THANK YOU! Breakfast Sponsor



Crane and Rigging Sign-In Form







CRANE, RIGGING & LIFTING COMMITTEE



CHAIRPERSON: DAVID WOLF, LYONDELLBASELL

Committee Mission Statement

To promote safe and effective crane, rigging, and lifting industry-related activities in the refining, petrochemical, oil and gas, and construction industries in the Gulf Coast, greater Houston Texas area.



CRANE, RIGGING & LIFTING COMMITTEE

OFFICERS

VICE CHAIR: BILLY EVERETT, FAGIOLI





VICE CHAIR: DOUG WRIGHT, BARNHART CRANE, AND RIGGING

ANTI-TRUST GUIDELINES FOR CONDUCTING MEETINGS

IBR appreciates your willingness to be an important part of this organization and the services provided to our industry.

The following guidelines shall be followed in conducting meetings of IBR. This is not an exhaustive list of every possible subject to be avoided; in the event you have doubts about the propriety of any matter to be discussed in a meeting, our legal counsel is available for consultation. Generally, the anti-trust laws proscribe unlawful combinations or agreements. Sometimes "agreements" may be inferred from conduct. IBR wants to avoid even the appearance of impropriety, and this is the spirit of these guidelines.

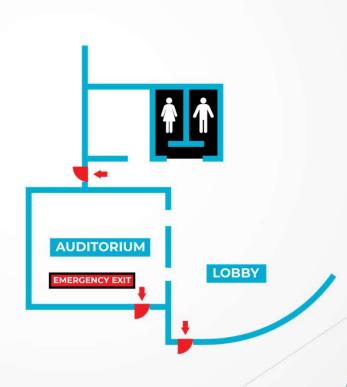
- Do not discuss the prices of goods or services of any particular company(s).
- Do not disparage the goods or services of any particular company(s)
- Do not recommend the selection of any particular company as a supplier or customer
- Do not urge or counsel that participating companies engage in any concerted activity to accomplish any unlawful purpose, i.e., boycotting any company or coercing a company to take some desired action.
- Do not discuss matters which may be trade secrets or confidential to any company, i.e. don't engage in "off the record" comments or state matters "not to be repeated out of this room".
- Do not propose secret or "rump" sessions after the official meeting is adjourned to discuss matters which cannot lawfully be discussed at the official meeting.
- Do not recommend or sponsor the gathering of statistical data, the publishing of standards, or doing joint research without advance written approval of the Operating Committee of IBR.
- Industry Business Roundtable's purpose is to educate participating companies, so every company represented will be better informed and can make its own individual decisions. IBR members are not required to adopt the IBR recommendations or policies.

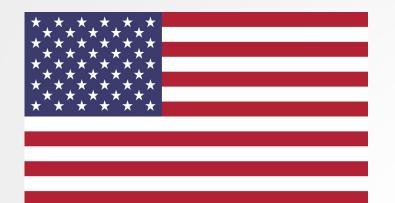
Thank you in advance for adhering to these guidelines.



Emergency Exits and Restrooms







Pledge of Allegiance

I pledge allegiance to the flag of the United States of America and to the Republic, for which it stands. One Nation, under God, Indivisible, With Liberty and justice for all.



Texas Pledge

Honor the Texas Flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.

New Attendee Introductions





Best Practice Sharing/Industry Hot Topics







OSHA update







OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION

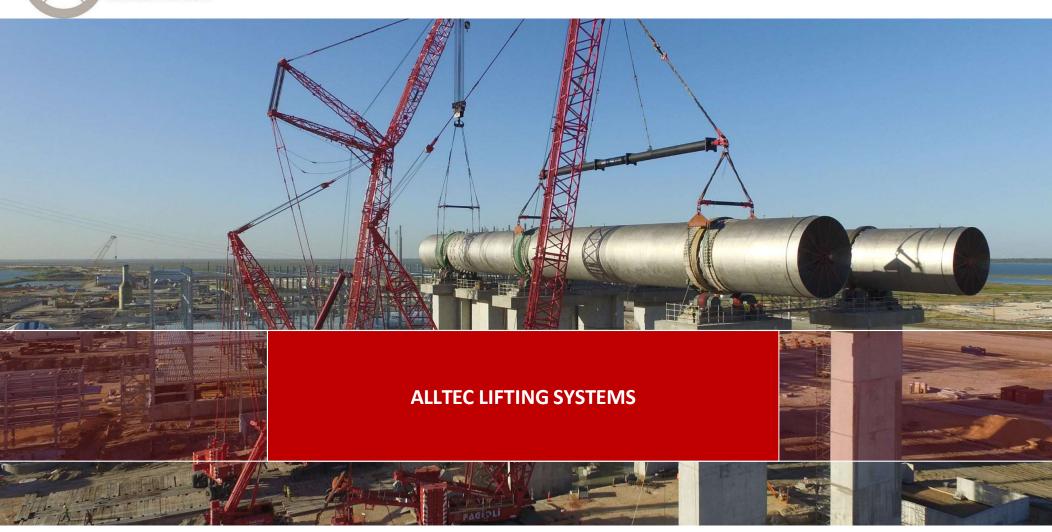
Welcome







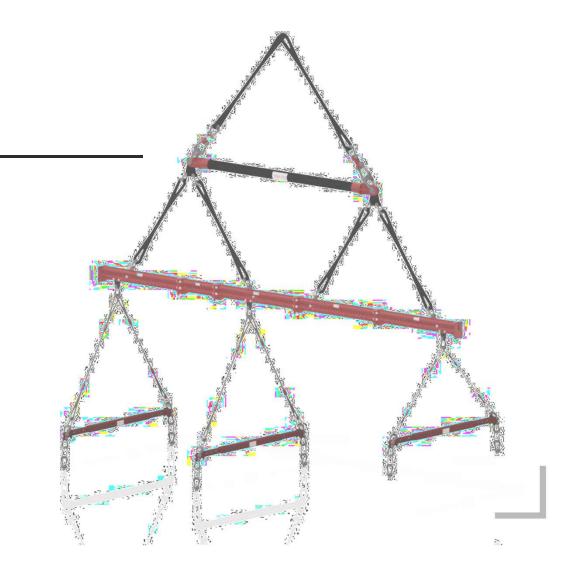
PORTFOLIO DO MONTE MICALS



Overview

TODAY'S DISCUSSION

Safety Topic
Alltec / Cetlla
HH/HL consulting
Q&A



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Safety Topic

A CRITICAL LIFT IS MORE THAN A LIFT

STEP 1: Crane Assembly (lifting of crane parts)

STEP 2: Crane upending

STEP 3: Crane movement from assembly location to lift location

STEP 4: Performing the lift

STEP 5: Unhooking the rigging

STEP 6: (Reverse assembly steps)

Most often accidents occur during crane assembly rather than during heavy lifting.



A CRITICAL LIFT IS MORE THAN A LIFT

Working the plan:

- Proper planning minimizes potential cost overruns, project delays and safety concerns
- Crane matting adequate for performing the lift does not guarantee it is adequate for all other steps
- Change in crane configuration does affect all steps



A CRITICAL LIFT IS MORE THAN A LIFT

IN CONCLUSION:

All parties involved with Lift Planning are to focus on ALL STEPS.



ALLTEC IS NOT ALONE

Core areas of expertise

- Heavy Lift
- Lightweight Lift
- Heavy Haul
- Engineering & Consultancy
- Design & Construct
- Training & e-Learning



LIGHTWEIGHT SPREADERBAR

Challenges

- Rigging needs to be as light as possible
- Long span

Solution

• Double aluminum truss bar



LIGHTWEIGHT SPREADERBAR

Challenges

- Limited crane capacity
- Long span

Solution

• Aluminum truss bar

Benefits

• Lower rigging weight, resulting in smaller crane size



GANTRY W/ TRACK SYSTEM



Some of the challenges

- Provide a solution to replace 200+ reformer tiles. Eliminate cumbersome individual bull-rigging scenarios.
- Minimize turnaround critical path duration Solution
- Track design with multiple gantries

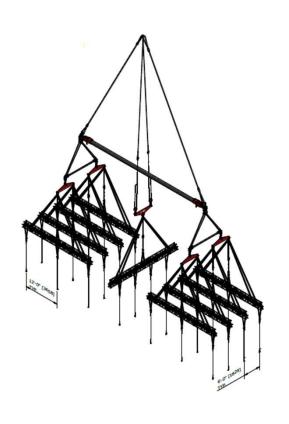
LIGHTWEIGHT ALUMINUM LIFTING BEAM

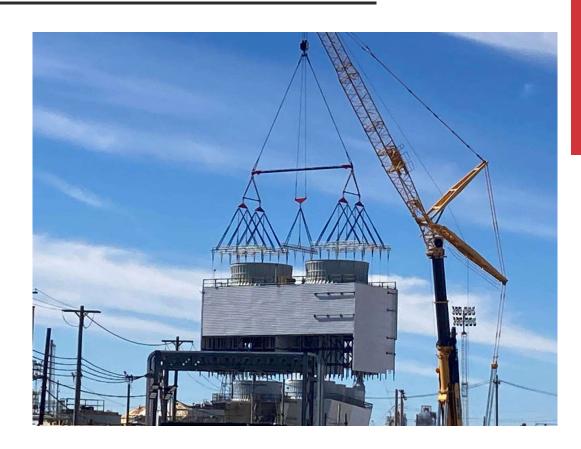




Some of the challenges

- Provide a lightweight modular multi pickpoint lifting beam Solution
- Rental of Alltec aluminum lifting beam





LIGHTWEIGHT ALUMINUM TRUSS GANTRY

Some of the challenges

- Provide a lightweight lift system in congested site area.
- · Avoid removal of site obstructions.

Solution

• Designed and fabricated a lightweight aluminum modular gantry.



LIGHTWEIGHT ALUMINUM TRUSS GANTRY

Some of the challenges

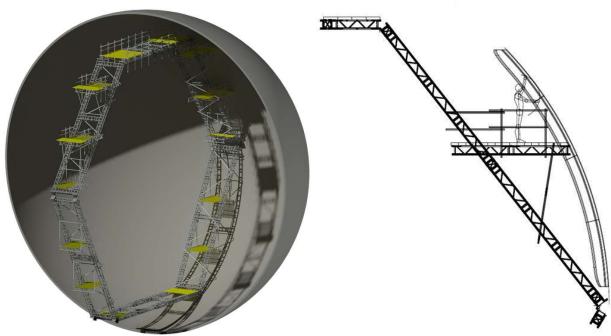
- Provide a lightweight lift system in congested site area.
- Avoid removal of site obstructions.

Solution

• Designed and fabricated a lightweight aluminum modular gantry.



SPHERE ACCESS SYSTEM (SAS)



Some of the challenges

- Providing safe and quick access to perform full internal Sphere Inspections.
- Minimize turnaround critical path duration.

Solution

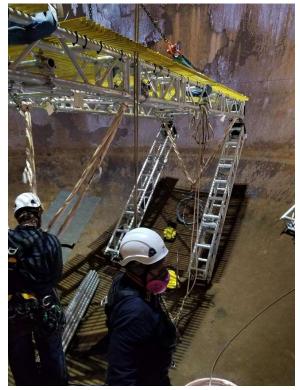
- Designed and fabricated an aluminum rotating access system.
- Reduced installation from 30 days to 4 days (compared to conventional scaffolding)

Alltec Scope

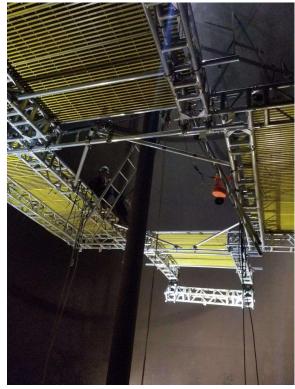
- Rental of SAS
- Assembly and Disassembly of SAS
- Daily inspection and operating of SAS
- Climate control and Illumination
- Cleaning (hydro blast) of internal sphere
- Safety personnel
- Escort of third-party weld inspector

Reduced installation from 30 days to 4 days (compared to conventional scaffolding)

SPHERE ACCESS SYSTEM (SAS)





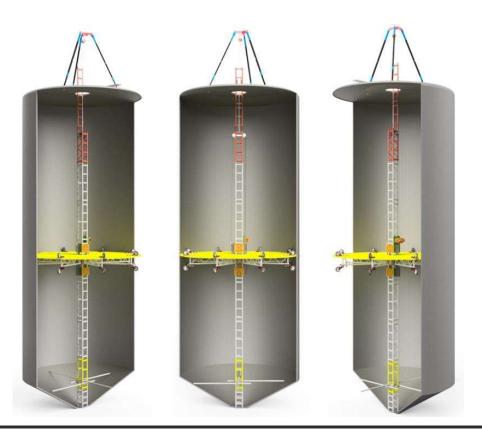


Top Deck assembly

Operational SAS

Suspended work platform

UPRIGHT VESSEL ACCESS SYSTEM (UVA)



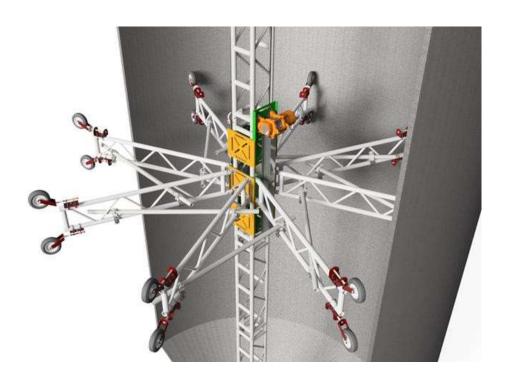
Some of the challenges

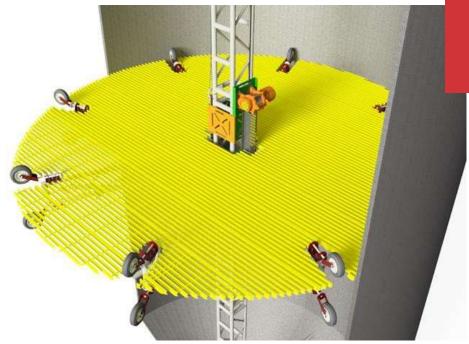
- Provide an efficient solution to cleaning and inspecting cylindrical vessels
- Reduce access system (dis)assembly durations compared to conventional scaffolding solutions
- Access through manway only

Solution

- Design a modular lightweight system with a movable platform
- Reduce overall turnaround time frame

UPRIGHT VESSEL ACCESS SYSTEM (UVA)





LARGE DIAMETER UPRIGHT VESSEL ACCESS SYSTEM (UVA)





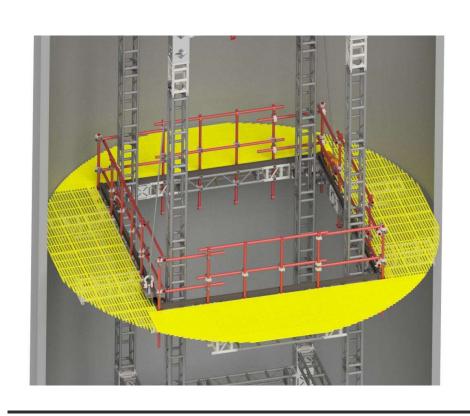
Some of the challenges

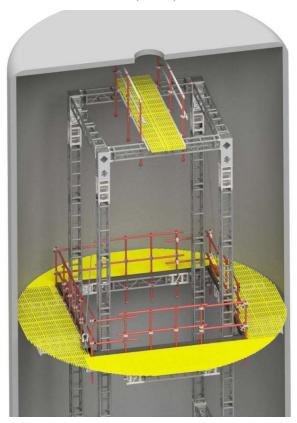
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Solution

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LARGE DIAMETER UPRIGHT VESSEL ACCESS SYSTEM (UVA)





INSPECTION AND MAINTENANCE PLATFORM

FLEXICOKER



Working Platform

Capable of moving from bottom to the top. Used for inspection and removal of coke on the inside of the flexicoker. The platform is adjustable in diameter utilizing pneumatic controls.

Gutter

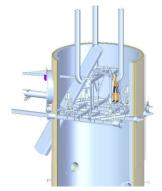
At the bottom, a gutter collects all the removed cokes where it can be removed safely.

Benefits

- Will not damage the flexicoker.
- Will fit any flexicoker
- Safe and reliable system supplied with method statements for installation and use.



SUPPORTING PLATFORM FLEXICOKER



Top floor



Top floor & working platform



Working platform



Working platform

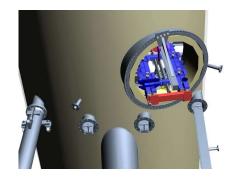


Gutter

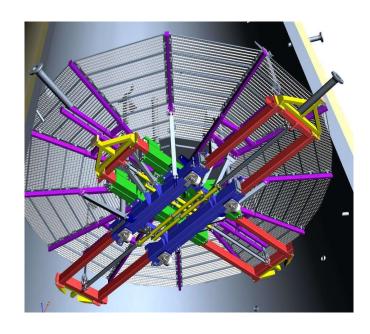


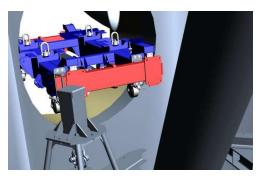
Gutter

FLEXICOKER INSTALLATION SEQUENCE SUPPORTING PLATFORM

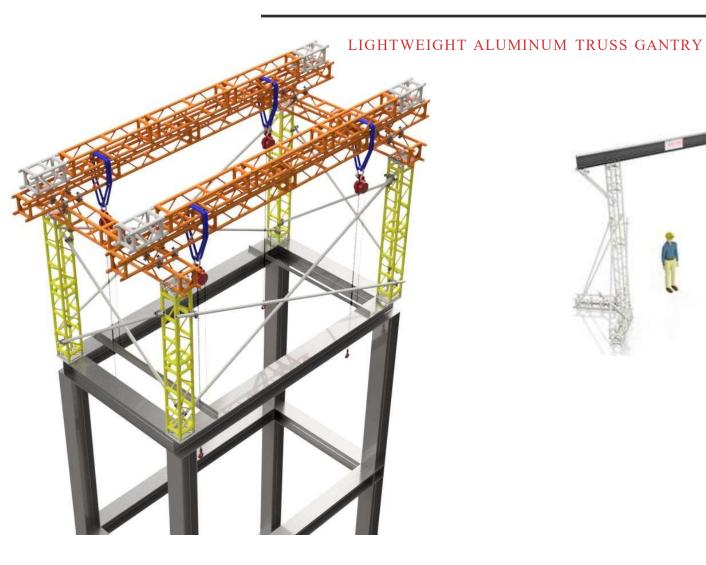










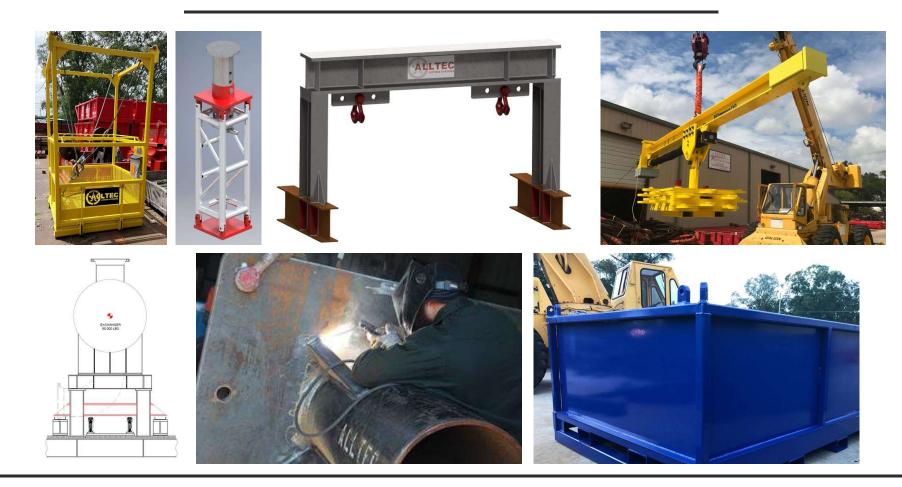




ALLTEC



DESIGN AND CONSTRUCT



DESIGN AND CONSTRUCT

LIGHT WEIGHT TROLLEY SYSTEM



Some of the challenges

- Extremely low headroom for lifting operation in an enclosed Generator Unit.
- System to be assembled inside. Items to be light-weight and modular

Solution

• Design and fabricate a modular ultra light lift and trolley system.

BRIDGE CLAMPING SYSTEM





Some of the challenges

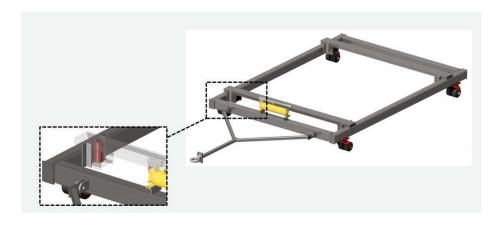
- Lifting lugs on 100+ ft long highway girder beams could not support the structural integrity of the beam
- Customer required a solution (design, fabrication, testing and delivery) within 1 week

Solution

• Design and fabricate an adjustable clamping system

DESIGN AND CONSTRUCT

LOW PROFILE CART



Some of the challenges

- Moving generators inside a congested warehouse facility with minimum height clearance
- Produce a solution to safely move and stage generators without use of crane or forklift

Solution

- Design and fabricate a hydraulic trolly system
- Arm extension allows for steering control in conjunction with swivel casters

MAGIC CARPET



Some of the challenges

- Provide a low-cost alternative to jack and slide equipment for removal of a 25t valve during turnaround
- Low headroom clearances

Solution

- Design and fabricate a (extreme) low profile cart with 360degrees maneuverability
- Jacks underneath the system "floats" the base in order to turn

ENGINEERING & CONSULTANCY | RIGGING RENTAL | DESIGN & CONSTRUCT | ACCESS AND LIGHT WEIGHT SOLUTIONS



2510 Dickinson Avenue, Dickinson, TX 77539, (281) 534-3100, operations@alltecliftingsystems.com

ALLTECLIFTINGSYSTEMS.COM

Future Topics / Other Business





Make Crane & Rigging Great Again!...the C & R Committee

Committee Initiatives:

- ❖ Include: Industry Hot topics 60-second Roundtable
 - ✓ What bothers you?
 - ✓ What challenges do you have with completing work?
 - ✓ What keeps you up at night?
 - ✓ What needs to be addressed right now?
- ❖ Try to include more "boots-on-the-ground" participation with the Committee
 - ✓ Branch manager
 - √ Superintendent
 - ✓ Safety
 - √ General Foreman
- **❖** Host an occasional "panel style" discussion similar to what you see at a conference.
- Develop a mechanism for owners to provide C&R incident data and metrics anonymously



Make Crane & Rigging Great Again!...the C & R Committee

❖ Year End Review:

- ✓ Provide a year-end recap in an annual Newsletter.
- ✓ What did we accomplish?
- ✓ Who is participating?
- ✓ Who are the members?
- ✓ Maybe an interview column where David and the team talk about some of the accomplishments throughout the year.
- ✓ What's in store for the upcoming year and the future?

❖ Future Topics:

- ✓ More clarity regarding Critical lifts
 - Including criteria (owner requirements)
 - Discussion on different requirements.
- ✓ What should be included in lift plans?
 - Who does plan information need to be communicated to?
 - Who needs to be involved in planning?



Make Crane & Rigging Great Again!...the C & R Committee

Future Topics:

- ✓ Flange Shackles.
- ✓ Lift communication between asset owner and provider.
- ✓ Engineered lift plan requirements.

Committee Standardization Initiatives:

- ✓ Mobile Crane Travel Guidance & Checklist. (Ready to publish on the C&R Committee Site)
 - This document and checklist initiative was started in 2020 utilizing many IBR C&R committee members.
 - The initiative resulted in the development of the guidance document and checklist.
 - Last week Worley's C&R director reached out asking for this documentation for use in their organization.
 - LYB's largest US facility was having an uptick in cranes striking objects during travel even using multiple spotters in some instances.
 - The LYB site implemented the guidance document and checklist
 - · Practically eliminated these incidents.



Make Crane & Rigging Great Again!...the C & R Committee

- How to ensure critical lifting information for existing process equipment is communicated to prevent costly equipment damage.
 - (This is directly associated with Corey Wrights question)
 - a. Add special lifting requirement warnings to manufacturer drawings.
 - b. Add a step in SAP or other planning software/system that requires a box to be checked etc. before the task can be progressed to the next step. This box could be "are there any special lifting requirements for this equipment? The owner can develop the specific system or action to capture the requirements.
 - c. Add specific warning signs to process equipment in the field.
 - d. Add QR code stickers to process equipment in the field that will pull up specific critical lifting information or warnings.
 - e. Implement specific paint color for process equipment with special lifting requirements.
 - f. Develop a matrix of process equipment with special lifting requirements and add to the site C&R procedure in an appendix.
 - g. Incorporate any or all of the above actions to the site-specific Crane and Rigging procedure.



Make Crane & Rigging Great Again!...the C & R Committee

Committee Volunteer Structure:

Vice Chair to assist the Chair with recruiting the following:

✓ Secretary: Takes minutes in each meeting and submits minutes to IBR for distribution

In the event they are unable to attend they arrange for a backup.

✓ Program Liaison: Arrange for speakers and submits them to the Communications Chair

✓ Sponsor Liaison: This person oversees the sign-up sheet for companies to sponsor meeting breakfast.

Sponsors will be recognized at each meeting.

✓ Communications Liaison: Writes social media posts and/or newsletters (IBR Approval)

Communicates all the important Committee information

Committee volunteers (Officers) will be recognized in meetings and on social media posts by name and company.



INASC. SAFETY DAY & Crawfish Boil THURSDAY, APRIL 11, 2024 | 12:30 PM

12:30 PM - 1:00 PM - Check-In

1:00 PM - 3:00 PM - Safety Sessions

AFPM EMPOWER: What's at Stake?

Morgan, Lewis & Brockius: OSHA Regulatory and Enforcement Update

and Best Practices for Responding to Informal Complaints

HOP Panel hosted by HASC

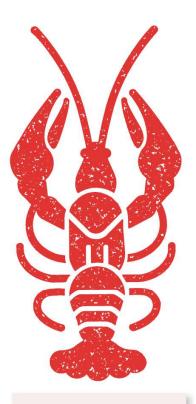
3:00 PM - 6:00 PM - Crawfish Boil Mixer

Live Music | Food & Beverages

SPONSORSHIP & BOOTH OPPORTUNITIES AVAILABLE

RSVP TODAY!

www.hasc.com/crawfish-boil





Next Meeting May 14, 2024

Innovation Through Collaboration!

