



POLISH TECHNICAL REVIEW



6

70/1975



POLISH TECHNICAL REVIEW

PUBLISHERS OF TECHNICAL PERIODICALS FOR THE CENTRAL TECHNICAL ORGANIZATION (NOT)
00-950 Warsaw, Czackiego 3/5, P.O.B. 1004, Tel. 39.11.34. Issued in English, French and German

	Page
Polish architecture and Polish architects in the world	2
Three hundred million dollars worth services from BUDIMEX	4
"Prix de Promotion Internationale" for BUMAR	8
Expansion prospects for hydraulic loaders	6
Crawler tractors	9
Heavy-duty crawler excavators	11
Cooperation in the production of driving axles	12
Hydraulics in heavy-duty working machines	14
Electro-thermal treatment of concrete	13
Preparation of building site under a ship machinery plant	17
Hardening of water reservoir bottoms	15
Improved methods of geological drilling	18
New railway trunk line	19
New developments in the research centres of the Polish Academy of Sciences	20
PATENTS	21
NEW BOOKS	24
ECONOMIC SURVEY	22
SCIENTIFIC AND TECHNICAL NEWS IN BRIEF	4, 8, 10, 16, 24

Polish architecture and Polish architects in the world

Polish architects have won many prizes at international competitions. The number of prizes and honorary mentions awarded to them at 46 competitions organized by the International Union of Architects totals 74. All these achievements were scored in conditions of heavy international competition since some of the contests were attended by as many as several hundred teams of architects. Many successes were achieved by Polish architects in recent years, including prizes and honorary mentions for the project of the historical centre of Ghent, re-development of the city centre in Santiago, building of a prefabricated "house of the future" in Japan and the project of the national opera house in Sofia.

The main reason of these successes are the modern architectural and town-planning concepts elaborated by Polish architects.

Expansion prospects for hydraulic loaders

In the past development programmes of hydraulic loaders, the trends at increasing their manoeuvrability had to compete with the trends at improving stability. The articulated system offered a compromise solution. The view prevailing so far was that the main articulated joint should be placed in the centre of the axle base but studies conducted in Poland have shown that a much better solution is to locate the joint axis at more or less 1/3 of the axle base, closer to the rear axle. The Ł21 loader designed along these lines features a number of designing and operational advantages.

Crawler tractors

The Huta Stalowa Wola Building Machinery Combine has concluded a co-operation agreement with INTERNATIONAL HARVESTER, USA for the manufacture of 4 types of tractor-based machines, that is: 2 types of bulldozers, a loader and a pipe laying machine. The tractors feature high operational reliability and are easy to construct. Their production was started in Poland in 1973. As soon as lot production of Polish-made sub-units is started the share of imported elements which initially amounted to 80% will be considerably decreased.

Cooperation with INTERNATIONAL HARVESTER has placed the Huta Stalowa Wola Combine among the most modern manufacturers of crawler tractors in the world.

Editorial Board:

B. Doweyko, L. Drecki, S. Gruzewski (Chairman)
A. Hanftwurel, F. Kubiczek, Z. Makomski, C. Myczkowski, J. Niegowski, B. Perkowski.

Editorial Staff:

A. Hanftwurel (Editor-in-chief), J.L. Toeplitz (Assistant Editor), S. Hilscher, E. Karska, Z. Schellenberg, A. Witkowski (Editors), S. Zaleski (Editor of the English version).

Translations: P. Dytko, J. Hummel, W. Iwiński, H. Stepień

Advertising Section: T. Pachnowski

Graphic Layout: F. Barcz

Technical Editor: A. Dziewulska.

Photos: BUMAR, CAF

Subscription orders should be addressed to the "Ars Polona-Ruch", 00-950 Warsaw, P.O.B. 1001, Krakowskie Przedmieście 7 or to one of the representatives of this firm abroad.

The annual subscription rate (12 issues) amounts to US \$ 9.90 or the equivalent in other currencies. In the socialist countries catalogue prices of the local distribution centres apply.

Cover photo: Truck-mounted crane manufactured under a licence of COLES CRANES Ltd by the HUTA STALOWA WOLA Combine

Printing Office: Zakłady Typograficzne Łódź, Zam. 199/75

INDEX no 37325/36915