Case Study

HSI Primary Crusher in Limestone Quarry

Magotteaux
cement
blow bar
One

Customer Calcit – "Plattenkalk" Limestone Plant

Location Germany

Background

Looking for a customer willing to test our new blow bar solution for a primary HSI crusher, Magotteaux approached Calcit Edelsplitt, which operates a Hazemag AP 7 primary crusher in the Calcit GmbH limestone plant.The first target was to evaluate the mechanical resistance to high feed sizes up to 800mm using Hazemag S profile blow bars. Depending on weather conditions, the lifetime of the manganese steel alloy reached between 40,000 to 90,000 tons of throughput volume. Despite the varying working conditions, the customer could evaluate the performance gap, and we agreed to run a test. The main concern for the customer was the risk of blow bar breakage.

Solution

With Hazemag blow bars, known as the „S" profile (thin), combined with high feed size, the conventional MMC approach is no longer compatible. Magotteaux had to perform a blow bar retrofit, ensuring proper fitting into the rotor and mechanical resistance against the demanding working conditions.

Results

Magotteaux's cement blow bars „W+ HT" solution was implemented into a new blow bar profile design. Expectations of twice the lifetime were achieved, maintaining a very flat wear profile and ensuring no breakage, which was the main concern of the customer.

+110 %
blow bar lifetime

10 %
production cost reduction

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