Steel Erection Safety – Safe Rigging Practices

To emphasize the importance of proper rigging techniques to prevent accidents and injuries during steel erection, in compliance with OSHA 29 CFR 1926 Subpart R and Subpart H, and ANSI/ASSP A10.48 standards.

Key Points:

OSHA and ANSI Requirements for Rigging

- OSHA 29 CFR 1926.251 requires that all rigging equipment (slings, shackles, hooks, etc.) be inspected before use and capable of supporting the load.
- ANSI/ASSP A10.48-2016 specifies that rigging for steel erection must be performed by qualified riggers under the supervision of a competent person.
- Loads must not exceed the rated capacity of rigging equipment, and a safety factor of at least 5:1 must be maintained for slings per OSHA 1926.251.

Pre-Use Inspection

- **Inspect rigging gear**: Check slings (wire rope, chain, or synthetic) for cuts, abrasions, kinks, or broken wires. Inspect shackles and hooks for wear, cracks, or deformation. Remove damaged equipment from service immediately.
- **Tag lines**: Use tag lines to control loads and prevent spinning or swinging, as required by OSHA 1926.753(c)(2).
- **Load calculations**: Verify the weight of the load and ensure rigging equipment is rated for the task. Never assume—check load charts and manufacturer specifications.

Safe Rigging Practices

- **Qualified riggers**: Only trained and qualified personnel should perform rigging tasks, per OSHA 1926.1427 and ANSI A10.48.
- **Secure attachment**: Ensure slings are properly attached to the load with appropriate hitches (e.g., vertical, choker, or basket) to prevent slippage.
- **Center of gravity**: Rig loads to keep them balanced and stable during lifting. Use multiple sling legs for heavy or awkward loads.
- **Clear communication**: Coordinate with the crane operator using standard hand signals or radios, as outlined in OSHA 1926.1419. Ensure the load path is clear of workers.

Hazards to Avoid

- Never stand under a suspended load—OSHA 1926.753(e)(2) prohibits working directly below a load.
- Avoid overloading rigging equipment or using makeshift rigging solutions.
- Do not use damaged or unrated hardware (e.g., bent hooks or worn slings).
- Watch for environmental factors like wind, which can affect load stability.

Compliance with Standards

- All rigging equipment must meet OSHA 1926.251 and ANSI/ASSP A10.48 requirements.
- Follow AISC guidelines for safe hoisting and rigging during steel erection to ensure structural stability and worker safety.
- Maintain records of rigging inspections and ensure equipment is marked with rated capacities.

Discussion Questions:

1. Have you noticed any damaged rigging equipment on this job? How did you handle it?
2. What challenges do you face when rigging heavy or irregular steel components?
3. How can we improve communication between riggers and crane operators on this site?

Worker Responsibilities:

- Inspect all rigging equipment before use and report defects to the supervisor.
- Ensure loads are properly secured and balanced before signaling a lift.
- Use tag lines to control loads and stay clear of the load path.
- Speak up if you observe unsafe rigging practices or unqualified personnel handling rigging tasks.

Supervisor Notes:

- Verify that all riggers are qualified and trained per OSHA and ANSI standards.
- Conduct daily inspections of rigging equipment and maintain inspection logs.
- Ensure a competent person oversees all rigging operations.
- Document this toolbox talk and collect worker signatures for attendance.

Improper rigging can lead to catastrophic accidents, including dropped loads and serious injuries. By inspecting equipment, following proper techniques, and communicating clearly, we keep ourselves and our coworkers safe. Let's rig it right every time.

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Safety Meeting
Sign-Off Sheet

Date: _____

Job Name: _____

Competent Person Name: _____

Competent Person Signature: _____

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Attendees:	