

Technological Research on Production of 10,000 T/Y Multitype Emulsion Explosives in Mongolian Republic

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1. Introduction

The Mongol-Russian Joint Mining and Processing Cu-Mo Corporation Erdenet signed a contract with BGRIMM for building a plant to produce 10,000 t/y multitype emulsion explosives by using BGRIMM emulsion explosives manufacturing technology. In order to ensure the realization this contract, we have done a series of studies on the design of technological process and the selection, layout of the production equipment, and made a success.

The Erdenet opencut mine, a Mongol-Russian joint venture, is a huge Cu-Mo deposit, from which more than 20,000,000 m³ rock and ore is excavated per year, consuming over 10,000 tons of explosives all imported from the former USSR in the past. It needed to expend much foreign exchange to purchase the explosives that even could not satisfy some demands for special blasting purposes. For this, the enterprise wanted to have its own emulsion explosives plant built. On the basis of practical requirements, we decided to make a design for continuous and automatically controlled emulsion production line which can manufacture 10,000 tons of multitype emulsion explosives per year. Starting from 1992, this plant has been finished after hard work for three years. A modern auto-controlled emulsion explosives production plant with large output were built in the end of 1994, which was transferred to the corporation Erdenet after passing the checking and accepted by the Mongolia National Checking Committee.

It is illustrated by the production from 1995 that the equipment on this line runs normally, and the output and quality of product with good blasting effect are stable, which has been praised by both Russian and Mongolian sides for its excellent economic results.