



Job Report Surface Mining

2200 SM: Mining of limestone in Spain



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Harald Lissberg, November 2004

Situation:

OMYA S.A. in Spain belongs to a French company based in Orgon, France. OMYA S.A. produces cement derived from a mine close to a small village.

During the operation OMYA S.A. had problems with the people from the nearby village. As a result of the complaints it was necessary to eliminate drilling and blasting. Particularly the dust, the noise and the permanent vibrations caused problems for the people living in the village. In addition, OMYA S.A. was very interested in simplifying its mining process and processing methods.

Solution:

After a short test period OMYA S.A. purchased a Wirtgen Surface Miner 2200 SM for mining the limestone without drilling and blasting.



Material data:

- ✔ Material: Limestone
- ✔ Density: 2,1 t/bcum
- ✔ Uniaxial compressive strength: ~ 50 MPa
- ✔ Tensile strength: ~ 6 MPa
- ✔ Structure: The limestone is 80 % solid with some layers in approx. 2 m distance.

Operating conditions:

- ✔ Operating area: approx. 400 m long and 8–10 m wide
- ✔ Loading method: side casting via conveyor
- ✔ Cutting width: 2,10 m
- ✔ Cutting depth: 0,20 m
- ✔ Advance speed: 6,7 m/min.



Production data:

- ✔ Cutting performance: 172 t/h
- ✔ Effective performance: 128 t/h
- ✔ Cutting tool consumption: 3/1000 t



Wirtgen GmbH
Hohner Str. 2 · 53578 Windhagen · Germany
Phone: +49 (0) 26 45 / 131-0 · Fax: +49 (0) 26 45 / 131-242
Internet: www.wirtgen.com · E-Mail: info@wirtgen.com