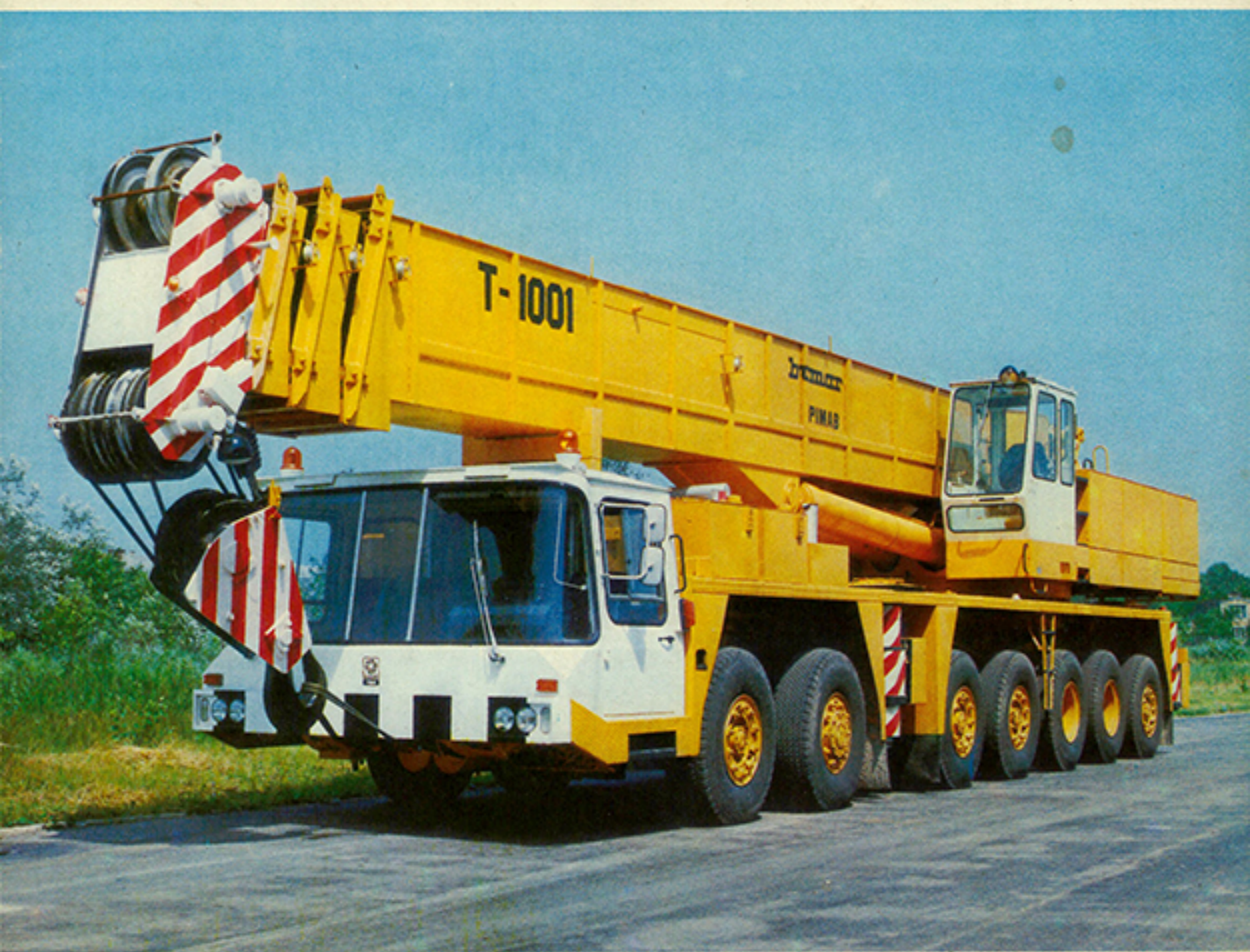




# POLISH TECHNICAL REVIEW





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**SIGMA**

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## CONTENTS

MINING	Page
Getting and hauling systems used in surface mining	2
Microcomputer controlled heading machines	6
Haulage shuttle-cars	8
Portable vibration meters for mining machinery inspection	11
<b>ENVIRONMENTAL PROTECTION</b>	
Vapours absorbing equipment	13
Catalytic purification of combustion gases (patent)	13
A noise suppressor for electric power stations	14
<b>ELECTRONICS</b>	
Equipment for testing pulsed capacitors	15
Thyristor-based frequency converters	16
<b>MATERIALS ENGINEERING</b>	
Optimization of the chemical composition of creep-resisting nickel-base casting alloys	17, 26
<b>WATER MANAGEMENT</b>	
A multiple-level storage reservoir WISKARB in sewerage systems	20
<b>PATENTS</b>	
An economical two-stroke engine	22
A new catalyst carrier	22
Equipment for discharge generation in a pulsed gas laser	23
Generation of pulsating fluid bed	23
Subsoil testing set	23
<b>BUILDING MACHINERY</b>	
Polish-Soviet co-operation in the field of self-propelled cranes	24
BRIEF NEWS	10, 14, 26, 28 2nd and 3rd cover pages
BOOKS	27
PRESS SERVICE	I - VIII

## Mining

Mining is the main item in the present issue. Hard coal and lignite, sulphur, copper, zinc, lead and gravel are only some of Poland's natural resources mined with the use of modern technology. Some of the solutions applied are discussed in the following articles: Getting and hauling systems used in surface mining; Microcomputer controlled heading machines; Haulage shuttle-cars. See p. 2 to 11

## Equipment for testing pulsed capacitors

The service life of pulsed capacitors is the key element influencing the operating characteristics of laser equipment. A taster has been designed in Warsaw which makes it possible to conduct automatic measurements of these capacitors thanks to its being interfaced with any computer system. The taster embodies a new solution (three-state converter) of the circuit charging the capacitor. Page 15

## Optimization of the chemical composition of creep-resisting nickel-base casting alloys

The Cracow School of Technology and the WSK-PZL Works in Rzeszów, using the theory of extremal experiments planning have developed a new creep-resisting nickel-base casting alloy whose components have been optimally selected. An outline of the research method used and the composition of the new alloy are presented in the article on p. 17

## A multiple-level storage reservoir in sewerage systems

The multi-level storage reservoir newly developed at the Cracow School of Technology allows for a more effective utilisation of the storage capacity of a reservoir with a simultaneous substantial extension of the range of its useful functions. The idea behind the solution consists in the different levels of positioning the bottom of the accumulating chambers and of the overflow edges of the fixed partitions. For details see p. 20

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Cover page photo: A 100 tonnes (acc. to GOST) self-propelled crane - an example of Polish-Soviet co-operation

Back cover photo: A 25 tonnes (acc. to GOST) self-propelled crane - an example of Polish-Soviet co-operation

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