

# THE PROFESSIONAL RIGGER

Volume 20 Number 3

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#### **TECHNICAL WORKSHOP**

#### **Accident Evaluation**

In this issue of the Professional Rigger, lets evaluate an accident. Read the case study to the right and identify the improper practices based on the list given. Check your answers at the bottom of column 3 on page 2.

The "Runaway Pipe" Workshop #3 at the right was taken from Mike's Rigging Mysteries, Purple Book.

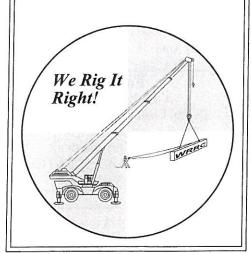
All 110 workshops are available at: www.mikesriggingmysteries.com.

The Professional Rigger is a publication of Industrial Training International, Inc.

It is distributed to those whose occupations require the safe and proper use of lifting and rigging equipment.

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#### **Runaway Pipe**

Accident Scenario

A mobile crane operator and rigger placed two chain slings in choker hitches around a steel pipe. The pipe was 3' in diameter, 40' long with a 1/2" wall.

The chain slings were 9/32", Grade 7 and 20' long, with a master link at one end and standard sling hooks at the other. The two slings were rigged at 45° from horizontal, straddling the pipe's midpoint.

Intending to load the pipe from the ground to a flatbed trailer, the rigger gave a thumbs-up signal to lift the load. He held the end of the pipe to steady it as it raised up approximately 7'.

The operator swung the pipe towards the truck. The end of the pipe, opposite the rigger, struck the headache rack on the back of the semi tractor. The pipe slid out of the slings towards the rigger striking and crushing his right leg. The pipe tumbled away from the trailer towards the crane, impacting the crane's back right outrigger.

Which improper crane and rigging practices are evident in this scenario? Circle the best answers.

- A. Wrong chain grade
- B. Improper signal
- C. Rigged too flat, 60° maximum for choker hitches
- D. Shock load
- E. No wear pads
- F. Insufficient cribbing under crane
- G. Operator swung without signal
- H. Load too high

- I. Man under suspended load
- J. Insufficient blocking under load
- K. Crane hook too big
- L. Pipe too heavy for the crane
- M. Wrong size chain even if grade 8
- N. Overhead power lines too close
- O. No tag line

### INDUSTRY NEWS INDUSTRY NEWS INDUSTRY NEWS

#### CEU Credits Now Available!

We are pleased to announce that Industrial Training International, Inc.

has become certified as an Authorized Provider by the International Association for



Continuing Education and Training (IACET). ITI is certified to offer IACET Continuing Education Units (CEU's) for all current training programs.



The 3rd Annual Crane & Hoist Conference & Exposition will be held October 5 - 7, 2005, in Houston, TX.

The 3-day event is designed to help those who work in construction or industrial environments be more efficient in their daily activities.

The conference sessions will be divided into the following three categories:

- Business & Operations Management
- · Crane & Rigging Operations
- · Technical Advancements & Applications

Keynote speaker will be Brain A. Moore, a consultant with FMI, a Management Consultant Company to the Construction Industry. Mr. Moore's presentation titled "Non Residential Construction: Can It Continue to Lift Itself Out of a Slump" will explore current trends based on FMI's research and examine options and opportunities to capture and share in a changing construction market.

Leading experts from the crane and rigging industry will present over 30 sessions including the following:

#### LIFTING WITH HYDRAULIC GANTRIES

David Duerr - 2DM Associates An overview of the various types of hydraulic gantry products currently in use in the U.S. along with a comprehensive outline for planning a gantry lift.

#### NEW DEVELOPMENT IN SLING DESIGN & PROTECTION

Dennis St. Germain - I & I Sling Learn the latest developments in synthetic slings, including cut protection improvements and highperformance fibers.

2-LOCATIONS

See enclosed "Training Schedule"

for more program

details and registration.

Changes in the design of multi-part wire rope slings for greater strength, as well as specific guidelines for protecting synthetic slings will also be covered.

#### 2004 CHANGES IN ASME B30.5— MOBILE & LOCOMOTIVE CRANES

Ron Kohner - Landmark Engineering Discover the latest changes to impact crane users, including crane operation with partially extended outriggers and the use of voice (radio) signals.

#### ROTATION RESISTANT ROPE FAILURES: LESSONS LEARNED

Knut Buschmann - UNIROPE Ltd. This presentation will discuss two actual cases of catastrophic wire rope failures involving rotation resistant rope types. Special focus will be on inspection, selection and maintaining ropes on tower and mobile cranes. Participants will gain a solid understanding of how such rotation resistant and non-rotating ropes interact with cranes.

#### HIGH-PERFORMANCE WIRE ROPE FOR **CRANES**

David Sleightholm - Bridon American This session will cover information on the application, use, and maintenance of high-performance wire ropes for mobile cranes. Attendees will learn the critical criteria for selecting the right rope for specific applications, and how to improve rope life by using the correct type of rope.

#### For Sale

10 ea. JCM 10,000 lb. Digital Load Link Dynamometers with case and shackles. 8 yrs. old. \$995 ea. Buy one or all. Contact Darlene at 360-225-1100 or darlene@wrrc.com

#### Workshop Answer key (for page 1)

A, B, C, D, G, H, I, M, O

## ITI's Training Center Programs

#### Rigging

- Journeyman Rigger
- Master Rigger
- · Crane & Rigging Management

#### Inspection

- Rigging Inspection Basics
- Rigging Gear Inspector Level I
- Rigging Gear Inspector Level III
- Mobile Crane Inspector

#### Crane Operator

- Boom Truck Operator
- Mobile Crane Basics
- Mobile Crane Operator
- Advanced Mobile Crane Operator
- NCCCO Mobile Crane Operator Certification