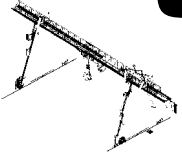


UPDATE

Winter, 1991/1992



1991 FALL USER MEETING CALLED "VERY WORTHWHILE"

The 1991 P&H Portal Crane User Meeting was held in Milwaukee on September 11-13 with 10 mills represented, including Bowater, Federal Paper Board, Georgia Pacific, Mannington, Mead, P&G, S.D. Warren, and Union Camp. A total of 14 P&H log cranes were represented by 14 mill personnel plus reps from Siemens, Mack and Fall Arrest Systems. The entire product support team was also present. The hotel offered a large theater and each of the mills brought videotapes of their cranes in action. The videos proved to be very informative and much was gained from seeing actual operations. This started off the meeting which was then followed by informative roundtable discussions on numerous topics of interest.

The afternoon session ended with a brief tour of the P&H factory, followed by a reception, prime rib dinner and awards. Friday's session was a product support roundtable where P&H personnel were able to respond to customer problems and concerns. At the close of the meeting, all agreed the time spent was very worthwhile.

All of our users are invited to attend the 1992 meeting which is now scheduled for Sept. 9-11. We already have two pre-registrations in hand and we expect a big turnout as word has spread about the value of attending user meetings.

The following is a summary of interesting comments from the meetings. GP Leaf River reported up to 95% uptime handling 100-150 trucks/shift. They converted to Mack grapples and put window A/C's in their cabs. Had hoist vibration, which turned out to be an out of balance brake wheel. P&H inspection program was highly endorsed.

1. GP Woodland, Maine runs 12 hour shifts with three operators working three on/three off. They handle 95-175 trucks per day with two bites per truck. They handle 8' through tree length, with up to 40,000 cords storage in the yard. Typically seeing 97% uptime.
2. Mead reported using STP on their Spreaderflex grapple cable as a lube. Siemens recommends Nevamelt too.

Happy with P&H product support and obtaining very good uptime.

3. Federal, Augusta reported getting eight months out of their PFV hoist cables and six hours for four men to change them out. They buy their PFV cables pre-made with the deadends attached. Added doors on grapple. Doing three month oil sampling and testing.
4. Gantrex stated that their trolley rail pads reduce vibration by 48%. S.D. Warren confirmed the dramatic improvement in the cab ride following their upgrade to Gantrex clips and pad. We do turnkey conversions and have a special rail grinder to obtain the best joint possible
5. S.D. Warren reported "no problems" and "very happy with 99% uptime."
6. P&G Grande Prairie reported seeing a "real effort to build a customer/service relationship".
7. UCC, Prattville, Alabama reported that Chuck Stoneman's advanced operator training was very worthwhile- and that it also helped with maintenance since the operators take more care after the training.

The CPPA/TAPPI users meeting was hosted by GP Ashdown, Arkansas and held in Texarkana, Nov. 18-20. Larry Clemens, as chairman of the committee, organized the event which was attended by over 50 people. One of the highlights of the trip was a tour of GP's mill and their Smartorque controlled P&H portal crane. The crane was fitted with a prototype Dynamic Storm Brake for static demonstration plus Chuck Stoneman demonstrated truck and railcar unloading with the crane. Unlike the P&H user meeting which focuses on specific P&H issues and concerns, this meeting takes a broader approach to discussing operations, supplier innovations, and general problems. There is less roundtable and more presentation type programming. P&H's Nick Flacco made a very interesting presentation on P&H Smartorque and also had a demo unit at the mill during the tour. John Rogers of GP gave a very informative program on how they have brought their uptime into the 96-99% range.

The bottom line is that user meetings are very worthwhile!

New “PM Plan”

One of the vital elements required to obtain acceptable uptime on your crane is a “PM Plan.” This was emphasized by John Rogers, GP Cedar Springs, Georgia at the November user meeting. John reported impressive uptimes for the past year on both of his P&H cranes in the 97-99% range for most months (including scheduled downtime!). John attributed their success to having a PM plan with documentation checklists implemented by experienced and well trained maintenance personnel. GP also maintains a spare parts inventory to support the PM plan.

The P&H portal crane team has taken what we believe are the best of many PM plans in use by our customers and developed a recommended PM plan with inspection checklists for operators, as well as mechanical and electrical maintenance personnel.

If you would like a copy of this PM plan, call or fax Gary Otto and he will mail or fax it to you for review and possible use. We recommend that your PM plan be integrated into a periodic inspection program by P&H ProCare service portal crane specialists. We presently have portal customers on monthly, quarterly, six month and annual inspection programs.

Torque Lock Nut and Supernut

We are proud to introduce the new Torque Lock Nut which is a better way to secure brake wheels and magnetorque brake rotors to motor shafts. The new Torque Lock Nut has replaced the old bent washer and nut on all new equipment. The Torque Lock Nut can be used as a direct replacement for all existing P&H brake nuts and washers as well as applied to any crane (simply provide us with the motor frame size and thread dimensions for the unit you are working on). Each Torque Lock Nut comes with installation instructions and eliminates the need for special tools. The Torque Lock Nut requires no adjustments or maintenance (when properly torqued) and saves time (easy mounting and removal). The Torque Lock Nut will not come loose and the torque values for each nut are stamped on the nut itself.

As discussed at the Fall 1990 User Meeting, the P&H Supernut is a direct replacement for the double input bevel gear retainers on the P&H gantry drive input gear set. The Supernut operates on the same principle as the Torque Lock Nut.

The Supernut is standard equipemnt on all new P&H drive trucks. If you have had problems with double nuts coming loose or with loosened brake wheels contact (800) 633-1136 for a quote.

Parts Replenishment and Uptime

Your goal is to maintain a high “uptime” operating percentage for your P&H Portal Crane. In order to maintain a high uptime rate, it is vital to replenish storeroom portal crane parts inventory. By having the parts you need on site, you can keep downtime to a minimum as well as pay less for premium rush charges, air freight services and overtime wages. Your job may also be less stressful!

After the initial startup and purchase of the recommended spare parts for your portal crane, you should ensure that storeroom inventory is replenished as parts are used. A periodic “review” of storeroom spares can identify critical part, long lead time parts and obsolete parts. An inventory review allows for planning, budgeting, and procuring those critical and long lead time parts. When a part with a long lead time fails (motors with magnetorques, CD brakes and specialized wheels), the ability to draw these parts from your storeroom is all the more critical to minimizing downtime.

Some portal crane users have opted to keep motors and brakes on hand. In the event of failure, the old part can be returned to P&H factory for a thorough rebuild which will bring the part, such as a motor, back to original factory specifications with a warranty. Thus the old part becomes a less costly spare.

If you are interested in scheduling a review of your spares inventory, please call (800) 633-1136.

MAINTENANCE TIPS

- The wire rope plugs used in the Electroline (bulldog) hoist cable dead end fittings are only good for one or possibly two uses. Several users have set these plugs up in their spare parts inventory. If you use PFV 7-FLEX instead of the 6x37 IWRC wire rope, be sure to use the proper plug. Refer to the following chart:

Size	P&H 6x37 p/n	P&H PFV 7 FLEX p/n
5/8"	1020Z10969	1020Z11599
9/16"	1020Z10968	1020Z11600
1/2"	Call	1020Z11601

- Power cable splices are available from: R&W Cable, Inc., Route 1, P. O. Box 75, Brivesville, WV 26588. They do factory splices as well as on site work. Contact Johnny Menthus, (304) 278-5121. Harnischfeger stock SHD GC power cable splice kits under p/n 87Z505D1 for #4-1/0 and D2 for #4-4/0.
- When the keyway inside the trolley drive Hansen gearbox becomes worn, several users have reported eventual failure and significant downtime. One solution is to convert your keyway coupling to a RINGFEDER keyless coupling using shrink disc technology. Harnischfeger can provide a conversion kit including new trolley drive axle shafts and Hansen conversion components. The tight fitup prevents wear in the axle to gearcase connection and assures long life.
- Clean gantry rails will greatly enhance the stopping ability of your crane. Many users are using cinder bricks scraping on the railhead with excellent results. The bricks don't need to be run at all times. Every other week could be sufficient. Check the bricks to be sure they are not clogged up with grease.
- One user has a VCR hooked up to their TV monitor in the cab. They use it to record a picture of any truckloads that do not meet the mill standards for spacing on the trucks. With the picture of the load plus a clear understanding by the truck driver that any damage to his truck is his responsibility, this mill has drastically reduced the amount paid out annually for truck repairs due to unloading damage. Advanced operator training will also reduce truck damage.
- Westinghouse has improved the design of the relay (L63) contacts on their vacuum reversing contactors. This relay has caused problems in the past for several users. One user reported that he disassembled his relay and corrected the problem himself. Westinghouse has assured us that the design improvement has been made and that all current models have

Gantry Brake Timer

By Frank Kemp, Portal Crane Specialist

There is often some confusion over the purpose of the gantry brake time delay in that it gives some 5 to 7 seconds before allowing the gantry brakes to set. The time delay is necessary to allow the crane structure to settle out before coming to a complete stop.

If you are on the top girder walkway, and looking through a girder to the opposite end, you will notice a sideways deflection in the girder when the crane starts and stops. This is because of the span and different inertia loads across the girder at any one time, due to the fixed leg/hinged leg, and position of the trolley (with or without load) along the girder.

If the gantry brakes set immediately when the gantry motors are turned off, the structure does not have the opportunity to settle out and this not only gives a rough stop, amplified in the cab, but is also hard on the gantry brakes and gantry structure.

However, there is one problem with the gantry brake timer in that in windy conditions the crane could be moved by the wind before the brakes set making it very difficult for the operator to spot the crane. To overcome this, a switch can be provided for the operator so that he can cut out the gantry time brake delay and apply the brakes immediately. This switch is interlocked with the gantry controls to prevent accidental application while power is applied to gantry motors.

If you don't have the brake set time and/or the bypass foot switch, contact P&H for details on how to add this valuable feature.

the new relays. This also applies to the P&H vacuum contactors.

- Alan LePage of S.D. Warren reports that he has had great success using Molub-alloy #777-1 lubricant on his Mack grapple. He has been able to reduce the frequency of greasing from each shift to three times per week without any increased wear noted.
- Be sure that you lubricate your Spreaderflex grapple cable. Use Nevamelt or one user recommends STP.
- Bass TV system owners are reporting excellent performance from their TV monitor systems. One user reports that the 12.5MM semi wide angle lens has proven to be the best suited to the application with less washout than the originally supplied lens.
- Gantry motion audible warning devices are many times found damaged, disconnected or stuffed with rags during inspections. Several users have reported successful use of the Edwards Adapatone Multiple Tone Industrial Signal. This device offers a choice of 13 switchable distinctive tones plus a volume control setting to adjust for your ambient conditions. Harnischfeger stocks this under part number 41Q11D101.
- In the event of a failure of the Smartorque hoist control tach coupling, several users report that a piece of rubber hose and clamps will get you back into operation quickly.
- Hoist gearbox input and output shaft seal leaks and blowouts could be eliminated by putting a "T" pipe fitting in the breather hole and putting 2 breathers in the box. This apparently reduces internal pressure. The oil level should not be above the 1/3 up point of the largest gear since overfilling can also cause leakage.
- Infrared thermal scanning of electrical panels can pinpoint loose connections prior to failure. Several users report positive results.
- Several grapple pin plates below the lifting beam have experienced some cracking. This highly stressed and easily abused area should not be overlooked in your PM inspection plan.

Trolley Drive Service Platformj

Harnischfeger now offers trolley drive service platforms on both new cranes as well as retrofits for existing cranes. These new platforms allow much easier access to the trolley drive components. If you are interested, contact Gary Otto for more details or a quotation.