



POLISH TECHNICAL REVIEW





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Thyristor-based frequency converters

The TPC thyristor-based frequency converter with a pulse width modulated inverter has been awarded a gold medal at the Poznań International Fair. This converter which has been designed and is now made in Poznań is a general-purpose piece of equipment used for feeding and controlling the speed of a.c. power drive systems. Its application yields considerable power savings, improves the power factor and makes it possible to achieve a smooth change of the sense of rotation. Details on p.5

A didactic set for studying the diffraction and filtration of spatial frequencies

Owing to the development of contemporary Fourier optics and the growing importance of diffraction problems in the curricula of schools and institutions of higher learning, the Technical University of Warsaw has developed a set of scientific equipment for the demonstration and investigation of diffraction and spatial frequency filtration phenomena e.g. Fresnel's and Fraunhofer diffraction, apodization, diffraction phenomena in light with a variable degree of coherence, Abbe's experiment, frequency analysis of an optical system and the optical realization of convolution and cross-correlation functions. Details on p. 13

Heating units from the Institute of Fine Mechanics

An article under this heading discusses the newest heating installations for the heat treatment of metals developed by the Institute of Fine Mechanics e.g. induction heaters, a furnace for the austenitizing of broaches, box-type furnaces for high-speed steel hardening, fluidized-bed furnaces (for heat treatment and cementation according to the Institute's own method „Termofluid”) glow discharge furnaces for nitriding and cyaniding, vacuum furnaces of several types. See article on p. 16

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