY BEST PRACTICES
- OSHA & ANSI COMPLIANCE

and equipment passed on to our customers and vendors. Ace's training and a certification program keep our inspectors up-to-date on OSHA compliance and best practices for design, maintenance, and the operation of overhead material handling equipment.

OSHA & ANSI COMPLIANCE

Ace's inspection program will ensure your lifting equipment conforms to all applicable OSHA, ANSI and CMAA regulations regarding safety, construction and reliability for overhead lifting equipment. Ace inspectors are trained in interpreting, applying and understanding current codes and will assure you have the proper documentation for maintenance and inspection required by law. All inspections for our customers are accessible any time in an on-site Customer Portal database.



WE PRIORITIZE SAFETY

JOB HAZARD ANALYSIS & PPE

Ace technicians will always review your job site for potential work hazards prior to inspection or repair. A Job Hazard Analysis (JHA), which includes a Field Level Risk Assessment, is conducted to flag any possible issues. If potential hazards are present, they're recorded, mitigated and controlled prior to work start. These issues can range from slippery water left on the floor to possible falling objects, any flammable gasses present in the work environment or even other workers in the area.

Ace technicians arrive at your site fully equipped with the proper personal protective gear needed for their work on your crane and are trained to comport themselves in as safe a manner as possible.

Safety is always our number one priority, both your safety and our technicians'.

INSPECTION FREQUENCY

Just like any other mechanical equipment in your business, keeping your crane operating smoothly over time will require regular upkeep and maintenance. Cranes can become not just inefficient from everyday wear and tear and parts breakage but, depending on your needed repairs, can also pose a danger to your employees.

OSHA rules stipulate that cranes must be inspected for damaged or worn components at intervals based on crane type and duty cycle. How often and what kind of inspection will vary based on several variables, including how frequently your crane is used and how much of a workload it carries.

Ace Inspectors are highly trained and specialize in detecting problem issues in your equipment that can be addressed and quickly resolved before draining your operations with expensive downtime.

WHERE DO BREAKDOWNS HAPPEN THE MOST?



INSPECTIONS AND PM GUIDELINES

TYPE OF INSPECTION	FREQUENCY	OSHA REQUIRED DOCUMENTATION
Initial Inspection	Prior to use of New or Altered Cranes	Record of Inspection
Pre-Shift Functional Test	Beginning of Each Shift	Record of Function Test Recommended
Frequent Inspection	Required Daily to Weekly*	Record of Inspection
Periodic Inspection	Annually to Quarterly*	Record of Inspection
Not in Regular Use	Idle for 1 month+ but < 6 Months	Record of Inspection
Preventative Maintenance	Based on OEM Recommendation	Record of PM
Repairs and Adjustments	Existence of Unsafe Conditions	Record of Repair

*Dependant on duty cycle. Consult an Ace representative to determine a program for your inspection frequency.



WE OFFER TRANSPARENT & EASY-TO-READ REPORTING

ACE INSPECTION REPORTS

After an examination of your crane and components, your technician will print out a copy of your easy-to-read Inspection Report which details their findings. No waiting days or weeks to hear your results! For full transparency, your report includes color photo documentation that substantiates our recommendations for needed repairs. The report follows a color coding convention that can be reviewed even at a quick glance.

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.

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.

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.

GOOD

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

ACTIONS REQUIRED

The results of your Inspection Report may reveal these actions are needed:

Dissassembly Required—The condition of an item, component or piece of equipment requires disassembly for further evaluation.

Preventative Maintenance—Indicates that preventative maintenance should be performed to the flagged issue in order to prevent a more serious problem.

Testing Required—Indicates further testing required to evaluate the working condition of the item being inspected.

Corrective Action Made—Action was taken during the time of inspection to correct, repair, or modify an existing problem, malfunction, or unsafe condition. 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.

Lifting Equipment Inspection Report

Sample Customer

Periodic Inspection

Location

certified
CraneCare

Inspection Date:

1/1/2011

InspectionID:

123456

Prepared For:

Customer Contact Name

Prepared By:

Ace Representative

Ace Service Location Address

Toll: 800.733.2231 | Tel: 229.225.6595

Fax: | 229.228.1806

www.aceindustries.com



MHI



CMAA
CRANE MANUFACTURERS
ASSOCIATION OF AMERICA, INC.

Member Company



Equipment Summary

Unit #1

Equipment ID: 2nd Floor Mezz.
Description: 500Lbs Jib With Hoist & Trolley
Location: 6175 Riverside Drive S.W., Atlanta - Sto Corporation (7063)
Summary: Annual Inspection by Joshua Potts on 2/28/2020
Conditions: 3 **U** 1 **F** 51 **G**

Component	Type	Manufacturer	Model #	Serial #	Capacity
Jib Crane	Base Mount	Demag	NA	NA	500Lbs
Hoist	Electric	CM	F	L0036WL	1/2 TON
Trolley	Push	Demag	NA	NA	500Lbs

Inspection Observations

G = Good **F** = Fair **P** = Poor **U** = Unsatisfactory **N** = Not Applicable **I** = Incomplete

Jib Crane - 500Lbs Jib

- G** Support Structure
 - (G) 1: Foundation
 - (G) 2: Structure
- U** Jib Crane
 - (U) 12: Capacity Sign - Jib is underrated. Jib is rated at 500 lbs and hoist is at 1/2 ton. (1 Picture) Repaired: __/__/__ By: __
 - (G) 5: Beam
 - (G) 6: Beam Connection
 - (G) 7: Nuts & Bolts
 - (G) 8: Welds
 - (G) 9: Clearances
 - (G) 10: Alignment (Hand Operation)
 - (G) 11: Elevation/Level
 - (G) 13: End Stops
 - (G) 14: Bearings
 - (G) 15: Lubrication
 - (G) 16: Rotation Stop

Trolley - 500Lbs Push Trolley

- G** Trolley Frame
 - (G) 1: Adjustment to Beam
 - (G) 2: Frame
 - (G) 3: Side Plate(s)
 - (G) 4: Trolley Sweep(s)
- F** Mechanical Components
 - (G) 7: Wheels
 - (G) 11: Axle(s)
 - (G) 12: Bearing(s)
 - (G) 14: Nuts, Bolts, & Washers
 - (F) 13: Cross Pin(s) - Recommendation; proper hardware needs to be installed on trolley to hang hoist. Currently using a hook. (1 Picture) Repaired: __/__/__ By: __

Hoist - 1/2 Ton CM Loadstar

- G** Markings & Warnings
 - (G) 1: Manufacturer ID Info (1 Picture)
- U** Lifting Medium
 - (U) 10: Chain Container - Hardware for chain container is missing and hanging from strain relief cable for container. New hardware is needed. (1 Picture) Repaired: __/__/__ By: __

Trolley - 500lbs Push Trolley

Point: 13 - Cross Pin(s)

Condition: F

Comments: Recommendation; proper hardware needs to be installed on trolley to hang hoist. Currently using a hook.



Hoist - 1/2 Ton CM Loadstar

Point: 1 - Manufacturer ID Info

Condition: G

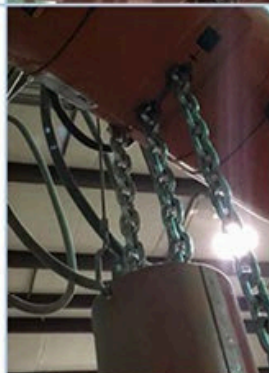
Comments:



Point: 10 - Chain Container

Condition: U

Comments: Hardware for chain container is missing and hanging from strain relief cable for container. New hardware is needed.



Point: 45 - Capacity Labels

Condition: U

Comments: Hoist is overrated for jib hoist is rated at 1/2 ton and jib is at 500 lbs





WE'RE HONEST ABOUT REPAIRS

ACE INSPECTION REPAIR QUOTE

Ace technicians are not required to meet a sales quota so you can be sure your repair quote is straightforward and no-frills. Our goal is to maintain your business and keep our customers satisfied. Where your Inspection Report will summarize the condition of your equipment, the Repair Quote will detail the repair recommendations with a breakdown of costs for parts and labor.

ACE INDUSTRIES CRANE & HOIST		Inspection Repair Quote		
Quote #: 420021009 2/24/2020		Ace Industries Inc. - Houston - SVC 1414 FM 1960 E Houston, TX 77073 Phone: 800-233-8179 Fax: 713-671-0608 aceindustries.com		
Marcos Ventura G&H Diversified Mfg. 11660 BRITTMORE PARK DR. Houston, TX 77041 Re: 2019.06-IRQ-G&H Diversified Mfg.				
Ace Industries, Inc. is pleased to provide the following quotation for repairs of deficiencies and recommendations found during the overhead crane & hoist inspections recently performed at your facility. Each item has been given a condition description relative to the severity of the deficiency found. As a rule, the conditions are as follows:				
(U) Unsatisfactory: OSHA / ANSI Safety Violation				
(P) Poor: Production Concern, Failure likely before the next inspection.				
(F) Fair: Production Concern, Failure possible before the next inspection				
Inspection Repairs				
Description	Parts	Labor	Travel	Ext Price
Location: 11660 BRITTMORE PARK DR HOUSTON TX 77041; Unit#: 1 (Bay 1 Fab Shop) - 1/2 Ton PP/SG/Gantry w\ 1/2 Ton Dayton ECH				
1. ACE will replace safety latch. Hoist - Condition: Lower Safety Latch: (U) Damaged safety latch requires replacement.	\$9.38	\$45.00		\$54.38
Location: 11660 BRITTMORE PARK DR HOUSTON TX 77041; Unit#: 2 (Bay 1 Machine Shop) - 10 Ton ProServ S# A7342 TRE/SG/DD w\ (2) 5 Ton Yale EWR				
2. ACE will replace damaged collector assembly. Runway - Condition: Collectors: (U) Bent and broken outside Tandem Collector Assembly. Recommend replacing assembly.	\$118.00	\$90.00		\$208.00
Location: 11660 BRITTMORE PARK DR HOUSTON TX 77041; Unit#: 3 (Bay 1 Machine Shop) - 10 Ton ProServ S# A7390 TRE/SG/DD w\ (2) 5 Ton Yale EWR				
3. ACE will install tandem ground collector. Runway - Condition: Collectors: (P) One green collector assembly is missing, should have collector installed to protect VFD.	\$118.00	\$90.00		\$208.00
4. ACE will tensile capacity on bottom block. Hoist - Condition: Capacity Labels: (P) Capacity is not legible. Bottom block 5 ton decals not legible. ANSI B30.16-1.1.1 The rated load of the hoist shall be marked on the hoist or its load block and shall be legible from the ground. Replace capacity labels.	\$50.00	\$90.00		\$140.00
5. ACE will replace wire rope assembly. Hoist - Condition: Wire Rope is (U) Wire Rope is kinked in two places; needs to be replaced.	\$1,328.64	\$270.00		\$1,598.64



WE KNOW SLINGS AND SAFETY

ACE SLING INSPECTION REPORT

Your slings are responsible for shouldering the weight of your hanging materials during a lift so keeping them in good shape is vital to your business. Any breakage in your slings jeopardizes the safety of your employees and could result in serious damage to your product should it fall. Sling inspection for safety and proper functioning in lift rigging and crane systems will help avoid costly accidents and improve the service life of your slings. ASME stipulates inspections for first use, yearly, monthly or quarterly inspections based on type of service and condition. Ace provides thorough sling inspections by certified, experienced technicians and a comprehensive and easy-to-read report for your records.

Periodic Inspection NRG Energy		FolderID: 2847 FormID: 7684422	
Beaumont, Tx			
Synthetic Web Sling		Configuration:	Type 3 - Eye & Eye Flat
Completed by: William Tuttle on 02/26/2020		Material & Phys:	Nylon - 2 ply
Location: Deweyville, Tx		Webbing Width:	1"
Serial Number: AN00159867		Length:	8'
TagID: 535			
Priorities Found: 1 - High			
General Condition			
1. General Condition		(F) Fail	
Damage to eye			

Periodic Inspection NRG Energy		FolderID: 2847 FormID: 7684423	
Beaumont, Tx			
Synthetic Web Sling		Configuration:	Type 3 - Eye & Eye Flat
Completed by: William Tuttle on 02/26/2020		Material & Phys:	Nylon - 2 ply
Location: Deweyville, Tx		Webbing Width:	2"
Serial Number: AN00166290		Length:	4'
TagID: 535			
Priorities Found: 1 - Good			
General Condition			
1. General Condition		(P) Pass	

Periodic Inspection NRG Energy		FolderID: 2847 FormID: 7684424	
Beaumont, Tx			
Synthetic Web Sling		Configuration:	Type 3 - Eye & Eye Flat
Completed by: William Tuttle on 02/26/2020		Material & Phys:	Nylon - 2 ply
Location: Deweyville, Tx		Webbing Width:	3"
Serial Number: 3523-12		Length:	8'
TagID: 532			
Priorities Found: 1 - Good			
General Condition			
1. General Condition		(P) Pass	

Periodic Inspection NRG Energy		FolderID: 2847 FormID: 7684426	
Beaumont, Tx			
Synthetic Web Sling		Configuration:	Type 3 - Eye & Eye Flat
Completed by: William Tuttle on 02/26/2020		Material & Phys:	Nylon - 2 ply
Location: Deweyville, Tx		Webbing Width:	2"
Serial Number: 6370-42		Length:	6'
TagID: 549			



WE'RE EXPERIENCED WITH ALL EQUIPMENT TESTING

ACE LOAD TEST REPORT

OSHA requires rated load tests for all new and altered cranes. Load tests prior to a crane's initial use ensures that any significant problems or errors made during the repair or installation process would be revealed before placing the crane in operation. After the testing has been successfully completed, we issue a comprehensive, easy-to-read report to retain with your maintenance records. Ace has extensive experience in certified proof load testing and we are capable of testing equipment weighing over 1 million pounds.

ACE INDUSTRIES CRANE & HOIST						Inspection Report
Equipment Summary					Unit #2	
Equipment ID:	2					
Description:	1 Ton Harrington Chain Hoist					
Location:	Omni Erecting Service - Omni Erecting Services (720888w)					
Summary:	Weekly Inspection by James Kittle on 2/17/2020					
Conditions:	17 G					
Component	Type	Manufacturer	Model #	Serial #	Capacity	
Hoist	Electric	Harrington	N/A	165431	1 Ton	
Inspection Observations						
G = Good F = Fair P = Poor N = Unsatisfactory N = Not Applicable I = Incomplete						
Hoist - 1 Ton Harrington Chain Hoist						
G Markings & Warnings						
G Lifting Medium						
G Suspension / Lower Block						
G Electrification / Power						
G Mechanical Components						
G Push Button (2 btn only)						
<small>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 magnet flux tests have been made unless specifically noted.</small>						
Record of Load Test						
The equipment designated below was dynamically load tested by performing the following movements:						
<ol style="list-style-type: none">1. Raise the load with the hoist2. Lower the load with the hoist partially and bring it to a complete stop to demonstrate the proper operation of the load brake or other means of holding brake.3. Traverse the load with the bridge and the trolley to the maximum extent possible to demonstrate the proper operation of the system.4. Finish the test and lower the load to a safe storage area.						
Please note:						
<ul style="list-style-type: none">• Load tests are point-in-time tests and do not serve as a design or safety certification for any component of the crane or runway system.• Load tests do not certify or guarantee the safety and reliability of any component of the crane or runway system.						
Component	Type	Manufacturer	Model #	Serial #	Capacity	
Hoist	Electric	Harrington	N/A	165431	1 Ton	
Test Weight:	Load test performed at 1.25 ton (125%).					
Comments:	Pass					
Customer:	Omni Erecting Services - 720888w	Equipment ID:	AceNo: 2 CustID: 2			
Date of Test:	2/17/2020	Location:	Omni Erecting Service			
Tested By:	James Kittle	Signature:				



WE KEEP YOU INFORMED WITH 24/7 ONLINE ACCESS

ACE CUSTOMER PORTAL

As an Ace Inspection customer, you'll have access to your records and job data online anytime you need it!

Just login to your customer portal to view:

YOUR CUSTOMER DASHBOARD

Clickable & Exportable Latest Safety issues
Trending Safety Conditions
Open Jobs Log

YOUR PURCHASE HISTORY

Spend by Type
12 Month Purchasing Trends
Invoicing Data with Clickable Fields for Details

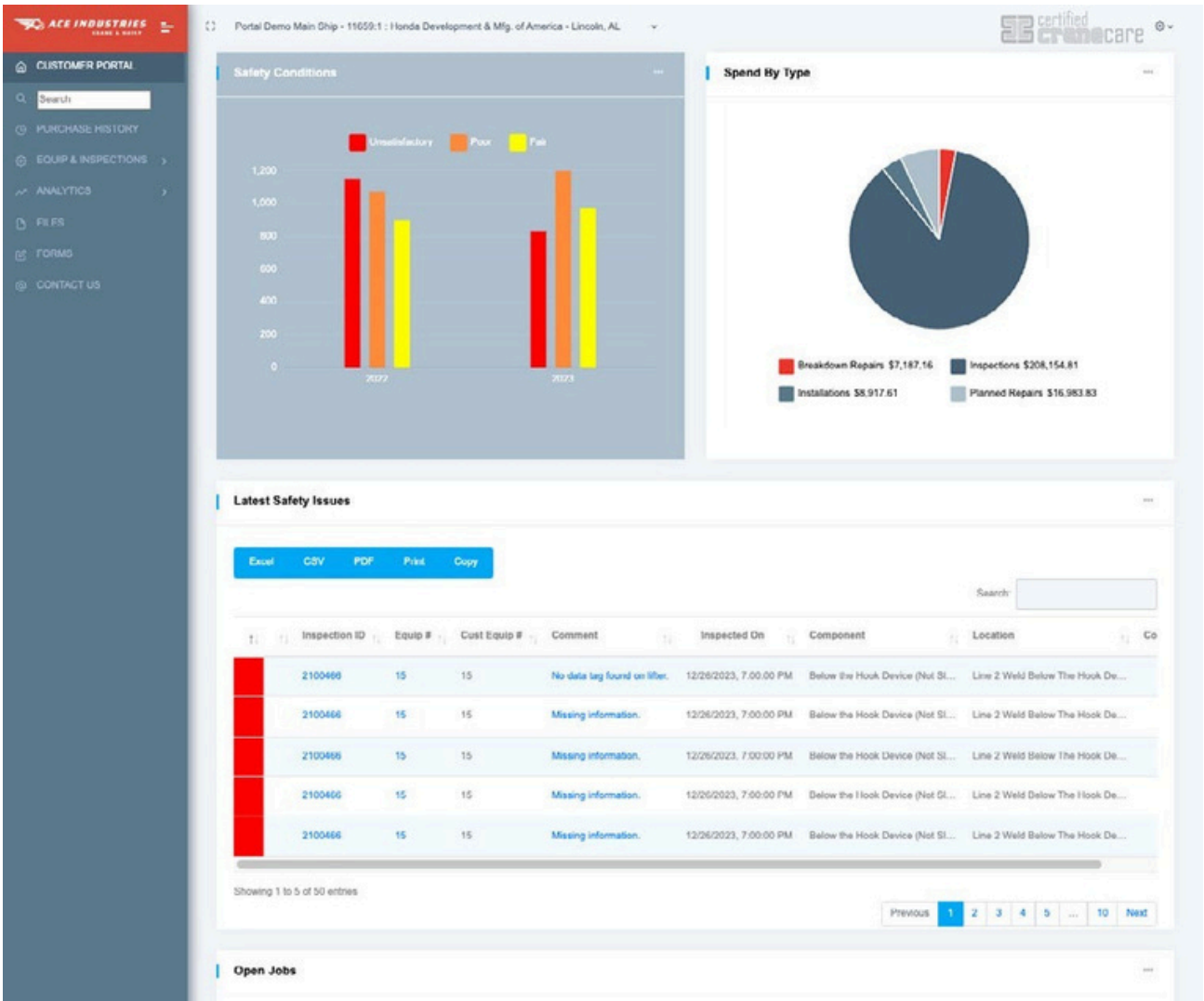
EQUIPMENT & INSPECTION LOGS

Your Equipment Log
Your Inspections Log
Your Locations Log

ANALYTICAL DATA

Your Equipment Spend by Category Your
Equipment Breakdown / Repair Hours Your
Equipment Expense Trends by Year Your
Equipment Spend Material vs Labor Your
Equipment Repair Hours Safety
Observations

YOUR QUOTES



**OVERHEAD
CRANES**

HOISTS • PARTS

SERVICE

INSTALLATIONS

INSPECTIONS

MODIFICATIONS



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CRANE & HOIST

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