

FlashPoint



Volume: 1, Number 1, • December, 2009 • International Newsletter
Visit Our Website at www.hollandco.com

 **NEWS YOU CAN USE FOR YOUR BUSINESS TODAY**

IN THIS ISSUE

• Holland ATMW Flash Butt Rail Welding Machine Selected By Network Rail As One Of Its Most Innovative Products. • Someone You Should Know – Holland's Hungary Agent • Ask The Service Department



Holland ATMW Flash Butt Rail Welding Machine Selected By Network Rail As One Of Its Most Innovative New Products

At this year's Railtex, 9th International Railway Equipment Systems and Services Exhibition in London, Network Rail featured the Holland ATMW Flash Butt Rail Welding Machine, with K922 welderhead, as one of its three most innovative new products.

Receiving a distinction such as this does not come easily or quickly. In fact, it is a commitment made by both Network Rail and Holland requiring many years of experience, testing and investment.

When Holland introduced flash butt welding in the USA over 40 years ago, its first task was the elimination of rail joints. As the technology changed, so did its applications. Welder heads with higher pulling forces were developed to meet the demand for closing longer strings of rail and performing defect removal.

In 1992, Holland introduced a line of high capacity pullers used for the purpose of repair and closure welding. Over the years, Holland continued to develop and innovate a two-piece system for repair and closure welding (automated puller and welderhead) consisting of a 72-ton welder head and 160 ton, long stroke, Super Puller. Holland utilizes this concept throughout North America and in several other countries today.

In 2004, the E. O. Paton Company of Canada was acquired by Holland. Prior to the purchase by Holland, Paton also recognized the railroad's need to reduce both costs and the size of maintenance crews. In cooperation with a USA Class 1 railroad, Paton began a joint venture to develop a high pulling capacity welderhead with 150 mm of pulling distance. After the initial prototype was developed, a second Class 1 railroad became interested in the concept and by mid 2010, there will be ten such machines in operation in North America.

For five years, Paton monitored the performance of the higher capacity welderheads to determine the optimum capacity, stroke, physical size and weight. When Paton was assured of the machine's ability to perform and its long-term serviceability, they introduced the 120-tonne K-922 welderhead to the world market.



Flash Point

News You Can Use For Your Business Today

China was the first market to acquire this technology. China used their K-922 welding machines in front of track-laying machines, joining short rails into long strings. Once the strings were laid, the flash butt welder came back and closed the rails into continuous welded rail (CWR).

These higher capacity welder heads are now able to perform six different applications (static welding, joint elimination, maintenance welding, defect removal, repair/restoration and distressing). Subsequently, the K-922 welding machines have been sold by Holland to railroads and contractors in Australia and the U. K.

Holland offers its welding machines in various configurations to allow the most efficient delivery of flash butt welds. In the U. K., Network Rail, working with its contractors, has used the K-922 high capacity welderhead with the Holland ATMW (All Terrain Mobile Welder) machine configuration.

The ATMW machine configuration allows maximum productivity in very short track windows because of its ability to work alongside the track and/or to enter or leave a section of track at road crossings of less than 5 meters. It can also use and access overhead line electrification (OHLE), thus maximizing track possession time.

The ATMW is built on a specially modified Doosan excavator base with a robust hi-rail and braking system that is certified to Network Rail's vehicle standards. Lift and slew locks allow safe working under overhead power lines and a careful weight balance design allows 360 degree movement of the welderhead, on canted track, without requiring special outriggers or other stabilizing means. The ATMW reach from the centerline of the machine is almost 6 meters, thus allowing the welderhead to reach across and weld an adjacent track.

After one year of testing and certification, (using the services of independent laboratories), the ATMW/K922 welding system has been approved by Network Rail for closure welding, stress welding, welding of different rail sizes, performing defect removal, welding of 300 foot cascaded rail, joining 216 meter lengths of rail, and joint elimination into CWR.



Holland is pleased to note that the ATMW with the 120-tonne K922 welderhead has been totally approved and certified to work on the entire Network Rail system. Further, Holland's 160-ton, long stroke, compact Super Puller (PullerLite) has received full approvals as well, thus giving Network Rail the ability to maximize stress lengths.

Holland continues to develop new generations of equipment in order to provide efficient and effective operations for our customers. In addition to our worldwide experience and comprehensive product offering, Holland can also accommodate the most demanding custom-built applications.

For further details on the equipment or applications mentioned in this article, please contact your professional Holland sales or service representative.



Someone You Should Know Holland's Hungary Agent

Conwest, Co, Ltd is Holland's exclusive agent for Hungary. At the helm of this family owned and operated business is Janos Szentivanyi, who has a PhD in economic and is a mechanical engineer. At various points in time, his wife and three sons have been active in the business. The company began operations in 1992 and has become the dominant distributor/agent for American-made railway track machines in Hungary. In addition to Holland, Conwest represents Harsco Rail and Imagemap, both in the United States, as well as several European companies.

Conwest's main customers are the major public transit systems, long distance freight railways, and railway contractors in Hungary, Austria, the Czech Republic, Turkey, Croatia and Slovenia. Over the years, Conwest has sold both a Holland welding system that was mounted on a loco type wagon and a road/rail mobile welder. Other equipment that Conwest helped deliver to customers includes ballast cleaners, a high-speed measuring car, a measuring car for trams/transit systems, and tamping machines. Also, sales of spare parts are an on-going part of the business.

When asked about Holland's equipment, Janos said, "The equipment is good and reliable and during the warranty period our customers have had no complaints." This is due, in part, by Conwest's offering its customers training in the USA. After several visits to the factory, with both management and operating employees, Janos stated, " We have very good memories of Holland and its people. Our customers operating employees are highly skilled technical people and generally can handle the problems that might arise."

When asked why Conwest has been so successful, Janos answered, "We have a vast number of personal contacts in the industry, we find out what their needs are, we sell them quality products, and we keep in constant contact with them before, during and after the sale." Good advice for anyone in business today.

By Gene Parker

Ask the Service Department Answers to Your Frequently Asked Questions Maintenance • Service • Training

Question: What are the main components of a Flash Butt Welding system?

Answer:

* Diesel Generator (Power supply)	* Welder Head
* Hydraulic pump unit*	* Control panel
* Crane (Lifting equipment)	* Cooling system
* Interconnecting cables & hose	* Weld Quality Monitoring System

Question: What voltages/settings do I use on the diesel/gen set?

Answer: Use 461 to 463 VAC with a frequency of 60.2 to 60.3 Hz if the system was set up by the manufacturer at 460 VAC, 60 Hz. We suggest 382 to 383 and 50.2 to 50.3 Hz. if the system was set at 380 VAC and 50Hz,



Flash Point



News You Can Use For Your Business Today

We recommend slightly higher settings due to their natural drop under the welding load. This will result in better support from the power supply during welding cycle.

Question: How often should we change filters and oil in the gen. set?

Answer: For a new engine, the first change is recommended at 250 hours and every 500 hours thereafter. Under dusty conditions, and welding is considered dusty conditions, every 400 to 450 hours. Always follow the manufacturer recommendations for local conditions.

Question: What oil is used in the hydraulic system?

Answer: AW 46 or Shell Tellus 46. The viscosity should conform to local conditions and temperature.

Question: What filters are used in the hydraulic system?

Answer: Pressure and return filters are on the hydraulic pump station. An additional filter is located on welder head hydraulic manifold. Change them when indicators show it is needed or at least once per year.

Send your Questions to Igor Mosendz, at FlashPointNewsletter@hollandco.com

By Igor Mosendz, PhD. - Field Service Manager

Newsletter Editor: Gene Parker

Newsletter Production Manager; Bill Roth

Holland L.P. 1000 Holland Drive, Crete, IL 60417-2120, USA