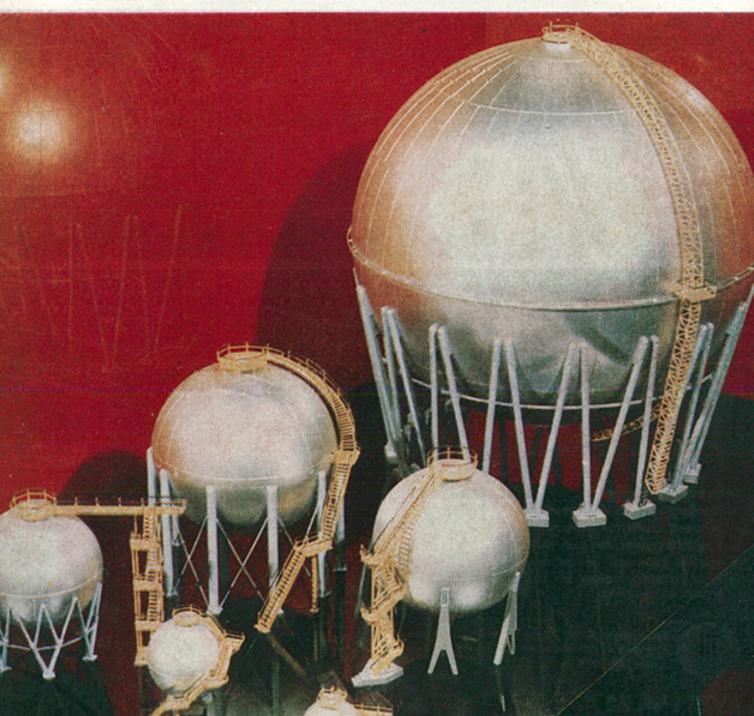
# POLISH TECHNICAL REVIEW



**10** 



## 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

CONTENTS	
MEASUREMENT EQUIPMENT	
1. Atomic frequency standards	2
2. Biological microscope - BIOLAR	4
3. Polish-made apparatus for liquid chro-	
matography	5
4. Industrial measuring equipment for the	
protection of waters	7
WATER ECONOMY AND WASTE TREATMENT	
5. How Poland covers her demand for	
water	10
6. The Upper Vistula cascade	10
7. Water for Cracow	12
8. Cleaning of pipe conduits by means	
of a turbine device	13
9. Chemical effluent-treatment plant	14
10. New development in the utilization of	14
wastes from food industry plants	15
MEDICAL EQUIPMENT	
11. General-purpose stimulator set	16
12. Radiological protection in gynaecolog-	
ical radium laboratories	17
13. Intracranial pressure monitor	19
<ol><li>Analyser of bioelectrical activity of the</li></ol>	
brain	19
,	
INDUSTRIAL BUILDING	
15. Spherical tank for gaz	20
15. Spherical tank for gaz	20
NEW DESCRIPTION OF THE OFFICE OF	
NEW DEVELOPMENTS IN THE RESEARCH	
CENTRES OF THE POLISH ACADEMY OF	
SCIENCES	22
PATENTS	
16. A method of preparing cast manganese	
steel with high impact strength	
17. Tube drawing	
18. Drawing die	
ECONOMIC SURVEY	
IN BRIEF	

### Industrial measuring equipment for the protection of waters

There are many sectors including the municipal economy, heat power engineering, chemistry and the paper-making industry in which it is necessary to control the standard of water and wastes. The article presents equipment designed for the protection of waters and comprising, among other things, industrial pH meters equipped with measuring heads, a salinometer, oxygen transmitters as well as equipment for monitoring the water and wastes auality.

### Chemical effluent treatment plant

The Mazowieckie Refining and Petrochemical Works of Plack operate a centralized system for effluent treatment. In this large factory, the different types of waste undergo separate pre-treatment and are then fed into a two-stage biological treatment plant common for all effluents. The plant will be soon equipped with coagulators which will constitute the first stage of treatment. The volume of effluents will be thus reduced by 50%, the treatment operation will be improved especially as the contents of ether extract will be reduced to insignificant amounts.

## Spherical tank for gas

THE "MOSTOSTAL" enterprise conducts many difficult engineering operations both in Poland and in foreign countries. Mention is due to the spherical tank made for the "GASAG" Gas Works in West Berlin if only because of its size and volume. The article describes the various assembly stages and serie of the quality tests.

Editorial Board: B. Doweyko, K. Drecki, S. Grużewski, (Chairman), S. Katarzyński, F. Kublczek, Z. Makomaski, C. Myczkowski, J. Niegowski, B. Perkowski, A. Hanftwurcel

Editorial Staff: A. Hanftwurcel (editor-in-chief), J. L. Toeplitz (Assistant editor), S. Hilscher, E. Karska, Z. Schellenberg, A. Witkowski

English version: S. Zalewski, P. Dytko, H. Stępień

Technical editor: A. Dziewulska-Kijas Graphic Layout: F. Baracz

Advertising section: T. Pachnowski Photos: CAF, S. Kuruliszwili 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 \$ 12,— or the equivalent in other currences. In the socialist countries catalogue prices of the local distribution centres apply.

## Cover:

Model of gas tanks built by Mostostal on the right side: model of the tank built in West Berlin (see page 20)

Printing Office: Zakłady Typograficzne Łódź. Zam 575/75

INDEX NO. 37325/36915