2-3 1983



POLISH TECHNICAL REVIEW



2-3



POLISH TECHNICAL REVIEW

X SIGMA

PUBLISHERS OF TECHNICAL PERIODICALS AND BOOKS SIGMA – AN ENTERPRISE OF THE CENTRAL TECHNICAL ORGANIZATION ul. Świętokrzyska 14a, 00-950 Warsaw, P.O.B. 1004, Tel. 39 11 99. Issued in English, French, German and Russian

CONTENTS

POWER INDUSTRY	
PRUNEŘOV II power station	2
A pressure stabilizer	
Distribution oil transformers	
A static follow-up reactive load compensator	7
GEOLOGY	
High frequency probes for rock testing	9
MINING MACHINERY	
Integrated longwall systems	11
A respirator wiper (patent)	
Equipment for detecting cuts in conveyor belts	15
MACHINES FOR EARTHWORK	
Super-tractor TD-40 (349 kW)	16
BUILDING INDUSTRY	
Building services of CHEMOBUDOWA-Cracow for	
the F.R.G.	19
MATERIAL ENGINEERING	
The industrial utilization of power plant fly-ash	
Equipment for the sintering and melting of ceramic	
materials	22
FARMING MACHINERY	
Rototillers	24
Automatic equipment for the UV irradiation of	
animals	25
A mechanical separator of stones from potatoes	
(patent)	26
A stream limiter for power hydraulics systems	26
(patent)	26
CONTROL-AND-MEASURING EQUIPMENT	0.7
Temperature and pressure controllers	
Infrared radiation-triggered photoelectric relays	
A control and monitoring zinc electrode	29
MOTORING	
The AUTOSAN ambulance	
Metal nitride coatings deposited on sintered carbi	
A shaft bearing mounting with axial compensation	
ECONOMIC SURVEY	
IN BRIEF	
PRESS SERVICE	I-VIII

Pruneřov II power plant

The largest Polish-built power industry project abroad – a power plant with a rated capacity of 1050 MW – has been handed over in a "turn key" condition to the Czechoslovak user. The project was built at a good pace (after commissioning the first power unit, the remaining ones were handed over at 4 months intervals). The plant has achieved excellent technical-economic indices and has been recognized to be the best brown coal fuelled power plant in Czechoslovakia. Details on p.2.

Mounted rototillers

The mounted rototillers made at the AGROMET-UNIA Agricultural Machinery Factory at Grudziądz were awarded a gold medal at the 1982 Poznań International Fair. They are of a simple design, easy to operate and maintain, reliable and having a long service life. A large number of these rototillers is sent for export. For technical details see article on p. 24

Longwall mechanized complexes

The high output achieved by Polish coal mining is largely the result of the complex mechanization of work in working faces. The Polish industry manufactures and offers 12 different types of longwall mechanized complexes adapted to coal seams from 0.8 to 4.1 m thick and having a high inclination angle. The article on p. 11 brings information about these complexes and the machinery and equipment which are part of them (linings, cutting machines, conveyors, etc.).

Press service of Polish technology

The current issue brings again a "Press service" from which reprints can be made free of charge by foreign technical periodicals. We hope that the concise form of the news included in the Service will encourage and facilitate reprints. Reprints can be also made from the other articles included in the issue. In both cases we shall appreciate information that any of our articles or short news have been reprinted.

Programmatic Council: K. Badźmirowski, S. Grużewski (President), S. Okoń, T. Wąsak, J. Toeplitz

Editorial staff: J. Toeplitz (chief editor), I. Chmielewska, A. Witkowski (assistant editors), S. Hilscher (managing editor), E. Karska, Z. Schellenberg, J. Wolf

English version: E. Karska

Graphic layout: F. Barącz

Production managers: A. Dziewulska-Kijás, B. Słowińska

Cover photo: Prunerov power plant, 1050 MW in Czechoslovakia, the largest Polish

project built abroad. Photo KAW - W. Stasiak

Photos in the issue: KAW - W. Stasiak

Subscription orders should be addressed to the Ars Polona-Ruch, 00-950 Warsaw, P.O.Box 1002, Krakowskie Przedmieście 7 or to one of the representatives of this company abroad. The annual subscription rate (6 issues) amounts to US \$ 25.20 (k. 14.40) or the equivalent in other currencies. In the socialist countries, catalogue prices of the local distribution centres apply.

Printing office: SIGMA, Warsaw.

Index no 36915