



# POLISH TECHNICAL REVIEW



## KOPEX

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



PEX

PLY OF: ● mining machines and equipment ● drilling rigs  
equipment ● safety and protective equipment

IGN AND ERECTION: ● mining plants ● coal preparation plants

VICES: ● geological survey and exploratory drillings ● mining  
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#### The coal mining industry

Four articles in the present issue are devoted to this industry: wrapping connector-free drives of mechanical miners for edge coal getting (the result is an elimination of the taut chain of the mechanical miner which leads to an improvement of work safety); the shifting of pit head-level structures in the coal mining industry (the effect is a more rapid commissioning of the project); flotation machines with automatic control systems (of a simple design, high mechanical reliability and long service life) and a gas-type fire-fighting equipment - with a water or nitrogen diffusion cooling of combustion gases which is of basic importance when extinguishing underground fires in coal mines or for fighting fires e.g. of various storage tanks. See p.2 and the following pages as well as p. 24.

#### Shot-blasting of external surfaces of tubes

This is a project of the Institute of Fine Mechanics in Warsaw used for cleaning the external surfaces of tubes with a wide range of diameters. The surfaces of tubes after cleaning meet the requirements of various anticorrosion protection technologies, including protective painting. Application of that equipment eliminates manual methods of surface treatment and also sand-blasting in an open cycle of abradant circulation. The equipment can also replace the power-consuming and dangerous to environment chemical methods of surface treatment, e.g. acid pickling. Page 9.

#### Pulsating-load presses for powders

Cooperation between the Cracow Technical University and the PONAR-ŻYWIEC Factory in Żywiec has resulted in the design of a pulsating-load press used for forming products from powdered materials by pressing, and then for working them further by extra pressing, sizing, or other type of plastic working (by using, among other things, an optional polarization attachment).

The press makes it possible to obtain products of a complicated shape and of a high and evenly distributed density. Page 12.

#### Press service

As usual, Polish Technical Review has an insert (pages I to IV) named Press Service including short, interesting technical news. We encourage you to make reprints of these news in technical periodicals.

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