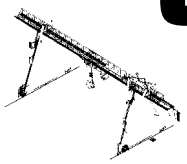
■ PORTAL CRANE SYSTEMS ■

UPDATE



Spring, 1988

Dear P&H Customers:

I'm pleased to announce that we have named Gary Otto our national sales manager for portal crane products. He has over 12 years of experience in all types of material handling with Harnischfeger and has specialized in portal cranes for the last six years.

Gary will be involved in every portal crane sale in the United States and he brings our portal crane team his field experience and on site work from the many installations he has sold in the south.

The addition of Gary to our P&H team is another example of our commitment to meet the needs of your company. We look forward to having you met Gary in his new position at Harnischfeger.

Sincerely,
Tim Hucke
General Product Manager

Grapple and Jack Stands

P&H offers a new grapple stand in two grapple sizes. Maintenance platforms around the new stand make it easier to lubricate bushings and pins, change the hydraulic reservoir and make repairs to woodyard grapples.

Jack stands for portal cranes, rotating cranes and log boom cranes are also available from P&H. These stands reduce the amount of time it takes to change out wheels or wheel assemblies for bearings on gantry trucks.

Structurally Bolted Connections

Tightening structural bolts or nuts is usually a time consuming yet vital task. P&H offers a suggestion that will help you save time by allowing you to identify which nuts and bolts have loosened.

Paint the bolt on an easy to see side; then paint a small mark on the surface next to that side of the bolt. If the bolt loosens up, the paint marks will be out of alignment

Beware of Counterfeit Fasteners, Couplings

The world of design engineering is sitting on a technological powder keg. Like the AIDS epidemic, the full extent of the problem is not yet known. It could blow over, or it could turn into a catastrophe of unprecedented dimensions.

The problem involves mechanical fasteners and specialty bolts of Grade 8 designation. They are the type specified fo severe loads or high temperatures and are key components in critical structures from aircraft to bulldozers.

Grade 8 bolts have a carefully controlled carbon content and require precise annealing and heat treating. If you use less costly thermal treatments and less precise metallurgy, you get fasteners classified as Grade 8.2. They are cheaper but also softer and have less strength, especially at high temperatures.

During the energy crisis, at least 15 American importers of fasteners got the idea that they could make money by cheating on the thermal treatment, buying Grade 8.2 bolts and selling them as Grade 8. So they massaged the specifications and placed orders with a number of fastener firms in the Far East, including nine in Japan. The companies producing the bugus bolts knew what they were doing but excuse their actions by saying that they were meerly following instructions.

Today the phoney Grade 8 bolts have infiltrated the supply pipeline of both civilian and military contactrors in the U.S. There is no way to detect the bogus variety without a lab test that can cost #200 per bolt.

Tracing the origins of specific bolts is virtually impossible. They generally arrive in small lots, with the government alone having some 26,000 separate contracts. The bolts get mixed with existing inventory and are picked for installation at random.

The process has been going on for several years, so there are thousands ofbad fasteners in the inventory of both contactors, not to mention those in the field. Civilian contractors have complained about this for years and now the military is investigating. The Army stated its inquiry when it began to notice an unusually high number of failures on a

particular type of artillery.

Aside from the potential for catastrophe, even simple remedial measures can cause havoc. For example, attempts to correct the problem are upsetting just in time deliveries of fasteners fo American automakers.

The Japanese manufacturers involved have promised not ot make the fake fasteners any more. But reliable sources say that the manufacturers in Taiwan and Korea still may be churning them out.

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Mack Grapples President Outlines Product Line Improvments.

Charles McElderry, President of Mack Grapples, reviewed product improvements on the Mack self contained log grapple recently for UPDATE. Improvements have been made on Mack's hydraulic cylinders, wear rings and torque hubs.

Mack's newest grapples are the result of 15 years experience in the woodyard in all temperature ranges. Mack is now stamping pressure readings on its manifolds, and all new hoses are identified with metal tags to help improve preventive maintenance time.

The grapple hydraulic system should never exceed 150 degrees fahrenheit. If this happens, the system has an internal leak. An experienced or trained mechanic should be able to carry out a preventive maitnenance check on a grapple in 15 minutes, McElderry said.

Wire Rope Enjoys Longer Life with Proper Lubrication

To gain maximum service life from a wire rope, proper and frequent lubrication is recommended. Since the wires in the rope move against each other as the rope works, a lack of lubricaiton accelerates fricitonal wear and can substantially reduce the rope strength and service life. The lack of lubrication will also promote corrosion and pitting which causes the wires to become brittle.

Correct methods should be used in applying the lubricant. wire ropes that have been in service should always be cleaned thoroughly before they are relubricated. Use wire brushes, scrapers or compressed air to clean the rope. All possible foreign material and old lubricant should be removed from the valleys between the strands and the spaces between the outer wires.

The lubricant should be thin enough to penetrate the strands to the core, but not so thin that it will run off the rope. It must not be so thick that it merely coats the outside of the rope. The best lubricant is a fairly thick, semi plastic type which is applied hot, in a thinned condition. This type of lubricant will penetrate while hot, and cool off to form a plastic filler and coating, which will then resist the penetration of water.

Several users have charged to PFV cables to increase rope life. P&H is using this type on incinerator cranes with high duty cycle applications.

Maintenance and Structural Inspections

One way to help avoid unnecessary portal crane downtime is to take advantage of quarterly maintenance inspections from P&H.

This thorough two day inspection is conducted by one of P&H's qualified service representatives located throughout the U.S. and Canada.

The inspection includes a review of your current maintenancecrew procedures plus written reports on the condition of all mechanical and electrical machinery on your crane.

Regularly scheduled crane appraisals provide you with the assurance that problems or wear areas will be uncovered and plans fortheir service or repair implemented.

In addition, structural components of all portal cranes should be periodically inspected to insure the structural integrity of the equipment. Varying degress of crane use, loading cycles and elements affecting corosion determine the frequency of this type inspection. However, log yard cranes should be inspected for structural integrity at least every three years.

For maximum efficiency, P&H offers you the services of a P&H field engineer to inspect the condition of the structural components of your crane and provide a written report of the findings.