



# POLISH TECHNICAL REVIEW



## KOPEX

EXPORT AND IMPORT OF MINING AND DRILLING  
MACHINERY FOR THE COAL MINING AND MINERAL OIL INDUSTRIES



supply of: ● mining machines and equipment  
● drilling rigs and equipment ● safety and protective equipment

design and erection: ● mining plants ● coal preparation plants

services: ● geological survey and exploratory drillings ● mining works ● engineering consultancy



Our Address:  
KOPEX  
OVERSEAS MINE CONSTRUCTION Co.  
ul. Grabowa 1,  
40-952 Katowice, Poland  
Telex: 0315681  
Phone: 581-631



# POLISH TECHNICAL REVIEW

**SIGMA**

PUBLISHERS OF TECHNICAL PERIODICALS AND BOOKS SIGMA - AN ENTERPRISE OF THE CENTRAL TECHNICAL ORGANISATION  
ul. Biela 4, 00-950 Warsaw, P.O.B. 1004. Tel: 39 11 99, tbc: 814 877 WCT WA PL. Issued in English, French, German and Russian

## CONTENTS

### COAL AND ORE MINING

- Screen-type linings for the coal mining industry ... 2  
Hydrotechnics in the copper ore mining industry ... 9

### AT THE DESIGNER'S DRAWING BOARD .....

- A new family of mechanical miners ..... 12

### BUILDING INDUSTRY

- The building system MURSA-ZM ..... 16

### WATER MANAGEMENT

- The CONTRACT-type storage reservoir ..... 18

### METALLURGY

- Ferro-alloys ..... 21

- BOOKS ..... 20

- IN BRIEF ..... 20

- PRESS SERVICE ..... I...III

### Coal and ore mining

The leading section of the present issue includes articles devoted to Polish achievements in copper and coal mining. The readers will find on page 2 to 11 interesting articles on the physical development of the Lubin copper ore deposits with special stress on the difficult issues of hydrotechnics, and on the haulage of the gotten. Two other articles deal with Polish-made machinery and equipment used in coal mining. The sections: From the designer's drawing board and Export of small plants are also dealing, this time, with problems of mining.

### Building and water economy

The article on the MURSA-ZM System presents a proposal for a new generation of popular energy and material-saving housing systems. The article on the CONTRACT-type storage reservoir outlines a new concept of an economical dimensioning of useful storage capacity ensuring, at the same time, a higher water storage capacity as compared with design solutions applied so far.

### Press service

As usual, Polish Technical Review brings an insert (pages I to III) called Press Service and bringing short news on various technological achievements. Any reprints from the Press Service will be most welcome.

Programmatic council: K. Badźmirowski, J. Czarnski, S. Gruzewski (President), A. Nowik, S. Okoń, Z. Pawlik, L. Sender, J. Toeplitz  
Editorial staff: J. Toeplitz (chief editor), I. Chmielewska, A. Witkowski (assistant editors), S. Hilscher (managing editor), E. Karska, J. Wolf  
English editor: E. Karska  
Graphic layout: F. Barącz  
Production manager: A. Dziewulska-Kijas

Subscription orders should be addressed to the Ars Polona-Ruch, 00-950 Warsaw, P.O.B. 1002, Krakowskie Przedmieście 7 or to one of the representatives of this company abroad.

Printing office: SIGMA - Warsaw  
Index no 36915