



POLISH TECHNICAL REVIEW



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Polish shipyard extension programme

The Polish shipbuilding industry has elaborated its own development concept consisting mostly in the building of ships of a complex technical design, labour-consuming and requiring a considerable amount of technical equipment. Polish shipyards have started to build ships in short series; these ships are often novelties on a world scale. The article is a review of the development of the Polish shipbuilding industry and may be useful to compare the trends of this development in Poland and in other countries.

ZAMECH-LIAAEN adjustable-pitch propeller

In cooperation with A. M. LIAAEN, Norway (the licence donor), the ZAMECH Mechanical Works in Elbląg manufacture adjustable-pitch propellers with a power transmission capacity of 20,800 HP. The construction solutions applied in the propeller have proved very successful. As compared with other solutions, the propeller hub features simplicity which facilitates the assembling and treatment operations and, also, ensures reliability in use and ease of repairs. The propeller has been provided with a number of devices preventing both the propeller and the engine from being damaged in case of a breakdown.

Cryogenic Equipment

Polish-made type BYP 401 silicon diodes are characterized by properties allowing them to be used for measuring temperatures ranging from 4.2 K to 300 K. The diode voltage, at a constant intensity of the measuring current is a monotonic function of temperature. Two articles, by A. Szymrka and L. Lipiński, inform readers about the practical applications of this relationship. Another interesting cryogenic installation is the gas liquefier for group A gases (nitrogen, air, argon) developed at the Cryoengineering Laboratory of the Polish Academy of Sciences. The liquefier has a liquefying capacity of 1.5 l/h and finds application in cryogenic laboratories.

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