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| NC Sturgeon Safety Management System | | | Doc No: | ASSEMCRNS |
| | | | Initial Issue Date | 02/2016 |
| ASSEMBLY/DISASSEMBLY CRANES | | | Revision Date: | Initial Version |
| | | | Revision No. | 0 |
| | | | Next Review Date: | TBD |
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Purpose

The purpose of this program is to set forth procedures for the assembly and disassembly (general requirements) of cranes and derricks in construction as required by 29CFR 1926.1404.

Scope

This program applies to all **NC Sturgeon** employees, temporary employees and contractors. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers **NC Sturgeon** employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Requirements

Supervision of Assembly/Disassembly

The assembly/disassembly (A/D) of equipment is directed by a person considered both competent and qualified. A/D must be directed by a person who is both competent and qualified or by a competent person who is assisted by one or more qualified persons. This person is considered the A/D director.

OSHA defines a Competent and Qualified person as the following:

- Competent Person – "One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them."
- Qualified Person – "A person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project."

The A/D director must understand and be knowledgeable in the applicable assembly/disassembly procedures prior to the commencement of such activities involving A/D.

Crew Member Knowledge Requirements

Crew members must understand their tasks prior to commencing A/D activities. The A/D director is responsible for ensuring crew members are knowledgeable of their tasks prior to commencing work.

Crew members must understand the hazards associated with their tasks. Prior to starting work, the A/D director is responsible for ensuring crew members are knowledgeable of the hazards associated with their tasks.

Crew members must understand the hazardous positions/locations they need to avoid before commencing work. The A/D director is responsible for ensuring crew members are knowledgeable before commencing work of the hazardous positions/locations they need to avoid.



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Hazard Identification

The A/D director shall be responsible for addressing the specific hazards associated with assembly/disassembly operations. The A/D director shall be responsible for managing specific hazards associated with assembly/disassembly operations. These include the following hazards:

- Site and ground bearing conditions
- Blocking material
- Proper location of blocking
- Verifying assist crane loads
- Boom and jib pick points
- Center of gravity
- Stability upon pin removal
- Snagging
- Struck by counterweights
- Boom hoist brake failure
- Loss of backward stability
- Wind speed and weather

Load Control

Rated capacity limits for loads must not be exceeded for the equipment being assembled/disassembled. Rated capacity limits for loads imposed on the equipment, equipment components (including rigging), lifting lugs and equipment accessories, must not be exceeded for the equipment being assembled/disassembled during all phases of assembly/disassembly.

Outriggers and Stabilizers

When the load to be handled and the operating radius require the use of outriggers or stabilizers, or at any time when outriggers or stabilizers are used, all of the following requirements must be met:

- The outriggers or stabilizers must be either fully extended or, if manufacturer procedures permit, deployed as specified in the load chart.
- The outriggers must be set to remove the equipment weight from the wheels, except for locomotive cranes. This provision does not apply to stabilizers.
- When outrigger floats are used, they must be attached to the outriggers. When stabilizer floats are used, they must be attached to the stabilizers.
- Each outrigger or stabilizer must be visible to the operator or to a signal person during extension and setting.
- Outrigger and stabilizer blocking must be placed only under the outrigger or stabilizer float/pad of the jack or, where the outrigger or stabilizer is designed without a jack, under the outer bearing surface of the extended outrigger or stabilizer beam.
- For locomotive cranes, when using outriggers or stabilizers to handle loads, the manufacturer's procedures must be followed. When lifting loads without using outriggers or stabilizers, the manufacturer's procedures must be met regarding truck wedges or screws.

Rigging

When rigging is used for assembly/disassembly **NC Sturgeon** must ensure that:



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- The rigging work is done by a qualified rigger.
- Synthetic slings are protected from abrasive, sharp or acute edges and configurations that could cause a reduction of the slings rated capacity, such as distortion or localized compression.
- When synthetic slings are used, the synthetic sling manufacturer's instructions, limitations, specifications and recommendations must be followed.

Inspection

A post assembly inspection upon completion. The post assembly inspection shall insure the selection of components, and the configuration of equipment that affect the safe operation of the crane are in accordance with manufacturer instructions, prohibitions, limitations and specifications.