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# POLISH TECHNICAL REVIEW



### **5-6**



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### X SIGMA

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#### Coal mining industry

The mining, especially the coal mining industry, occupy a priority place in the Polish economy, which finds a natural reflection in our magazine. In the present issue, our readers will find an article on the technology of getting coal in the "Knurów" coal mine. After the getting of thin deposits (article in no 2-3/84, page 11), the turn has come for getting hard coal deposits, also those that are strongly dipping, and edge coal beds (page 2). Experts from the Rybnik Coal Region present interesting data on methods of fire damp drainage and utilization of the gas being removed (page 4). A third article discusses improved methods of wet dressing of coal.

#### Regeneration of machine parts by means of chemical coatings

The regeneration of worn machine parts is done mostly by padding, metal coating by spraying and metal plating. In spite of being known in theory, the chemical methods are not used in practice. As shown by article on p. 14 they give excellent results in the regeneration of hydraulic elements and gear teeth by coating them with Ni-P, Ni-P-Co and Ni-P-Sn, considerable savings of energy, materials and expenditure for spares being also ensured.

#### The utilization of pickling effluents in agriculture

In industrial production, considerable amounts of pickling effluents and solid wastes are formed containing useful metals such as molybdenum, copper or manganese which constitute microelements indispensable in agriculture. Scholars from Lublin have worked out original methods for the processing of these effluents and wastes into liquid and solid fertilizers. An additional advantage is the protection of the natural environment. See p. 16 and 18

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