Fletcher®
Product Newsletter

J. H. Fletcher & Co.™

Huntington, WV

www.jhfletcher.com

2013 Issue 1

Inside

J.H. Fletcher & Co.
Proud Supporter of Higher Education

J.H. Fletcher & Co. was founded by James H. Fletcher, a consulting engineer in the mining industry. His son, J. Robert Fletcher, followed in his footsteps, earning a degree in Mechanical Engineering from the University of Illinois. Both of these men became supporters of higher education, and more specifically, engineering. By encouraging and financially supporting higher education in the engineering field, Fletcher has contributed to the development of many innovations in the underground mining industry.

Andrew Nielson and Hannah McNally earned $2,500 scholarships from the J.H. Fletcher & Co. Mining Engineering Scholarship Fund. Left to right are: Billy Goad(Business Development Mngr) , Charlene Kendall, Bill Kendall (Western District Sales Mngr), Andrew Nielson (Recipient), Hannah McNally

To date, Fletcher has contributed close to $500,000 to the J.H. Fletcher & Co. Scholarship for Engineering at Marshall University, with plans for continued funding.

Recently, Fletcher has extended their generosity towards higher education assistance with back-to-back $100,000 donations to the SME Scholarship Foundation. These donations form the endowment for the J.H. Fletcher & Co. Underground Mining Scholarship. The Fletcher Scholarship is awarded annually to one or more students pursuing an undergraduate degree in mining or minerals engineering, with a desire to use their skills to apply technology to improve the safety and productivity in underground mining. Students pursuing degrees in mechanical or electrical engineering may also be considered if they are minoring in mining engineering or show a strong desire for a career in the underground mining industry. The endowment furthers Fletcher's commitment to supporting higher education in the engineering field. Fletcher is proud to support this year's two recipients: Hannah McNally (University of Missouri at Rolla) and Andrew Nielson (University of Utah) with scholarships of $2500 each.

Fletcher does not limit its support to the engineering or mining fields. For many years Fletcher has offered tuition assistance to its employees and their children who choose to further their education at an accredited college or university to obtain a 4-year degree. Over the years Fletcher has assisted over 200 employees and/or their children in completing their education.

J.H. Fletcher & Co. will remain an advocate and supporter of higher education for its employees, children of employees and those who wish to pursue a degree in the engineering/mining fields in the years to come.

The Walk-thru Roof Bolter Concept

Most of J.H Fletcher & Co.'s (JHF) safety and productivity innovations over 75 years have resulted from "brain storming" meetings between miners (our customers) and JHF sales and engineering representatives. JHF customers explain the mine conditions that are potential safety hazards to help in developing the bolter design. Between customers and JHF representatives, very often a new concept for the roof bolting machine is developed to address the safety and/ or productivity issues.

The original idea for the "walkthrough" (WT) chassis for the roof bolter came from the mine foreman at No. 37 Mine, U.S. Steel Lynch District, Harlan County, Kentucky. In 1983 the No. 37 Mine was in early development, and the seam height averaged ten feet (3.05m). The coal ribs were extremely hazardous.

JHF sales and engineering people worked closely with Lynch District Chief Engineers J.W Boyle and later Bob Stansbury in developing the WT design.

These WT machines were model DDR high seam roofbolters having the drilling booms arranged for "inside the booms" operator control positions. Elevating operator platforms were incorporated on each drill boom to raise the operators, with the drilling controls, for easy reach of the mine roof.

The "inside the boom" operator control position concept had been developed previously in 1978 for Bethlehem Energy, Ellsworth Division in S.W. Pennsylvania. The inside the booms control arrangement affords the operators protection from rib hazards by placing the boom structure between the hazard and operator. The limitations of these earlier machines were that the operators were required to walk between the roofbolters and rib to enter or leave the booms control position. However, the design was a significant safety advancement for the day.

Hazardous ribs were and currently are prevalent in many coal mines. Soon after the U.S Steel No. 37 mine bolters were installed, model DDO WT arm feed roofbolters with inside the boom controls were built for Westmoreland Coal Co. in Virginia.

The first model HDDR WT roofbolter was built for Monterey Coal No. 1 Mine in Illinois in the mid 1980's. Soon after, the sales of HDDR WT and other models spread to the Western states and Alabama, and Kentucky.

Beginning in the early 1990's, rubber tire and crawler driven HDDR WTs have been sold in England, Australia, China, Norway, Canada, Mexico and South Africa. Today, the HDDR WT roofbolter is widely used in South Africa where the room and pillar system is the prevalent mining system.

Since the early 2000's, the industry surge to develop metallurgical grade coal seams throughout Appalachia has been a key element in the improved designs of the low seam DDR WT.

Seam heights below 50" created opportunities for various improvements in the layout of the DDR WT to accommodate men crawling through the chassis as well as material flow issues.

The WT chassis has had many configurations, and many improvements have been made over the years. Significant improvements are listed below in chronological order:

1. The walkway deck thickness through the length of the chassis was reduced from 9 inches to 4 inches. This gives the operator 5 inches additional head room.

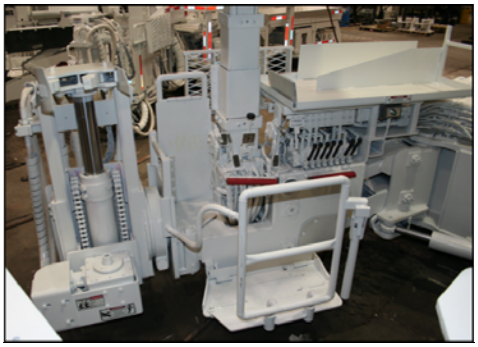
2. A powered retracting entrance ramp was incorporated at the rear of the chassis.

3. An automated material handling system for loading bolts, resin, and other supplies (assembled outside the mine in trays) onto the machine chassis.

4. Operator platform back guard was designed to include a "butt rest" which allows the operators to rest their legs.

5. Lower seam DDR chassis was improved, spreading the chassis out to allow crawl through in low conditions.

6. Rib access booms were developed on all WT models to allow the operator to better position himself in rib and truss bolt installation.



On-The-Floor: 4 Head Bolter for China

Currently on the production floor and nearing completion are two mast feed roof drills for China. The unique aspect of these machines is that they each have four mast feed roof drills. Two operators run the 4-Head bolter with each operator working 2 drill masts.

The operator's platform slides out toward the rib. The operators will then start drilling the outside holes making use of detented controls. While that mast is drilling, they can then move to the inside masts and drill those holes.

Mine operators in China like the 4-Head Roof Drill concept and feel that it is more efficient and increases production.

The machines have been designed and manufactured at the Fletcher plant in Huntington, WV and sold through our agent in China, Joy Global.

Joy Global is the exclusive distributor for Fletcher coal mining equipment in China.

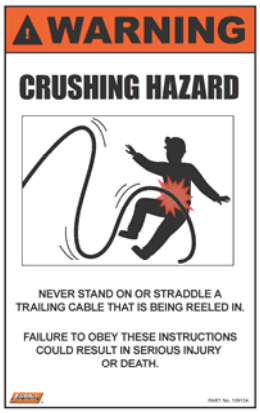
JOYGLOBAL

Posters

On the J.H. Fletcher & Co. web site are posters and warning alert stickers. Three new posters have recently been added for your viewing on our web site. Part numbers for those posters are: 513510, 534621, 139134. Some of these posters have accompanied Information Bulletins and some have been developed and published with our customer's assistance. J.H. Fletcher & Co. offers these posters free of charge and encourages you to put them up in bathhouses and lunch rooms to remind all personnel of specific hazards and information when operating Fletcher equipment.

513510

534621



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Employee News

Leonard Novak

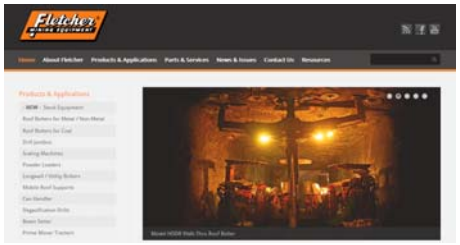
Lenny Novak has joined the sales staff at J.H. Fletcher & Co. with the title of Sales Director – Industrial Minerals. This appointment supports J.H. Fletcher's commitment to growing the Industrial Minerals business segment, which was started in 2001.

"Since its founding, J.H. Fletcher has been the recognized leader in coal mine ground control and miner safety," said Lenny. "I look forward to contributing to a legacy of Fletcher being recognized as a leader in safety and productivity in industrial minerals."

jhfletcher.com

Keep checking our website as new information is continually being added. Most recently, we have included information and new pictures of our extensive Metal/Non-Metal equipment line. Soon, customers will be able to sort equipment based on heading size, power selection and other criteria.

Also, you can see what stock equipment we have available, as well as machines being built for quick turn around.



Information on job opportunities and how to apply can be found on our website: www.jhfletcher.com
(AA/EEO Employer)

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Published by J. H. Fletcher & Co.
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Huntington, WV 25722-2187

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