

## The revolution in double face grinding

**CoolEdge GrindPro: New type of bonding system offers high grinding tool stability, grinding at low-temperature, and less machine wear when double face grinding at industrial scale.**

At EMO 2023, the world's leading trade show for production technology, which takes place in Hanover from September 18–23, the DVS TECHNOLOGY GROUP and its subsidiary NAXOS DISKUS are presenting a new type of soft-grinding bonding system: the *CoolEdge GrindPro*. The technology was specially developed for double face grinding machines. These types of machines are used in the automotive and sanitary industries, in engine production, and in tool and mold making, among others. Typical applications are the grinding of connecting rods and heat-sensitive workpieces such as ceramic components.

In these situations, the workpieces have to be precisely ground with micrometer accuracy. At the same time, a high removal rate of up to 1.6 mm occurs during machining. Another challenge with these types of grinding procedures is keeping the heat input as low as possible because many workpieces cannot accommodate additional cooling slots. And in many cases, it is also impossible to optimally place coolant nozzles.

*CoolEdge GrindPro* offers a solution for this: The newly developed resin used in the grinding wheels ensures a small, precisely adjustable amount of bond. This makes the grinding wheel high-grain, soft-grinding, and therefore excellent for dressing. At the same time, the innovative resin improves wet grinding resistance. Oil and emulsion are used as coolants.

*CoolEdge GrindPro* demonstrates its revolutionary potential both in pre-grinding as well as finish grinding, for example by lowering the spindle power. The *CoolEdge GrindPro* grinding tool works with significantly less friction than its predecessors. The machine therefore requires a maximum spindle power of 17 kW for a typical grinding process. Conventional bonding systems, on the other hand, use 21 kW. The lower spindle power means less stress on the machine and enables energy savings of around 20%. The bonding system of the *CoolEdge GrindPro* also reduces the load on the machines and tools, which are subjected to particularly high loads during double face grinding. This leads to a significantly longer service life and lower operating costs.

At the same time, the cool grinding process offered by the *CoolEdge GrindPro* minimizes the risk of the grinding tools overheating. This increases their stability. They work effectively over a longer period of time with consistently high grinding performance without overheating and wearing out. The grinding process has to be interrupted less often, productivity increases, and tool change costs decrease. Incidentally, this not only has a positive effect on the grinding wheel. Because the cool grinding of the *CoolEdge GrindPro* also means that

material deformations and quality problems with the machined surface occur less often – and the reject rate is also lower.

*CoolEdge GrindPro* is used in particular in grinding machines from DISKUS, Fives Giustina, Supfina, Wolters, and other manufacturers. The grinding wheel can be used for rough and finish grinding and is available in dimensions from 475–1060 mm.

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Image title: CoolEdge GrindPro

CoolEdge GrindPro enables efficient double face grinding with less machine wear and consistently high quality.

File name: NAX\_CoolEdgeGrindPro\_topview\_LR

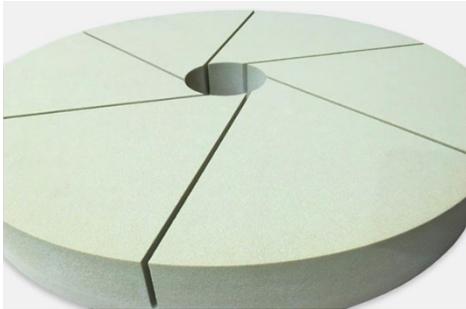


Image title: CoolEdge GrindPro

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