U.S. Gypsum | Indiana Mine

R&M Materials Handling, Inc.

R&M chain hoists, wire rope hoists & crane components help our customers rise above their competition with the industry's broadest product portfolio.

With over 90 years of developing and perfecting crane packages, electric chain hoists, and wire rope hoists, R&M is ready to help your business rise above your material handling challenges.

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Industry Group:
Hoist Manufacturers Institute (HMI)

THE APPLICATION:

A 20 ton capacity overhead crane and hoist from R&M Materials Handling Inc. has been installed 400 ft. beneath the surface at the U.S. Gypsum Company Shoals Mine in Indiana.

The top running, double girder crane, principally chosen based on the short lead time offered by R&M and its Indiana-based distributor, CraneWerks, is being used to assemble and maintain equipment for the mine underground. It spans 35 ft. and travels on a 62 ft. long runway.

Growth & Impact

PERFECT FIT

The crane was built in two pieces to fit down the narrow mine shaft, and then welded together on site.

QUICK DELIVERY

These cranes are pre-engineered, which makes building and shipping them fast.

OPTIMIZING SPACE

A bridge crane allows USG to make full use of their space while saving on limited floor space.

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"We needed a crane capable of moving large pieces around for assembly of equipment in the mine, and the results suggest we found a solution."

- U.S. Gypsum

THE CHALLENGE:

Challenges were encountered both on the surface and below ground. For instance, the shaft used to get equipment into the mine was much smaller than most of the machinery used below.

U.S. Gypsum said: "Being underground is its own challenge. Everything from pouring concrete to lifting the beams is difficult because you don't have access to a lot of the equipment you would normally think of using. It's constant problem solving."

THE SOLUTION:

The crane bridge had to be built in two pieces so it could fit down the narrow mine shaft before it was welded together at the bottom.

The crane provides a lifting solution on a daily basis, raising mobile equipment components, typically weighing approx. 10 tons, around the area. U.S. Gypsum explained that loads are normally large pieces of fabricated steel components of a larger machine.

A top running crane was chosen because it offers the same hook height as a single girder crane, which would require a higher ceiling. The height available is important because the hoist and trolley ride on top of the bridge girders rather than being suspended beneath the bridge girder. This gives the best hook height of any overhead bridge crane option, giving users the maximum amount of lift (distance that the hook can be raised above the floor below) available.

THE RESULTS:

"We could have acquired a few telehandlers that had the necessary weight capacities, but the EOT [electric overhead traveling] crane was the preferred option.", U.S. Gypsum said.

"We have trained around 10 people on how to use the crane. I would say four or five of them use it on a daily basis," they added.

The crane has been installed at the south end of the mine. The plan is to relocate the site's maintenance facility to this location in the future.