

Inspection Report

Ostrauer Kalkwerke GmbH, Ostrau and
BWH Basaltwerk Mittelherwigsdorf OHG, Mittelherwigsdorf

Date: 29.06.2016

1. Ostrauer Kalkwerke GmbH Ostrau

- Deposits: Dolomite – Limestone
- Reserves: for about 100 years (at current output)
- Annual output: approx. 300 Tm³
- Mining method: Underhand stoping
- Burden ratio: 2:1 (2 m³ overburden to 1 m³ rock)
- Exploitation: Drilling and blasting (drilling scheme will be handed in subsequently)
- Charging method: LHD-Method and dump truck until treatment
- Extraction: approx. 90 %
- Main product: Fertiliser / Filling material / Road construction material
- Cutting direction: South Southeast (Expansion area)
- Mining direction: parallel benching, congruent with cutting direction



Figure 1: Full view of the limestone plant of Ostrau – aerial photograph
(Photo: Ostrauer Kalkwerke GmbH, <http://www.ostrauer-kalkwerke.de/index.php?id=17>)

The extraction is realised by benching of the respective slice, height of slice approx. 20 to 22 m. The height of the slice correlates to the present thickness of the in-situ dolomite package.



Figure 2: Wall face, preparation for extraction (Foto: Riedel/C&E)



Figure 3: Solid mining thickness (Foto: Riedel/C&E)

The overburden is used for refilling (Overlying rock, clay – loess clay).
Number of personnel during the production process: 15 to 16 (estimated)

2. BHW Basaltwerk Mittelherwigsdorf/Lausitz

- Deposits: Basaltic rock
- Reserves: for about 15 years
- Annual output: approx. 300 Tm³ / approx. 500 Tm³ depending on demand
- Mining method: Underhand stoping over berm, downwards
- Exploitation: Drilling and blasting, annual approach approx. 3 months
- Charging method: Excavator and dump truck until treatment / partial conveying
- Extraction: n/a
- Main product: Crushed rock, grit, aggregates
- Cutting direction: not defined
- Mining direction: parallel to the cut berms (90 degree offset to cutting direction), downwards



Figure 4: Full view – aerial photograph (Photo: Deutsche Fotothek; http://www.deutschefotothek.de/documents/obj/71228701/elb_euroluftbild_0022363).

The extraction is realised by benching from berms. The height of the berms is about 10 to 15 m. The process is executed in one quarter for drilling and blasting works, subsequently charging, transportation, processing.

The drilling is executed by external contractors, the blasting works are realised by the company itself.

Borehole matrix: 4 x 5 m (will be handed in subsequently)

Explosive consumption: 0,5 kg /m³

The blasting pattern is optimised so that during the following operations no further drilling or blasting is necessary (the obtained grain size correlates with the existing processing conditions in the broadest sense).



Figure 5: Preparation of mining block for extraction (Photo: Riedel/C&E)