Radio Remote

Have you ever wondered why things work the way they do? Well, believe it or not, most things work the way they do for a reason. In the case of Fletcher machines, that reason will most likely be related to a safety concern.

This concern for safety exists not only in the basic design and manufacture of our machines, but extends into their overall application. Therefore, everything associated with the machine, and it’s use, must be carefully evaluated and integrated into the overall machine design.

Often the only safe way of operating a machine is by remote control. A good example would be our mobile roof support systems (MRS). Due to the location in which these machines operate – under unstable and caving roof conditions, there is no safe means of operation other than by remote control.

Sometimes, remote control may not be a mandatory requirement for safe operation. However, remote control can provide an overall improvement in machine safety and efficiency by providing the operator with a better operating location and perspective.

Although remote control has provided improvements in safety and operating efficiency, it has created safety issues of its own. For instance, how to make sure the machine will react only to... Continued on page 2

Expanding to Better Serve You

To meet the growing needs of our valued customers, J. H. Fletcher & Co. is expanding its warehouse by 11,400 square feet and adding an additional 18,000 square feet to the state of the art manufacturing facility. The expansions will provide additional warehousing and manufacturing space necessary for our coal mining and industrial minerals line of equipment. J. H. Fletcher & Co. expects both buildings to be in operation by December, 2005.
signals from the transmitter associated with that machine. Further, how do you make sure that the transmitter is providing the machine with only the commands that the operator intended – in other words the machine is not operating inadvertently.

For over two decades Fletcher has been installing remote control systems on roof bolters and mobile roof support systems. During this time we have worked closely with our remote control system manufacturers to provide systems that meet Federal and state requirements – as well as safe and efficient operation. The knowledge gained from this experience is only available to our engineers, who work closely with our remote control system suppliers.

We provide our remote control system suppliers with specific requirements concerning operating controls (pushbuttons and joysticks) as well as operating characteristics and safeguards to prevent cross-talk and inadvertent machine operation. This cooperation between manufacturer (Fletcher) and remote control supplier exists only with specific manufacturers of remote control systems. Those manufacturers of remote control systems which are not used as original equipment parts on our machines do not have the benefit of our experience, background and knowledge. Hence, their systems may not meet our requirements for safety, reliability and overall operating convenience. In fact, in some cases applying these systems to our machines could create potentially hazardous conditions.

If you are using a Fletcher machine which was originally supplied with a remote control system, you should never retrofit this machine with a remote control system that is not provided by Fletcher. Additionally, if you are considering adding a remote control system to a Fletcher machine, make sure the system is provided by Fletcher.

In recent years considerable improvement in the design and manufacture of remote control systems has occurred. Many of our older systems can, and should be, updated to provide the latest safety devices and operator convenience. The original system used a bulky transmitter in conjunction with a machine mounted relay operated receiver control system. Today, this system uses a transmitter not much larger than a TV remote control and the receiver unit is totally solid state (eliminating bulky and less than reliable relays).

All Fletcher remote control systems are designed to integrate with the machine to provide optimum safety, reliability and operator convenience. Only Fletcher, working in conjunction with our authorized remote control suppliers can provide a system that properly integrates with the overall machine design. Use of anything other than an OEM supplied remote control system can create serious safety hazards.

For further information concerning the installation or update of remote control systems on Fletcher machines contact your local Fletcher sales representative – or call our Sales Office at (304) 525-7811.

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**Maintenance Q & A**

**Q.** On my machines dust suppression system, I know there are 3 silencers to reduce noise. One silencer is located in each exhaust and the third is in the intake line of the blower cooling air inlets. If my system gets “dusted out” and the silencers get filled with dust, how do I clean them?

**A.** This is an important question because if the silencers get filled with dust their noise reducing properties can be adversely affected. The silencers should simply be removed and flushed with water. A plug has been provided for draining the silencer after flushing, make sure the plug is put back in before re-installing the silencer. Also make sure the silencers are installed in the correct direction. A sticker is attached indicating the inlet port which can also be recognized as the port on the end with the clean out plug.
Fletcher Chooses Pall as Standard

Oil filtration is one of the easiest and most important ways to maintain a productive machine. Dirty oil causes wear to the pumps, valves, motors, hoses, and cylinders in your hydraulic system. Availability of production equipment is critical and a good filtration system will help avoid premature component failure and down time. J. H. Fletcher & Co. has chosen Pall as their standard filtration system. The filter elements are designed to hold the trapped dirt inside the filter even with cyclic hydraulic loading of the filter. On machines using the new Pall filtration system, mines are getting pump life in excess of 5 years.

J.H. Fletcher & Co. switched to Pall filter elements and housings for several reasons. The filter elements that we use have a 12 micron absolute rating. This filtration level is consistent with the requirements of our sleeve bearing gear pumps, our piston pumps and motors, our valves and our electro-hydraulic controls. We chose to have a proprietary size element and housing so elements of inferior or incorrect construction and/or specification could not be substituted. The current filter housings have certain advantages over the previously used filter housings: (1) When a dirty filter indicator showed red on the previous filter, it was already bypassing 15-20% of the oil flow. The indicator shows a dirty filter at a pressure differential of 35 PSI, but does not begin bypassing oil until a pressure differential of 50 PSI. (2) The previous top loading housing allows dirt to fall back into the housing when changing the filter. The Pall has a removable bottom bowl which allows all dirt and oil to be disposed of when changing the filter. (3) The bypass indicator on the previous housing is internal and can not be tested or easily replaced. The bypass indicator on the Pall housing is external and can be tested and easily replaced.

Bill Kendall (JHF Western District Sales Manager) has conducted a field study of the Pall filtration system with the cooperation of a Western Mine. The mine previously used a filtration system with synthetic 10 micron elements (10 micron nominal rating). After 3 weeks with the Pall filters installed, they had 15 times fewer 5 micron particles and cut their 15 micron particles in half.

J.H. Fletcher has chosen Pall with a proprietary element and housing as their standard filtration system because we know how important clean oil is to the life of the hydraulic system. Our goal is to continually improve the quality, reliability, and availability of our machines. This is an important step toward achieving that goal.
**International Front**

J. H. Fletcher & Co. has long been the leading custom designer and manufacturer of underground mobile drilling, scaling and roof support equipment in the United States. Over the years though we have also gained a strong presence internationally in places such as Great Britain, China, Poland, Norway, and South Africa. Currently, we are manufacturing equipment going to Russia, India and the Ukraine. Through our international sales team, along with overseas agents, we have been able to supply equipment to increase operator productivity while minimizing exposure to many of the risks of underground mining.

For information on international sales, contact Larry Howe in the U.S. at 304-525-7811 or Dale Gill in the UK at 011-44-1777705379.

**NEW EMPLOYEES**

Fletcher would like to welcome Brian Perrine to our design engineering team. Brian is a 1999 graduate from West Virginia Institute of Technology with a B.S. in Mechanical Engineering. Before coming to Fletcher, he was employed by AK Steel in Middletown, Ohio for 5½ years as the maintenance manager of the Slab Reheat Furnaces. We are sure Brian will be an asset in the design process as Fletcher continues to provide quality products to the mining industry.

**Your E-Mail**

J.H. Fletcher & Co. appreciates you sending us E-mail and answering our web site survey. However, if you are sending in E-Mail requests, we ask that you provide us the following information: NAME, A FULL ADDRESS, PHONE NUMBER, AND YOUR E-MAIL ADDRESS. PLEASE ADDRESS YOUR E-MAIL TO: dcooper@jhfletcher.com

The information contained in this newsletter has been obtained from sources believed to be reliable, and the editors have exercised reasonable care to assure its accuracy. However, J. H. Fletcher & Co. does not guarantee that contents of this publication are correct and statements attributed to other sources do not necessarily reflect the opinion or position of J. H. Fletcher & Co.

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