

STUDER SmartJet®

CLEVER COOLING



The SmartJet® concept from STUDER revolutionizes the manual cooling process during grinding by using a frequency-controlled pump and a pressure measuring unit that measures the dynamic pressure at the SmartJet® distributor near the cooling lubricant outlet. The system enables precise and process-oriented coolant flow and uses flow-optimized, 3D-printed nozzles for accurate and reproducible cooling. In contrast to other systems, all components are coordinated and thus form the smart system. The software supports the operator in setting up the nozzles and in the manual or optionally available automatic nozzle tracking.

The dynamic pressure, volume flow rate, and discharge speed of the cooling lubricant are displayed on the control unit. Nozzle choice and parameters such as dynamic pressure and volume flow rate are stored in the program and are available to the operator the next time. Another advantage of SmartJet® is the option to vary the amount of cooling lubricant during the grinding process and thus optimize the process. With its modular design and quick-change system, SmartJet® also shortens set-up times and increases grinding efficiency while significantly reducing water and energy consumption.

The advantages of SmartJet® at a glance:

- Optimized coolant supply
- Ensures operator-independent, reproducible results
- Adjustments via machine control
- Higher grinding performance
- Higher process reliability
- Shorter set-up times
- Modular design
- Up to 40% less water consumption
- Up to 50% lower energy requirement

