

## Limestone Quarry – Certovy Schody

Market segment	Industry
Application market	Mining
Pumped medium	Underground seepage water
Pump product	Mobile Pump SuperBetsy
Country	Czech Republic



### Challenge

In order to fulfil the strict legal mining regulations in force in the Czech Republic, considerable quantities of groundwater and rainwater have to be pumped out of the Čertovy Schody limestone quarry. The challenge was to find a reliable, versatile pump solution that is capable of handling variable water levels and flow rates. At the same time, the system had to be as mobile as possible for quick setup and dismounting to ensure that operations can be maintained at different locations within the large quarry at all times.

### Solution

The system was realised with two units of the SuperBetsy mobile pump system (IPS) from Hidrostat. The pumps are equipped with a robust Hatz diesel engine, which ensures a reliable drive. The selected material combination ensures high resistance to the abrasive solids present and a correspondingly long service life. The self-priming, mobile **SuperBetsy** high-pressure pump can be easily moved from place to place within the quarry as required.

### Benefits

The high degree of flexibility, without a permanently installed infrastructure, ensures short set-up times and rapid availability of the pumps. This enables extremely efficient removal of the groundwater and rainwater present, simultaneously at several locations in the quarry and in compliance with statutory environmental and mining regulations. The integrated remote monitoring system provides the operating personnel with real-time data on the condition and performance of the pumps, which enables predictive maintenance and prevents or minimises downtime.

- high efficiency, resulting in low fuel consumption
- and significant cost savings over the entire life cycle of the pumps

Quantity of units sold	3 pieces mobile Pumps SuperBetsy Type IPS D (Diesel drive)
Pump type	D 150-ESH with Screw Centrifugal Pump E125-SH3R
Motor data	max. 43.7 kW / 1'900 rpm
Material combination	Cast iron pump body, Hidrohard wear parts and stainless-steel impeller (Pump)
Duty point	Flow (metric) : 30 litres per second / Head : 48 meters Flow (US) : 475 US gallons per minute / Head : 157.5 feet
In operation since	2021