

POLITECHNIKA ŚLĄSKA  
WYDZIAŁ GÓRNICTWA I GEOLOGII  
KATEDRA ZARZĄDZANIA I INŻYNIERII BEZPIECZEŃSTWA

## **ROZPRAWA DOKTORSKA**

**Analiza i ocena możliwych strategii produkcji węgla  
kamiennego dla zaspokojenia sezonowych potrzeb  
odbiorców**

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Summary: "Analysis and evaluation of possible coal production strategies to meet seasonal needs of customers"

The primary goal of this study was to develop a model of seasonal fluctuations in customers needs and develop best strategies to meet the demand for coal.

The requirement to use an appropriate strategy to production is a consequence of seasonality. The following strategies for coal mining were created and analyzed:

- flexible production;
- the stable production.

Knowledge about the demand for coal in the past is crucial to take decisions concerning the future of its production. Monthly data were obtained from the KW S.A.

Three alternative scenarios for macroenvironment of the coal company were created (based on a survey of expert opinion) for the dissertation. In order to select the most appropriate strategy for each of the adopted scenarios of the coal company environment was used the method of multidimensional comparative analysis.

The study allowed to formulate the following conclusions:

- the study showed that there is no dominant production strategy, which means that the choice must be made based on an assessment of the specific situation in the company.
- the forecast of coal production for the coming years foresees further declines of production, but to a much lesser extent than it did in the 90s.
- the results of the analysis lead us to the conclusion that the selection of appropriate manufacturing strategy has a decisive influence on economic results of mining companies.



*A. Rybak*