



Material Handling Products for the Mining Industry



Hoists and Winches Built to Survive in the Mining World

Since 1924, Ingersoll Rand has been building extremely durable and reliable hoists and winches. Designed with premium features and built using rugged cast iron and steel, Ingersoll Rand doesn't take shortcuts and never uses inferior components. Ingersoll Rand hoists and winches are designed to thrive in mines. When your job requires a hoist or winch you can depend on, count on Ingersoll Rand.



Liftchain Pneumatic Hoists

- **Rugged, all steel construction** in a compact design for durability
- **Reliable gear type air motor** with minimal moving parts for low maintenance
- **Designed for explosive environments** ATEX Zone 2 standard



Liftstar and Pullstar Pneumatic Winches

- **Rugged cast iron and steel construction** for extreme durability
- **Reliable gear type air motor** designed for even the harshest environments
- **Standard internal muffler** that reduces noise levels



Liftchain Hydraulic Hoists

- **Rugged, all steel construction** in a compact design for durability
- **High torque hydraulic motor** with high efficiency at low motor speeds
- **Fully enclosed automatic multi disc brake** for corrosion protection



Electric Winches and Car Pullers

- **Robust 5:1 structural steel design** for extreme durability
- **TEFC, NEMA B class motors** rated for continuous duty
- **Automatic disc brake** for maximum stopping power

Material Handling Products Designed for Mining Anywhere in the World



Ingersoll Rand hoists and winches are most often used in underground mines. Hoists and winches are used to transport equipment in and out of the mine and to move raw materials out of the mine. Smaller mines require 1-2 winches or hoists in capacities ranging from 1 to 6 tons. Larger and deeper mines require hoists and winches with capacities up to 20 tons to move material and equipment. Ingersoll Rand hoists and winches are perfectly suited for this type of continuous duty, rugged work. They are also

designed for use in the processing plants that are typically located near mines. Pneumatic hoists are used in this environment in capacities up to 6 tons. Whatever the job, count on the rugged design and time-tested features in Ingersoll Rand hoist and winches to get the job done.

Recent Global Installations



Ingersoll Rand electric winches with 8 ton pulling capacity are being used by a customer in the Philippines. The winches are located outdoors at the entrance of the coal mining shaft and are used to pull a chain of coal carts (total weight about 20 ton) riding along rail tracks into the underground mine.



Liftstar and Pullstar air winches with 1.5 ton lifting/pulling capacity are in use by an Indonesian customer. The Ingersoll Rand winches are used inside underground gold mines to lift, move & construct the wooden structures that support the openings of underground shafts. The winches are also used for lifting of heavy tooling or machineries in the mines.



Liftcahin air hoists with 3 ton capacity were purchased by a customer in Australia for the lifting of explosive magazines in multiple mines.



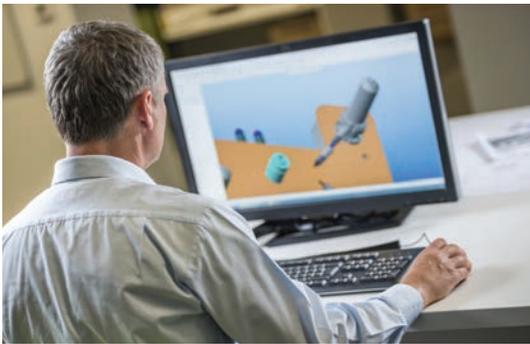
12 ton Liftstar Hydraulic hoists are in use in Australia. The hoists are installed onto the front of their loader vehicles. The hoists are used to pull loads onto the front lifting panel as well as being used as a recovery hoist in the mines.

A Tradition of Proven Reliability, Efficiency and Productivity



No matter where you are located, Ingersoll Rand is committed to serving and providing you with the necessary information with regard to our products and services. Our world-wide network of distributors, certified technicians and engineers are a telephone call away — ready to support you with innovative and cost-effective solutions that will keep your business running at peak performance.

Special Orders



A significant portion of our business is providing customized solutions for specific applications. We recognize that not all jobs are created equal and that the most cost-effective solutions may not be in an off-the-shelf item. We've designed and manufactured winches and hoists for applications as simple as moving bags of lettuce, to as intricate as installing critical payloads on space vehicles, including high capacity loads 100 tons and above.

- Design for custom capacities
- Custom control systems
- Custom product modifications
- Witness testing and complete certification to most global standards
- Full data package with CAD drawings
- Dedicated project management for your project from conception to delivery
- Onsite services available including presale and evaluation



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