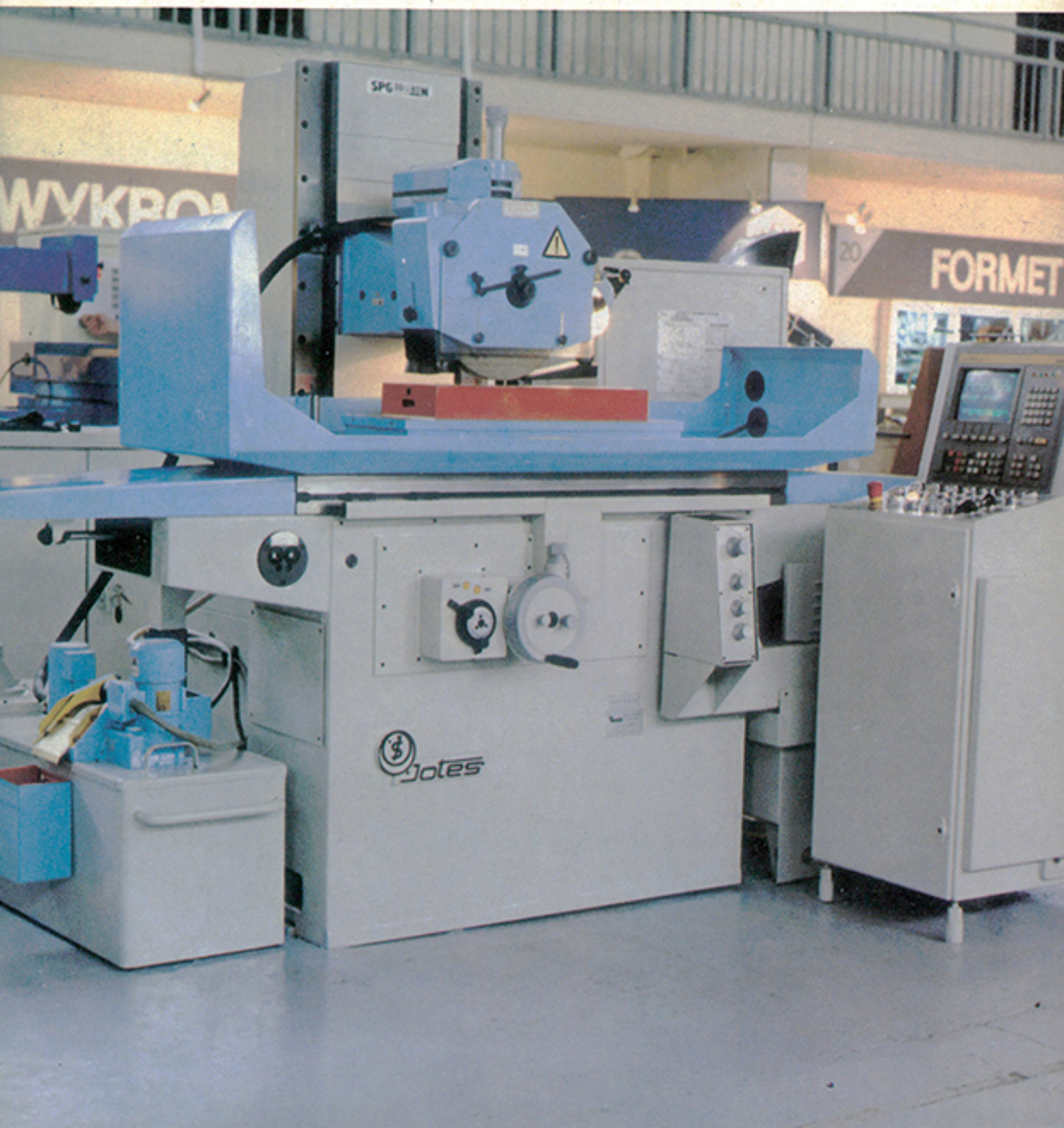




POLISH TECHNICAL REVIEW





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Nickel-titanium alloys exhibiting the shape memory effect

The Institute of Physics and Chemistry of Metals of the Silesian Technical University in Katowice has developed a technology of manufacturing the NiTi alloys exhibiting the shape memory effect. This technology is based on the utilization of nickel and titanium which have been purified by the zone refining process and cast under vacuum or in an argon atmosphere. The NiTi alloys exhibiting the shape memory effect have found wide application in technology and medicine (surgery). For details see p. 2

New building materials from the Institute of Building Technology

The article reviews the following achievements of the Institute: the MALIX resinous and mineral material designed for coating inside walls and ceilings in medical service and food industry projects, a hydrophobic agent, materials for the thermal insulation of external walls, various additives improving the properties of concrete, an anti-adhesive agent, the CONBIT building material featuring a high resistance to the action of chemical compounds, asbestos-free ligno-cement panels, an inhibitor of reinforcing steel corrosion, an inhibitor of corrosion of the central heating system, a method of reinforcing and repairing cement mortar blind floors. See article on page 8

Design of the ANTONOVSKAYA coal mine in the Soviet Union

Polish design works have worked out the designs for the "Antonovskaya" hard coal mine in western Siberia. The coal mine is to be built by Polish companies. The article on p. 18 discusses, among other things, the model of development working, the variants of locating the different projects on the surface, etc.

Polish ring-ball mills

The "At the designer's drawing board" section of this issue brings on p. 21 an interview with Mr. Witold Krajewski, M. Sc. (Eng.), Head of the Crushing Mills Department at the design office of the Mechanical Stoker Factory at Mikołów, on Polish achievements in the development of ring-ball mills since the purchase of a British licence for their manufacture. The improvements reviewed in the article have contributed to a growth of production and export of these mills.

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Cover photo: Surface grinder with horizontal spindle axis CNC type SPG 30 × 80 N2 (gold medal at 59th Poznań International Fair). Manufacturer: PONAR-Łódź Grinding Machinery Factory, plant in Głowno

Back cover photo: Elevator vacuum furnace type VVFC/BL-2436 (gold medal at 58th Poznań International Fair). Manufacturer: ELTERMA Thermoengineering Works at Lubusz

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