

UPDATE



Winter 1993/1994

1993 PORTAL CRANE USER MEETING CALLED A "GREAT SUCCESS"

Our 1993 P&H Portal Crane User Meeting was held in Milwaukee in September with 11 mills represented, including: Abitibi Price, Buckeye Florida, E.B. Eddy, Georgia Pacific, Mead, Procter & Gamble, S.D. Warren, Vaagen Bros. Lumber and Weyerhaeuser. Thirteen cranes were represented by 17 mill personnel, plus representatives from Fabreeka, Gantrex, Leschen Wire Rope, Mack Mfg., Pagel Safety Products and Taylor. P&H engineering, sales and service staff were also present. This interesting mix of personnel allowed for many open exchanges of ideas and solutions to everyday problems encountered in the woodyard.

The meeting opened with a videotape review of each of the cranes represented, showing them at work. Being the next best thing to an actual woodyard tour, this opened the door to many discussions and questions. Roundtable format was used for most of the meeting.

Ted Barber and Ted Volmar joined forces to make a wheel alignment presentation. A very important point that was made was that driver wheel diameters must be matched to 3 to 5 thousandths for proper operation, due to the high speeds involved. They also pointed out that trolley tracking can be effected by festoon system excessive drag. One more area to check if your crane is experiencing trolley wheel alignment problems

Mill comments included:

- S.D. Warren uptime running 95-98% averaging 4 to 6 months of rope life using PFV.
- Buckeye Florida running at 97% uptime, taking a 6 to 12 hour weekly outage on Fridays for maintenance, truck turn time is 18 minute average.
- GP Woodland handling up to 300 trucks per day, storing in blocks of 2300 cords, average storage under crane is 25,000 cords, peak in mid season is 45,000 cords using a 1200 ft. runway.

Several safety issues were covered including the new P&H operator's chair that lays down horizontal for CPR or medical attention for the operator. Many users have found that they can get an EMR team up to the cab faster than getting the operator down. The key factor is having the space to work at the cab level. Weyerhaeuser recently replaced their old roof entry cab with a side entry cab having a wide side platform with room for a stretcher plus 18" clear all around. This added space and easy access could very well save a person's life someday. A RescueMatic emergency escape device was also demonstrated. A video is also available.

New technology is always a popular topic at the user meetings and this year we had Oliver Tannett of Leschen Wire Rope give us a very complete and interesting presentation on the latest wire rope designs. In addition to the Plastic Filled Valley rope design which goes by the name of Tuff-Kote, a compacted strand rope design was introduced that when coupled with the

Tuff-Kote feature offers the ultimate in wire rope design for log crane applications. The compacted rope stands conform to the outer rope diameter and therefore drastically reduce friction in the rope grooves and sheaves. We expect both rope and sheave life to be dramatically increased. One important point that was made was that when removing the plastic at the ends for clamping, do not exceed 400 degrees if using heat. Chisel or wire brush removal was recommended. A 1 to 1 1/2% rope stretch is typical for new ropes going into service so therefore, when replacing ropes, matched sets should be used. If one rope is replaced, care should be taken to frequently adjust the length and keep the lifting beam level.

A product support roundtable on Friday morning covered parts, service, training and general customer satisfaction issues. We welcomed the positive responses that confirmed our strong efforts in all these areas to provide only the best in the industry. We believe that everyone who attended came away with at least several time and money saving ideas for their cranes.

This was John Cody's last user meeting since he will soon be retiring from GP's Woodland mill. We will miss his good humor and broad knowledge about log cranes.

The 1994 User Meeting is scheduled for Sept. 79, so be watching for details in upcoming UPDATE issues and set aside time now to attend.

Resistors and Reactors

By Frank Kemp, Portal Crane Specialist

These constitute a very important part of the electrical drive motor system in that they limit the motor current, particularly on slow speed, to the design characteristics.

Any problems in this area, such as loose connections and shorted connection cables or resistor coils, will result in overheating of the motor rotor windings in the case of shorts, or low torque in the case of loose (high resistance) connections.

Loss of motor torque, or motor overheating is sometimes not apparent, and can also be of an intermittent nature.

It is therefore very important to maintain a regular inspection of these items, paying particular attention to connections at resistors and reactors. Use of Belleville spring type washers can also prevent loosening due to heating and cooling cycles.

With the static stepless control, a separate feed is taken back to the static panel for input to the frequency detector module from the hoist and gantry resistors. The trolley resistor has three separate inputs used for the frequency detector and plugging module. These feeds are taken off the resistor banks with a #14 stranded wire. These connections should also be checked as they are also susceptible to loosening.

Generally one set of reactor terminals are connected as a star point, the other terminal is connected in series with the "slip" resistors in the resistor bank.

If care is taken in proper inspection and maintenance of resistor and reactor connections, unnecessary downtime can be eliminated.

Motor Drain Plugs

Please remember that your motors have drains on the bottom. Be sure that plugs are removed at startup or at time of replacement. You could avoid motor damage or failure.

Welded Rail Splice Update

After months of trials and testing, our P&H welding engineering department has released a new rail splice procedure for field welding of both trolley and gantry rails. The new process utilizes "Bule Max 2100" Lincoln electrodes and is proven effective. Call for a free copy of the complete detailed procedure as well as the lab test results.

Norbord and Georgia Pacific add to P&H User Group

We are proud to announce that both Norbord Industries, Inc. of Tupelo, Ms and Georgia Pacific, Brookneal, VA have chosen P&H as their log crane supplier for their new OSB plants currently under construction. Both cranes are 145 t. span at 40 and 33 ton capacities respectively. The OSB market is growing steadily and P&H intends to be the market leader in supplying log cranes for these plants. P&H Smartorque V™ controls coupled with the P&H commitment to total customer satisfaction make P&H a wise investment in the future. Those current users who supported P&H in the selling effort for these cranes are heartily thanked, especially Mannington Wood floors in Epes, AL who has hosted several customer visits recently.

MAINTENANCE TIPS

If your crane has dual hoist gear case arrangement, you should be aware that a special assembly procedure has been formalized to maximize load sharing between the two gear cases. Proper load sharing will result in maximum gear and bearing life.

Two crane owners have reported hoist motor problems associated with the hoist blower unit. In one case, the blower bolts came loose, allowing water contamination and phase to ground fault. In another case, insects got into the motor, plugging up the drain holes, resulting in water problems once again. The simple addition of an intake screen can help to prevent insects from getting in.

Several cable reel rotate bearing and ring gear failures have occurred due to lack of lubrication. The grease point is hard to find and sometimes missed. Be sure to include this important point in your lube program.

Magnetorque™ air gaps are critical to the proper load braking function of your hoist. Proper air gap should be 65/1000". With as little as 50% over 93/1000", your magnetic coupling can be lost along with your load braking capability.

On several cranes, owners have found that their wind anemometer sensor device was partially blocked when mounted on the cab roof area. Relocation to a "J" bracket below the cab resolves this problem, and if the bracket is hinged, it can easily swing up to the platform for servicing.