CASE STUDY

APPLICATION:
COLLECTION OF DRY METAL CHIPS

CUSTOMER:
TRACTOR MANUFACTURER

BENEFITS:
EFFECTIVELY CLEAN THE GEARBOX BLOCKS FROM METAL CHIPS IN A SHORT TIME

DEPURECO® INDUSTRIAL VACUUMS USA

To address this, we implemented a **comprehensive solution integrated with each CNC grinding machine** in the facility. Dry chips are collected and discharged directly into the CNC's collection system, streamlining operations and reducing downtime.

A **leading tractor manufacturing company** was facing a critical challenge in the final cleaning phase of its metal components, particularly the **steel gearbox cases**.

During the machining process, **dry metal chips would accumulate on the parts,** posing a risk to both the quality of the components and the efficiency of production. The gearbox cases, typically made of steel or cast iron, require complete cleaning to remove any residual chips before they can proceed to the next stages of assembly.

Cleaning these parts **quickly and efficiently** is essential for:

✅ Preventing damage → Remaining metal chips can harm sensitive components;

✅ Avoiding blockages → Chip buildup can clog machinery;

✅ Maintaining production → Fast and effective chip removal is essential for ensuring smooth production.

OUR INDUSTRIAL VACUUM SOLUTION

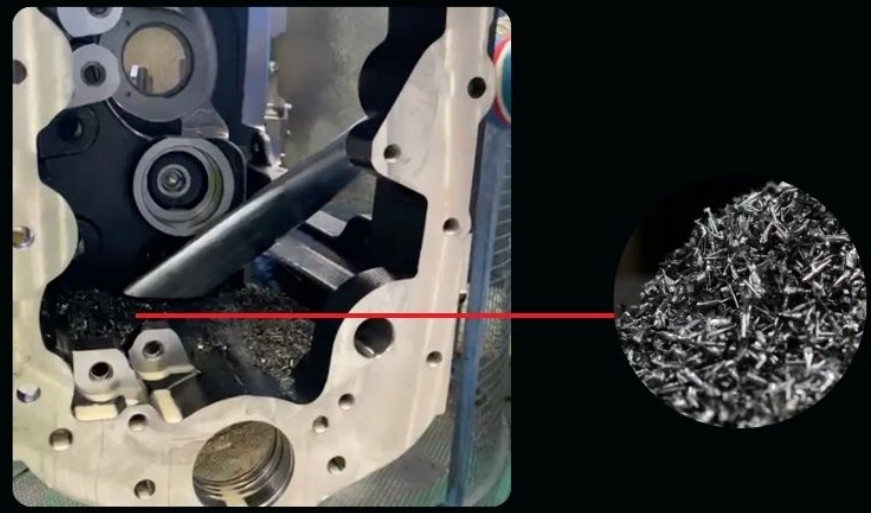
FOR METAL CHIPS

To meet the challenge of cleaning dry metal chips from tractor gearbox blocks after grinding on CNC machines, we installed **four HF 300,** one for each CNC.

These powerful **three-phase stationary systems** are equipped to clean the entire surface of each gearbox block in **under 2 minutes.**

Our **HF 300** are specifically designed to handle fine, dry metal chips without clogging or loss of suction power, maintaining consistent performance even in high-demand environments.

HF 300



Collection of metal chips from gearbox block

OUR INDUSTRIAL VACUUM SOLUTION

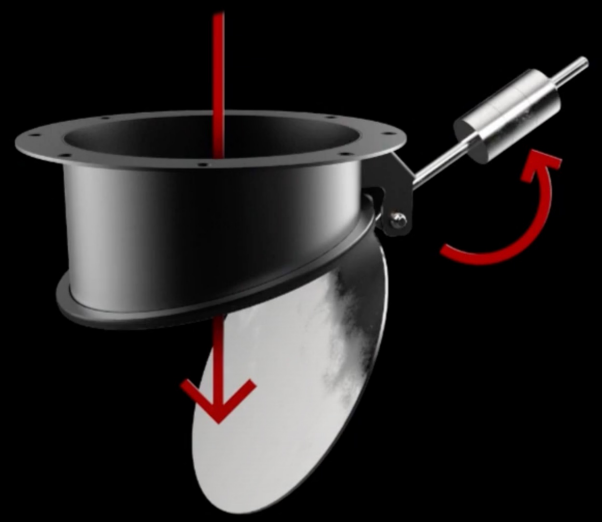
FOR METAL CHIPS

DISCHARGE SYSTEM

The **counterbalanced flap discharge system** ensures an efficient release of collected material. directly into the CNC's collection system. When suction stops, the flap opens and let the chips fall.

This **design removes the need for manual handling of debris** and minimizes downtime, so the system can operate continuously without interruptions.

The discharge mechanism is engineered to handle **high volumes of metal chips effortlessly,**



Counterbalanced flap discharge

EXPLORE OUR INSTALLATION

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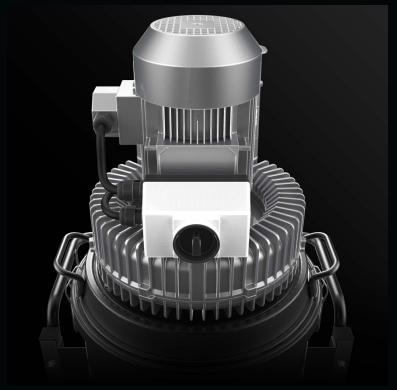
VACUUM UNIT: FOUR HF 300

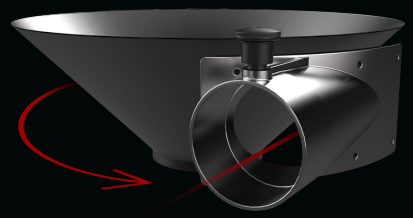
The chosen vacuum unit for this installation is the powerful HF 300, a three-phase stationary system with the following features:

POWER: 4.8 HP
FILTER SURFACE: 3,720 IN2



4.8 HP side channel blower

M class polyester star filter



Tangential inlet

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