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A method of copper production from chalcocite concentrates in a fluidized-bed oven

The one-stage process of smelting copper directly from concentrates in a fluidized-bed oven by the OUTOKUMPU technology was applied for the first time in the world at the Głogów 2 Copper Works. The new technology made it possible to increase nearly twice the production output with a simultaneous decrease of power and refractory materials consumption. Losses of copper contained in the waste slag were reduced as well. For details see p. 9.

A ducted-fan turbine engine

The D-18 ducted-fan turbine engine designed at the Institute of Aviation, Warsaw in inexpensive and its performance data are better than those of good engines used for the propulsion of combat training aircraft. Good engine performance characteristics have been attained thanks to the high efficiency of the compressor fan assemblies, the combustion chamber and turbines, and also the optimization of the thermal cycle. The engine can be used in single-engine training aircraft or in other versions, namely the reconnaissance and strafer ones. See article on p. 22.

Pulsating-action pressure casting machines for moulding shops

The individual, pulsating-action moulding machines developed at the Foundry Institute, Cracow, feature a number of original design solutions, including a quick-action pulsation-type valve being the salient assembly of every moulding machine. Consequently, the weight of this machine is considerably smaller than that of a corresponding jolt-squeeze moulding machine. See article on p. 24.

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Front cover: ELEKTRIM has modernized the PRUNERÓW IV power station and electro-filters in the Czech Republic

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