

ALUMINUM CHIPS IN CNC COOLANT TANKS

Cleaning CNC machines and recovering coolant

THE CHALLENGE

During aluminum machining, TaMek produces large volumes of metal chips. Fine particles can build up in CNC coolant tanks and machine channels, making routine cleaning more difficult.

THE OPERATIONAL NEED

TaMek needed a high-capacity system to vacuum up coolant and metal residues together, avoid repeated emptying and recover coolant that could still be reused.

THE CHALLENGE IN NUMBERS

40-50 T/YEAR

Chips produced

UP TO 70%

Tank volume occupied by deposits



Vacuum cleaning during CNC machine maintenance

THE SOLUTION IN NUMBERS

500 L

Collection capacity

8 OF 10 CNCs

Tanks serviced
without emptying the unit

**COOLANT
RECOVERY**

Filtered coolant
available for reuse

A SYSTEM TO CLEAN AND RECOVER

Supplied by Nor-Swiss, Depureco's Norwegian distributor

THE CUSTOMER'S NEED

TaMek needed a higher-capacity unit than its previous equipment to reduce the number of emptying cycles required when cleaning CNC coolant tanks.

Separating chips from coolant was another priority. Recovering fluid still fit for use would allow it to be returned to the process, avoiding unnecessary replacement.

THE SELECTED SOLUTION

TaMek chose the Depureco RAM OIL T 500, a mobile industrial vacuum designed to collect machining fluids and metal chips in a single operation.



500 L

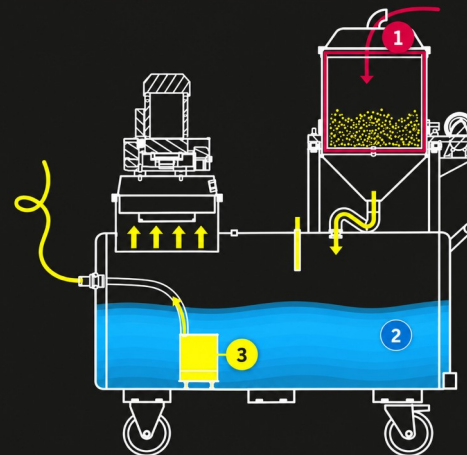
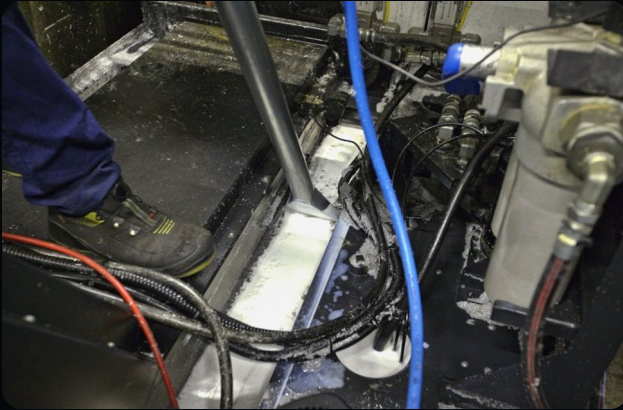
Liquid collection capacity

8 OF 10 CNCs

Tanks serviced without emptying the unit mid-task

THOROUGH CLEANING OF CNC TANKS

Vacuuming and separating coolant and chips in one operation



- 1 Suction and separation of oil and metal chips
- 2 Collection of filtered oil
- 3 Discharge of filtered oil via pump

ILLUSTRATIVE DIAGRAM

HOW THE CLEANING WORKS

The operator vacuums coolant, chips and deposits from the tank. Once the fluid level drops, they can reach the bottom more easily and remove residues left behind by the CNC's chip removal system.

The unit separates solids from the collected liquid. When the coolant is still suitable for use, the filtered fluid can be returned to the machine.

OPERATIONAL BENEFIT

Fewer emptying cycles and recovery of reusable coolant.

COOLANT FILTRATION WHILE CNC MACHINES RUN

An operating mode alongside periodic tank cleaning

FILTRATION WITHOUT A FULL STOP

TaMek also uses the system to filter coolant while CNC machines are running. In this mode, the unit removes some of the residues from the fluid without requiring a complete tank clean every time.



MANAGING CHIPS IN THE WORKSHOP

TaMek also operates a briquetting system to compact aluminum chips and recover coolant retained in the material. The vacuum is also used to clean the area around this equipment.



BENEFITS FOR MAINTENANCE AND PRODUCTION

The solution's features meet the workshop's operational needs

WHAT CHANGES FOR TAMEK

Higher collection capacity simplifies CNC tank cleaning and reduces repeated emptying. Separating coolant from chips also makes it possible to recover fluid that is still fit for use, rather than replacing it routinely.

Filtering coolant while machines are running provides another way to manage residues without scheduling a complete shutdown for every cleaning operation.

CASE DATA REPORTED BY NOR-SWISS

500 L capacity; the coolant tanks on 8 of 10 CNC machines can be emptied in one collection operation each.



INDUSTRIAL VACUUMS FOR OIL AND CHIPS

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