

Ultrasound ensures safety

The lathes used by a manufacturer of medical technology require a large quantity of cutting oil for producing prostheses. Each lathe therefore features a tank which is filled regularly by the operating staff. A stainless steel pipeline system distributes the oil throughout the manufacturing process and dispenses it at tap connections.

Due to the risk of leaks and burst pipes, which could damage the environment, insurance companies and regulatory authorities stipulate that safety measures be put in place.



Filling with cutting oil



Ultrasonic flow measurement

KROHNE proposed measuring the amount of cutting oil dispensed each time and closing a valve when a plausible level is exceeded. This meant installing a UFM 3030K/BATCH triple jet ultrasonic flowmeter at the start of the pipeline directly before an electric valve. Thanks to the integrated BATCH function, the amount of cutting oil dispensed can be limited to 50l, for example, for each replenishment before the valve automatically closes. The valve opens again when the operating staff remove the pump nozzle from the holder to top up the cutting oil. This minimizes the risk of losing oil, especially when the system stops. The UFM 3030's counter function also makes it easier to monitor supplies of the cutting oil.

Information: KROHNE Messtechnik GmbH & Co. KG, Thomas Zimmerling,

Email: TZimmerling@krohne.de