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Arbor-type leaf-like grinding wheels

The UNION-VIS Co Ltd. at Bielsko-Biala, a specialized manufacturer of abrasive tools, has developed a new technology of grinding wheels based on imported resins. The technology ensures high productivity and is safe for the environment.

The arbor-type leaf-like grinding wheels are made of abrasive materials sectors (leaves) spaced radially round the axis of a steel arbor and of a resin filling compound binding all elements into a single whole. Owing to their specific design, the leaf-like grinding wheels are flexible and match the shape of the workpiece. They are particularly suitable for finishing operations (See p. 6).

Mineral-organic fertilizers from wastes

The technology of production of mineral-organic fertilizers from wastes developed at the Technical University of Wrocław requires small investment and operating outlays and ensures a high-quality product. It is based on biochemical processes. The raw materials used are constituted by wastes from the food processing industry, e.g. breweries, sugar factories, distilleries. Also used are straw and sawdust. The fertilizers obtained comprise a relatively high amount of nitrogen and phosphorus. The latter element is present in the form of organic compounds and, hence, does not undergo undesirable chemical reactions with other soil components as is the case with conventional fertilizers. (Details on p. 7).

An emission-free method of hydrogen cyanide production

The new technology of hydrogen cyanide production developed at the Nitrogen Works of Tarnów has made it possible to obtain a product featuring competitive economic indices and being friendly to the environment. The new technology provides, among other things, for an emission-free start-up and stopping of the HCN installation, a method of recycling the tail gases back to the process, a technique of stabilizing the absorption-desorption systems (polymerization of substances present in those systems has been completely eliminated), original catalyst charges, ammonia recovery. (See article on p. 9).

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Cover photo: The DUT-0300 crane for road building and field work, developed by the Industrial Institute of Building Machines at Kobyłka

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