



# Kopalnia Melafiru

Melaphyre mine

Poland

## Plant Description

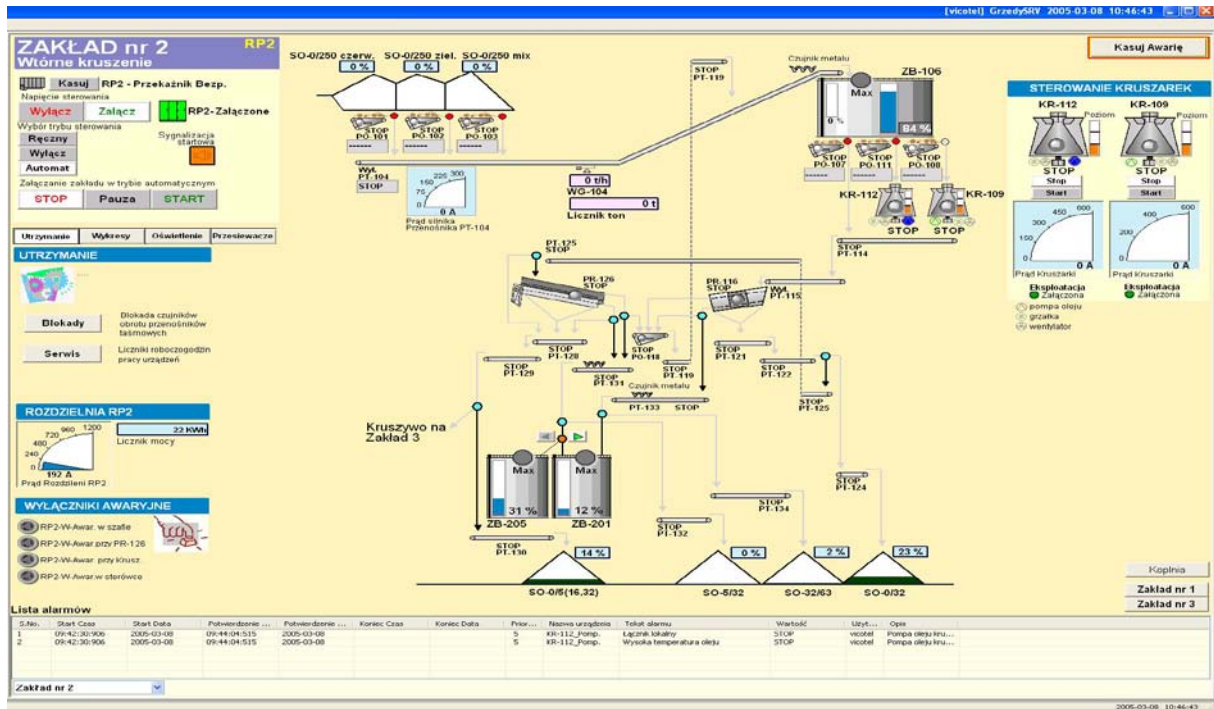
The operation mines a basalt rock type called melaphyre. This rock is used for producing road gravel, road and railway break stones, mixtures with sand for road construction, bituminous concrete and railway sidings.



## IGSS Application

The IGSS application is currently used to monitor and control two processes: Factory 2, which produces the crumbled stone, and Factory 3, which produces road gravel. The factories are equipped with crumbling machines, sifter, feeders, conveyor belts, tanks, weights, etc.

In the near future, the Factory 1 IGSS system for monitoring and controlling the preliminary crumbling process is to be commissioned.



### System Characteristics

The IGSS server is on site at the mine and it's from here that production is monitored and controlled. The number of objects used in the application is 600. The IGSS server communicates with the Versa Max PLC from GE Fanuc through an RS485 interface using the Modbus RTU communication protocol.

There is an additional operator station installed at the headquarters of the mining company in the town of Czarny Bor, which lies a few kilometers from the mine. Because there's no Internet access at the mine, this operator station is connected to the server via modem over a fixed phone line. In addition to monitoring the mine's operation, it is used to generate and analyze reports that are created in the IGSS system.

### System Integrator

The IGSS application has been designed and installed by Microtech International Ltd. of Wrocław, Poland, <http://www.microtech.com.pl>