Reference: Taladrinas

SYSTEM FOR THE MAINTENANCE AND STERILIZATION OF OIL EMULSIONS (CUTTING FLUIDS)

The purpose of this device is to increase the useful life of oil emulsions used as cutting fluids in machining processes by combining UV light and air injection.

TYPE OF DEVELOPMENT

"Quasi-machine" to be integrated in machining centers.

DESCRIPTION

The purpose of this device is to increase the useful life of oil emulsions used as cutting fluids in machining processes by combining UV light and air injection.

The equipment consists of a system that combines ultraviolet light and diffusers for injection of compressed air to control the proliferation of microorganisms in the oil emulsions (cutting fluids) and prevent its decay. The number of UV lamps and diffusers depend on the size of the oil emulsion tank.
The system is placed on the oil emulsion tank in order to control the proliferation of microorganisms inside the oil emulsion.

This equipment is fully adaptable.

INDICATION

To be used in mechanical workshops.

NOVELTY/ADVANTAGES

•Plug & Play system
•It does not require a costly initial investment to get it up and running.
•It requires minimal maintenance.
•It significantly extends the oil emulsions useful life.

Research group: Mechanical Engineering

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IPR STATUS

Patent filing:

EP23726387.6 (Pending)

Priority date:

13/05/2022

Applicant: University of the Basque Country (EHU)/ Polymat

STAGE DEVELOPMENT

TRL3-4

COOPERATION GOAL

License agreement and commercialization of the product.