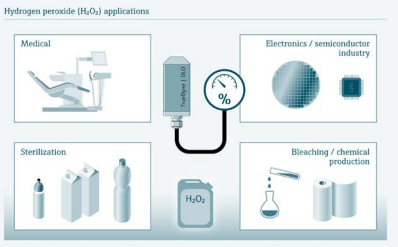
Sample system concentration measurement

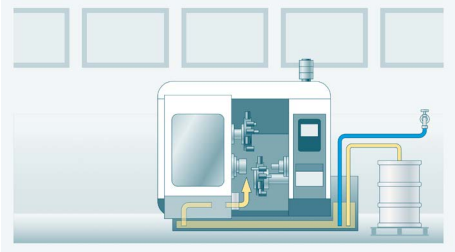
In close collaboration with Imagine Systems, a compact and intelligent analysis device was developed that combines high precision with ease of use. The integration of MEMS technology and smart sample control makes the system a powerful solution for real-time concentration and density measurement.

The system features an integrated controller that enables automated sampling, pump control, and analysis functions. Samples can be conveniently drawn from any container – ideal for laboratory applications, process monitoring, or mobile use.

Hydrogen peroxid (H_2O_2)

Hydrogen peroxide is a versatile oxidizing agent with applications in medicine, industry, and technology. It is used for disinfection, wafer cleaning, gaseous sterilization, and as an environmentally friendly bleaching agent in the textile and paper industries.





Optimal cooling lubricant concentration – for maximum process reliability

The correct concentration of cooling lubricants is crucial for the quality, service life, and efficiency of your CNC machining. Too low concentrations lead to corrosion and insufficient lubrication – too high concentrations cause unnecessary costs and health risks. Whether manual or automated – modern measuring solutions enable simple, fast, and reliable monitoring of your cooling lubricants. This allows you to maintain control over your processes at all times.

Measured variables:

Density, temperature and quantities derived therefrom (e.g., standard density, concentration, etc.)

Typical media:

- Gasoline, diesel, kerosene
- OME (synthetic materials)
- Oils and lubricants
- Water-based media
- Methanol, isopropanol
- AdBlue

Concentration packages:

- Sugar in water
- Alcohol in water
- Salt in water
- Minerals in water
- Hydrogen peroxide in water
- Ethylene glycol in water

Media and concentrations that deviate from those listed above may be used after individual clarification if necessary.

Accuracy of measurement:

Density: ±0,5 kg/m³ (±0,2 kg/m³)

Permitted density measurement range:

0...1600 kg/m³

Permitted viscosity range:

0,3...50 mPa s

Permitted process pressure range:

0...20 bar (absolute)

Permitted flow range:

0...10 l/h (water)

Temperature conditions:

-40...+60 °C

Dimensions:

- Lenght: 300mm
- Width: 226mm
- Height: 300mm

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