

## **MEASUREMENTS OF LOAD OF POWER SUPPORTS ON CAVING LONGWALLS**

This contribution presents execution of measurements of pressure in the under-piston space of power support legs that were performed on three caving longwalls during their run. The measurement system used for the measurements, its improvement and way of collecting and transferring data have been described. The longwalls subjected to the measurements with a height ranging between 2.15 m do 3.20 m were located at depths of about 750 m, 900 m and 930 m. The results of the measurements have been presented in the form of diagrams of hydraulic medium pressure changes and working support pressure on the roof shown on the maps of the longwall panels where are also shown influences of past mining events in neighbouring seams. The working support pressure on the roof exerted by the powered supports under investigation were determined using a proprietary programme of GIG based on longwall height, under-piston pressure in the support legs, breadth of the shearer's space and the load of the gob shield of the roof support depending on its height.