



## TECHNICAL NEWS

### Rigging Inspection Quiz

Test your knowledge of OSHA regulations, ASME standards and manufacturer recommendations for usage.

#### Synthetic Web & Roundslings

1. Why would a web sling be rejected from service if it feels hard and plastic in a very localized area?

2. What is the most likely cause of severe bleaching or loss of color in a flat synthetic web sling?



3. A web sling, which has been subjected to severe localized compression, best matches a general term known as \_\_\_\_\_.

4. Is the cover of a synthetic roundsling load bearing?  
Yes No



5. What is the most common type of load bearing yarn used in a synthetic roundsling?

6. Which sling is not rejectable due to ultraviolet ray degradation, a flat synthetic web sling or a synthetic roundsling?

7. What removal criteria relates to threads separated near the end of an eye to eye web sling?

#### Alloy Chain Slings

8. What condition may be present on a chain sling which is described as severe oxidation?

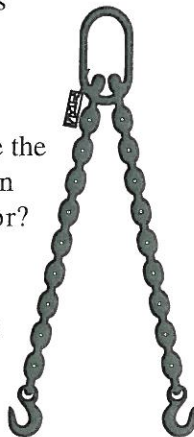
9. What could cause the chain in a sling to turn brown or blue in color?

10. What is a term that best describes an out of plane hook?

11. On a chain sling tag, what does the acronym DOS stand for?

12. Chain slings must use what type of chain in their assembly?

13. How is reach measured in a chain sling?



#### Rigging Hardware

14. A shackle that has been hammered into shape describes what manufacturing process?



15. The most common percentage of metal loss on a piece of rigging hardware, which would require its removal from service, is what amount?

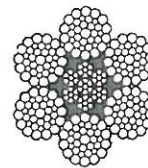


16. What rigging hardware item is adjustable in its length, by rotating the center body?

17. Shackles should be marked with what three items?

#### Wire Rope & Wire Rope Slings

18. What does the number 36 represent in a 6 x 36 construction type wire rope?



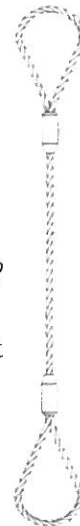
6 x 36 WS  
Warrington Seale

19. What are the two most common liquefied materials used to fabricate a wire rope spelter socket?

20. How many sheaves would be in a crane's traveling block if the crane was reeved in a 12-part line system?

21. What is the broken wire criteria for a wire rope sling?

22. What is the term that best describes a rebound in wire rope resulting in severe distortion in the strand and core lay?



23. How many rope diameters must be between sleeves, splices or fittings in an eye to eye wire rope sling?

24. What is the most common damage that can occur to a wire rope on the bottom layer of a drum with multiple layers, such as a mobile crane?



OSHA - Occupational Safety & Health Administration

ASME - American Society of Mechanical Engineers

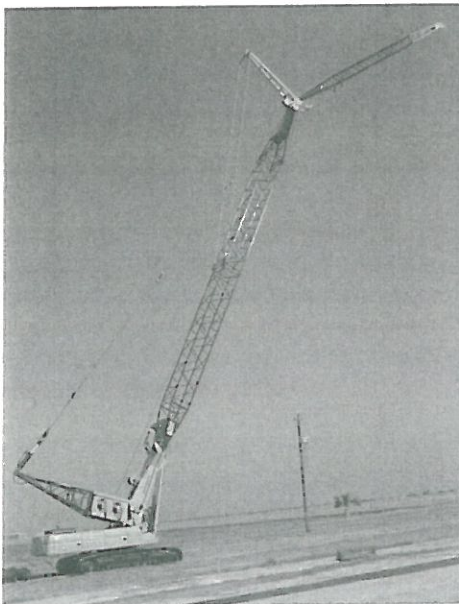


## CLIENT NEWS

### Favelle Favco

ITI's Instructor Russ Donaldson was asked to present Mobile Crane Operator Training Programs for Favelle Favco employees in order to increase their knowledge about the various types of cranes that are manufactured and sold by Favelle Favco.

The training consisted of both classroom and hands-on workshops with subjects such as crane terminology, load chart interpretation for various models of cranes, and crane set up. During the hands-on portion, the employees practiced setting up and operating a new FFC 38 Ton Hydraulic Track Crane.



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For more information contact  
**The Professional Rigger**  
PO Box 1660  
Woodland WA 98674  
(360) 225-1100

### BHP Minerals

ITI was contracted by BHP Minerals to develop a Crane & Rigging Safety Manual.

The Manual consisted of identifying personnel responsibilities relating to the safe operation of overhead and mobile cranes and rigging practices.



### Procter & Gamble

Oxnard, CA was the site for a two-day Comprehensive Rigging Program. The course consisted of eight hours of classroom instruction followed by a series of "live-load" field rigging exercises. Rigging gear inspection, load weight calculation and finding the center of gravity were just a few of the subjects addressed in the program.

## On-site Certified Rigging Gear Inspector Programs

### Kellogg

Omaha, NE was the site of a 3-day CIP Program for 5 participants. Attendees unanimously agreed that the subject matter covered in the program was extremely useful and raised their awareness of the importance of rigging gear inspection.



### Montana Power

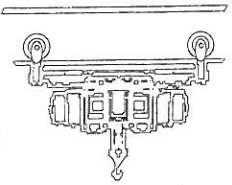
A total of 20 individuals attended a 3-day program in Great Falls, MT. Subjects addressed included sling fabrication, quality control, operating characteristics, and inspection removal criteria. Written exams in each section were given and a series of hands-on rigging gear inspections were performed.



### Idaho Power

ITI was contracted to present a 3-day Overhead Crane Inspector Program for 10 individuals in Idaho Falls, ID.

In addition to a written exam, participants were required to perform hands-on inspections using daily, monthly and annual checklists.



### J. Ray McDermott

ITI was asked to present two Master Rigger Programs to more than 30 participants in Amelia, LA.

Program activities included drifting loads, jacking & rolling, pick & turn, load leveling techniques and much more.

### Bechtel Idaho

ITI Instructor Devon Beasley presented a 3-day CIP Program for 14 individuals at Bechtel's Idaho Falls site. Attendees performed hands-on inspections of wire rope, wire rope slings, synthetic web slings, alloy chain slings, and rigging hardware.



### Mazzella Wire Rope & Supply

More than 40 individuals attended a 3-day CIP Program at Mazzella's new Cleveland Facility. During the first day, participants observed demonstrations of sling fabrication and proof testing.



A particular focus was chain sling usage and inspection in steel mill environments, since many of the participants were from that particular industry.



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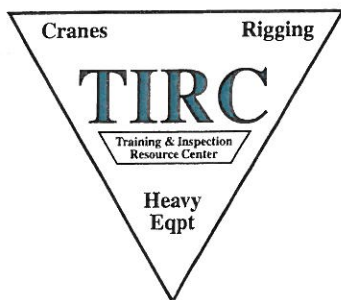
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## ITI NEWS



### Training Center Coordinator Increases Enrollment!

*Gynger Densmore*

In the five months she has been with Industrial Training International, Inc., Ms. Gynger Densmore has helped increase trainee enrollment at the company's 7,800 square foot training facility in Woodland, WA.

Ensuring each participant has a positive experience during the training programs is a top priority to Gynger. From the initial registration through handing out the certificate, Gynger makes sure each individual is given the best opportunity to learn and enhance their rigging, inspection, or operating skills. By participating in a combination of written classroom workshops and "live load" moving exercises, attendees better retain and understand the concepts and techniques taught in the programs.

Gynger's background, which includes over twenty years of customer service experience, has enabled her to develop an almost instant rapport with the participants.

Whether you're a newcomer to our training programs, or a returning veteran, Gynger will make certain your visit is a positive one!



*Master Rigger Program*

## OPEN ENROLLMENT TRAINING PROGRAMS

Attend one of the following courses at our new Training Center:

- *Journeyman Rigger*
- *Master Rigger*
- *Rigging Gear Inspector-Levels I, II & III*
- *Rigging Rodeo*
- *Crane & Rigging Management*
- *Mobile Crane Operator*
- *Mobile Crane Inspector*
- *Boom Truck Operator*

All of the programs consist of written workshops followed by hands-on exercises which help put into practice the concepts and techniques taught in the classroom.

Please see the enclosed Training Schedule for dates and times.



## INDUSTRY NEWS

### ACRP

The National Assembly Meeting of the Association of Crane & Rigging Professionals was held June 1 - 3 at the picturesque Columbia River Double Tree Hotel in Portland, OR.

Scheduled events included a field trip to Ulven Forging, which allowed the attendees to see up close and personal some of the techniques used in the forging process. Next the group was bused to Industrial Training International's Training Center in Woodland, WA. Jacking and Rolling, Critical Lift Planning and locating the Center of Gravity were just a few of the workshops conducted during the 4-hour hands-on session.

The week of activities were highlighted by a dinner cruise aboard the Spirit of Portland and a gigantic fireworks display celebrating the 150th anniversary of the City of Portland. New friendships were made and a great time was had by all.

### ACRP

P.O. Box 61589 • Vancouver, WA 98666  
Voice (800) 690-3921 • Fax (360) 834-3507  
Email: [acrp.net](mailto:acrp.net) Web Site: [www.acrp.net](http://www.acrp.net)

## WORKSHOP

### ANSWER KEY for Page 1

- |  |  |
|--|--|
| 1. Heat or friction damage                       | 14. Forging  |
| 2. Ultraviolet ray damage                        | 15. 10%  |
| 3. Crushing                                      | 16. Turnbuckle   |
| 4. No  | 17. Manufacturer's name, capacity, and size              |
| 5. Polyester                                     | 18. 36 wires per strand                                  |
| 6. A roundsling                                  | 19. Zinc and epoxy resin                                 |
| 7. Broken stitching                              | 20. 6 sheaves  |
| 8. Rust or corrosion                             | 21. 10 broken wires in a lay, 5 in one strand in one lay |
| 9. Heat  | 22. Bird cage  |
| 10. Twisted or bent                              | 23. 10 rope diameters                                    |
| 11. Double leg, oblong link, sling hooks         | 24. Crushing   |
| 12. Alloy  |  |
| 13. Inside bearing point to inside bearing point |  |