

CUTTING FLUID APPLICATIONS

Cutting fluids are commonly used as a coolant, lubricant, and flushing fluid.

- As a coolant, cutting fluids are often applied to cool down the cutting tool and the workpiece.
- As a lubricant, cutting fluids are used to lubricate the tools and machinery, reducing cutting force and friction.
- As a flushing fluid, cutting fluids are used to wash off the chips and improve the surface finish.

CUTTING FLUIDS BENEFITS

- Cutting fluids help to control the temperature during the metal-cutting process by absorbing heat and preventing damage to the tool and workpiece.
- Cutting fluids help to improve the surface finish of the workpiece by flushing away chips and reducing built-up edges.
- Cutting fluids are typically non-corrosive to the equipment used in the cutting process, helping to protect the machinery from damage.
- Cutting fluids provide lubrication to the cutting tool and workpiece, which helps to improve the movement of the tool and reduce wear and tear on the machinery.
- Cutting fluids can be used as coolants, lubricants, and flushing fluids, making them a versatile solution for a range of metal cutting operations.

CUTTING FLUID SELECTION

The selection of cutting fluid plays an important role in the metal-cutting process and affects its performance. Therefore, it is advisable to select high-quality cutting oils to derive optimal benefits.

The right selection of cutting fluid primarily depends on the material to be cut and the tool used. It also depends on the type of operation, such as drilling or cutting, and the degree of cooling effect required.