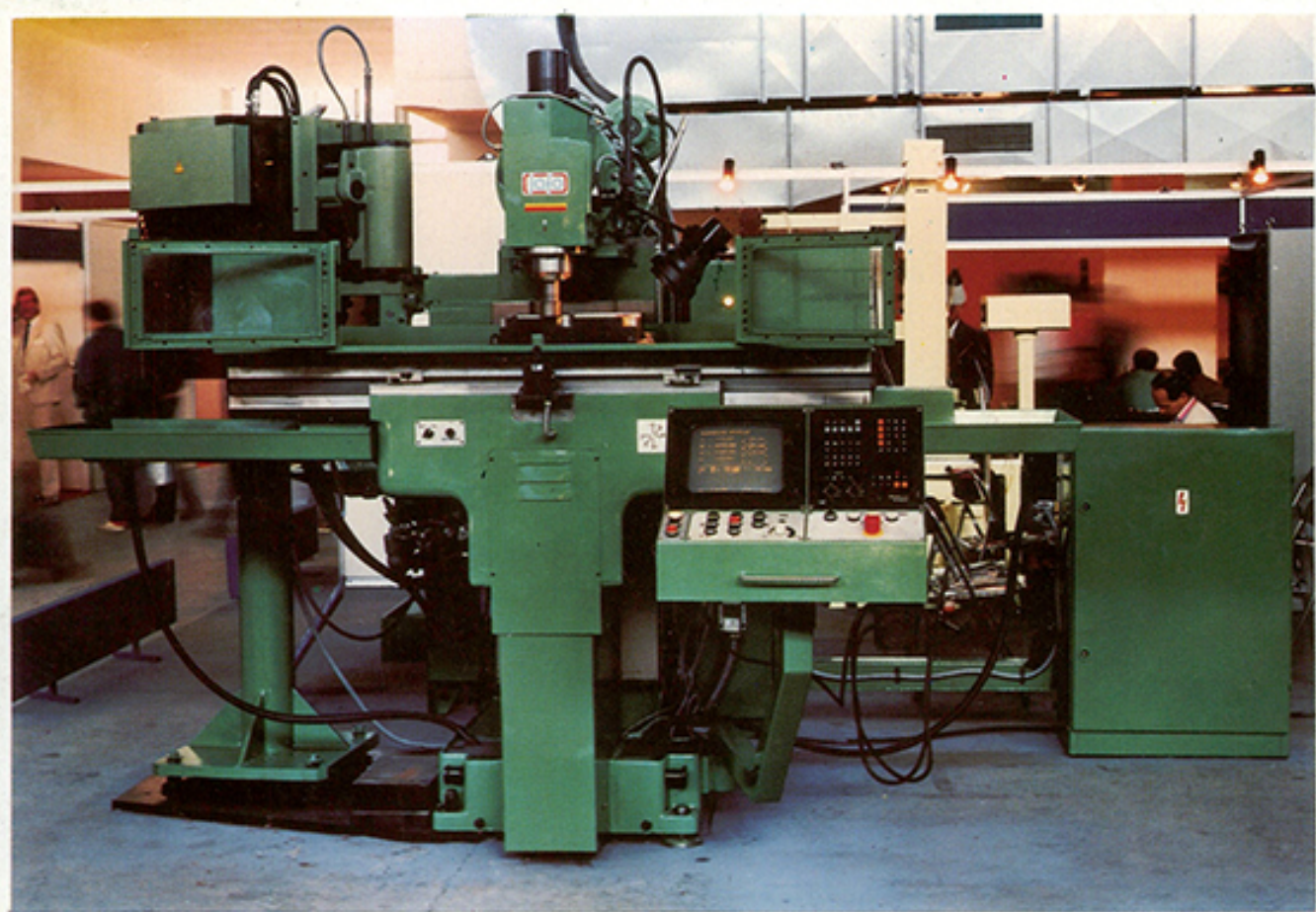




POLISH TECHNICAL REVIEW





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Transistor-based converters for D.C. servo-mechanisms

The Institute of Electrical Engineering in Warsaw has developed converters for modern drive systems — servomechanisms of industrial robots, feed gears of machine tools, feed mechanisms of automatic presses, radar antennae, etc. The converters meet all the specific requirements set to such drives. The article discusses the advantages, operation and design of these transistor-based converters. See p. 6

A laser radiation spectrum analyzer

The COBRABID Company has undertaken a successful attempt of constructing a device for the spectrum analysis of laser radiation. This analyzer which is based on the construction of a measuring system utilizing the principle of operation of the Fabry-Perot interferometer has a high resolution capacity. See p. 2

A microprocessor-controlled SO₂ immission monitor

The Gdańsk Technical University has developed a new type of monitor for determining the SO₂ immission level. The monitor is equipped with an electrochemical sensor. Its advantages include: accuracy better than 1% of full scale reading, period of unattended operation 60 days, short response time, possibility of conducting continuous measurements and protection against interference effects due to O₃, Cl₂ and H₂S. See article on p. 8

A container-type, automatic water supply station

This station is designed for the treatment of underground waters and supplying potable water to villages, production plants, small housing estates, etc. It is outstanding for its small size and automation of the technological process which comprises the following integrated processes: coagulation, flocculation, filtration and disinfection. Page 16

Self-lubricating slide bearings

Research work conducted in Poland has resulted in the manufacture of multi-layer self-lubricating slide bearings with a low-carbon steel base. The base has been electroplated with a thin layer of copper. The desing and advantages of the bearings are discussed on p. 12

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Front cover photo: Vertical machining centre FYN 50 NM made by the Special-Purpose Machine Tools Factory PONAR-JAFO at Jarocin.

Back cover photo: The model of the RT-4 radiotelescope designed at the Export Centre of the Association of Polish Engineers and Technicians Mechanicians SIMPEX in Katowice

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