Deep Mine Roof Control

Early Fletcher Timbering Machine

Fletcher Roof Ranger I Single Head Bolter

Gary Lockney
Lockney & Associates, Inc.

J.H. Fletcher & Co. of Huntington, West Virginia is this year celebrating 70 years of service to the coal mining industry *(see Coal News June 2007 Cover Story)*.

Originally founded in Chicago, Illinois in 1937 by James Herbert Fletcher, J.H. Fletcher & Co. was created to offer equipment packages for hauling coal from the mine face to the tipple. After moving to Huntington, West Virginia in the 1940's, Fletcher's product line at the time was the design and manufacture of timbering machines. In 1947 the U.S. Bureau of Mines promoted the use of roof bolting technology and it was a natural progression for Fletcher to commence development for production of roof bolting machines.

Today J.H. Fletcher & Co. is the world's largest manufacturer of production roof bolting machines which are custom-designed to meet a variety of specific mining needs. Fletcher employs 240 people in the United States and is represented throughout the world. Improvements in safety and productivity of roof bolting in the USA have always been directly linked to J.H. Fletcher & Co.

From the moment the day shift rides through the gaping mine portal and trades morning sunshine for narrow light beams from cap lamps and man trips, minds focus on the tasks ahead. Light banter from some crew members mingles with serious conversation among others. Less experienced miners may still feel that strange reluctance to leave the light behind. Old-timers reflect on personal experience combined with the collective wisdom of an industry that has been part of human history for centuries. Few operations within the coal mine have seen more change than that which literally holds the roof over their heads – the job of the roof bolter operator.

For those persons, at the end of the ride waits a massive orange machine capable of drilling holes through solid rock, installing cartridges of resin and pins of steel, spinning them and holding them

Bob and Jim Flecther

during the seconds necessary for set-up – all without requiring the operator to venture under unsupported roof. But it hasn't always been so. Let's look at today's workday on a fully-equipped Fletcher dual-head roof bolter.

Today's operator slips into a compartment protected above by a heavy steel canopy. Within inches of his hands are easy-to-operate joystick controls especially designed and located to reduce fatigue over long hours in the mine. Emergency de-energizing controls are within quick reach if needed. Drill steel, bolts and resins for today's shift have been loaded into trays and placed atop the machine, so there's little need for repetitive bending and lifting. After getting word that the continuous miner has moved out of the way, the operator checks the machine one more time and gently pushes the tram controls. The hiss of the hydraulic system reassures him as the bolter moves into position to install the first bolt rows of the day.

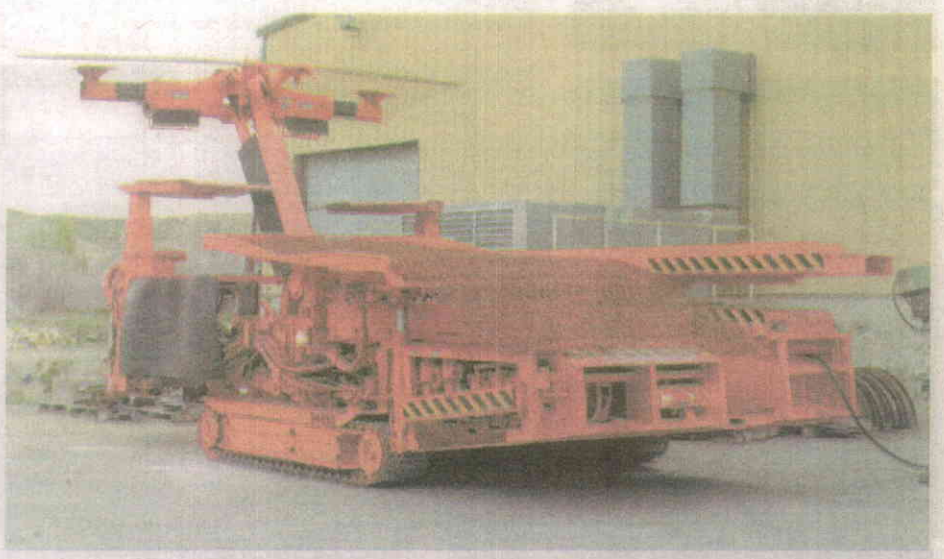
Assisted by front and rear lift systems used to prevent hang-ups on rough bottom, the bolter is soon in position. Without leaving the protection of the cab, the operator extends the machine's massive temporary roof support forward, and sets it solidly inby from the row to be bolted. He exits the protective compartment, and moves forward – not walking between the rib and the machine, but on a special walkway provided up the center of the machine chassis. Positioned between the drill boom on the outside, and the temporary roof support (TRS) on the inside, two operators now load drill steel into the heads, drill to the proper depth, and install the resins and bolts. The drill heads swing to the full width of the entry, allowing the entire row to be secured without a machine move, and where necessary, the drill heads tilt for angle drilling in truss installations or horizontally into ribs.

Microprocessor "feedback" sensors automatically read "top" conditions, and adjust the drill speed, feed rate and torque to penetrate the stone efficiently, with minimal wear on bits. Drill cuttings and rock dust are captured internally by an MSHA-approved system as the drill steel spins. When the row is complete, the drill booms and TRS fold away, and the machine moves to its next position, or allows the miner to resume progress at the face.

For more information about Fletcher and its equipment, call 304.525.7811 or visit www.jhfletcher.com.

Gary Lockney is president of Lockney & Associates, Inc., marketing communications agency for coal equipment producers since 1978. Contact at 888.544.8761 or gary@lockneyads.com.

Fletcher HDDR Dual Head Bolter



CHDDR with Mesh and Material Handling