



Shaw Almex custom designed a unique Aluminum Frame splicing press, model RAB4-14484 to complete the eleven splices. With a platen size of 144" (3657 mm) by 84" (2133 mm) this press is capable of splicing a belt 72" (1800 mm) wide with a splice length of 130" (3300 mm) in a single cure.

Its two-piece frame design greatly reduces press assembly and disassembly time and the integral platen water cooling system allows for the fastest hot vulcanized splice possible. The unique Almex pressure bag and flexible heating platens ensured uniform heat and pressure.

The top frame of the vulcanizer was easily lifted up out of the way as the splice was prepared in position on the bottom frame.

The vulcanizer platens also provide an integral water cooling system which quickly cools the splice, after the curing stage, to further shorten the splice cycle.

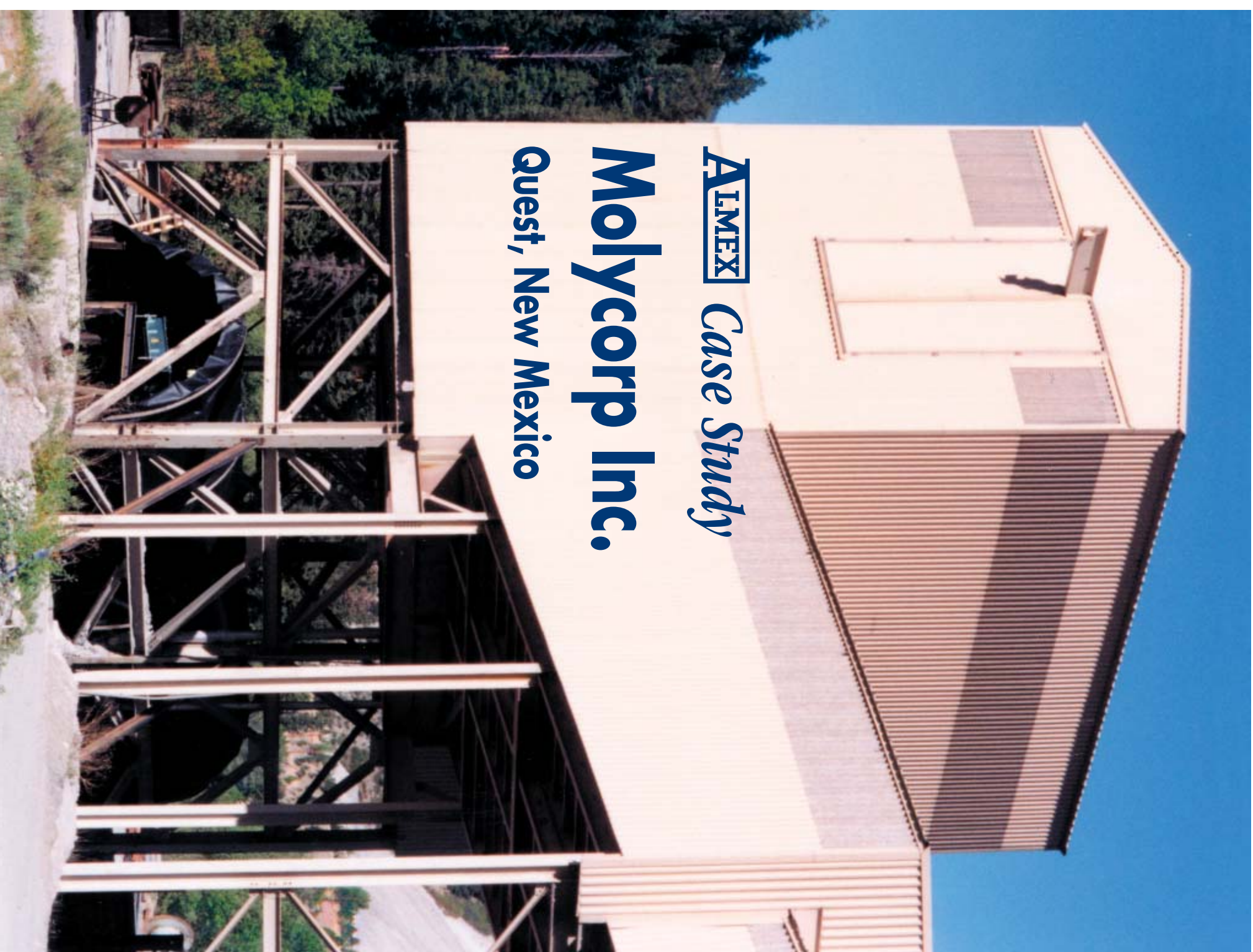
Two splicing crews working around the clock completed all eleven splices in a fast, efficient manner, thereby minimizing the downtime for Molycorp.

*At Shaw Almex, we believe that as the marketplace changes, suppliers and industry must unite their ideas and skills to find innovative solutions.*

*This project at Molycorp is just another example of Shaw Almex working to be...  
Your Partners for Success!*



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**ALMEX** Case Study

**Molycorp Inc.**

**Quest, New Mexico**

## Shaw Almex... Your Partners for Success!

*At Shaw Almex, our commitment is to be a partner with you in the success of your bulk material handling operation. A recent belt installation at Molycorp Inc. in Questa, New Mexico, is an example of that commitment.*

**M**olycorp Inc., a subsidiary of UNICAL, operates a large underground molybdenum mine at Questa, New Mexico.

### **History:**

Molybdenum is an essential ingredient in the production of many high strength metal products and serves as an alloy in almost every phase of the production of iron and steel.

Molybdenum has been mined and milled at Questa, in Taos County of Northern New Mexico, for over 60 years. In 1965, an open pit mine was developed. As ore in the open

pit mine was being depleted, exploratory efforts determined that large, deep ore reserves were also located on the Questa property. A \$200 million dollar expansion, in 1983, established underground mining operations.

An opening was driven 6,600 feet at a 10° slope from the mill area to a location beneath the ore body. A 48" (1200 mm) wide belt conveyor system was installed in this inclined shaft to bring the ore to the surface.

### **Challenge:**

A vital incline conveyor required a new, high strength steelcord conveyor belt. This new belt had to be installed as quickly and efficiently as possible to minimize downtime.

### **Solution:**

Molycorp worked in partnership with the belt supplier, Conitech of Germany, the belt installation contractor, Conveyor Services Corporation of Pennsylvania and the vulcanizer specialists, Shaw Almex Industries of Canada, to provide a fast efficient solution.

In June of 1998, the belt was replaced with a 48" (1200 mm) wide, ST 3600 steelcord belt. These belts were shipped from Germany on 10 elliptical spools with 1500 ft. (457 m) of belting per spool which reduced the number of splices required.

The belt installation and splicing team designed unique handling and processing equipment within the splice station to minimize the time required for splicing and handling procedures.

The procedure for this installation was to splice the 15,000 ft. (4572 m) of belting above ground and lay it in a trough. The entire belt would then be pulled onto the conveyor structure in one pull and the final splice completed in position on the conveyor structure.

