

RETAINING WALL FOR THE JAW CRUSHER ERZİNCAN, DOĞU ANADOLU, TURKEY

Reinforced Soil Walls and Slope Reinforcement

Problem

In the gold mine crushing and screening facility located in the province of Erzincan, a retaining structure was needed in order to safely transfer the ore brought from the open pit mine by vehicles into the jaw crusher.

The vehicles weighing 40-60 tons were required to continuously transport material to the crushing and screening facility and at the point where they would feed the material to the jaw crusher a flexible structure needed in order to withstand the vibrations.

Solution

The fact that the reinforced concrete systems, which are known and common in the mine sites, are rigid systems, cause cracks and fractures in the concrete structure due to the continuous high-scale vibrations. Concrete structures that cannot adapt to changing environmental conditions are being replaced by geogrid reinforced retaining structures that are compatible with the environment, flexible and new technological products are used. For this reason, Anagold Mining decided to work with the systems developed by Maccaferri, the leader in its field.

After the calculations of internal stability, overturning, sliding and general stability done with the Macstar W program which Maccaferri has developed, it has decided that the most suitable retaining structure is the Terramesh System reinforced with Paragrid 80/05 geogrid.

Ballast was chosen as the filling material in the application, laying and compression process was performed at every 50 cm. The Paragrid 80/05 product, which was determined to be used, was laid at every 1 m vertical heights and the Terramesh System retaining wall of 10 m height was manufactured for 120 m, ensuring the safe operation of the jaw crusher.

Terramesh System Retaining Wall will continue to work continuously with its flexible and robust structure in Erzincan province, which is a region where seismic forces can be encountered continuously.

Client: ANAGOLD MADENCİLİK

Designer / Consultant: MACCAFERRI TURKEY

Contractor: ANAGOLD MADENCİLİK

Products used (Qty.)

- Terramesh 800

Date of construction: 04/2012 - 06/2012



Terramesh System Retaining Wall



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