Complete chips management systems:
Collecting and Recycling Chips

“Make your chips and machining sludge profitable
1. Reduce the volume of your chips
2. Recover your cutting fluids
3. Add value to your waste”
SFH is a FRENCH designer and manufacturer of chips processing lines dedicated to increasing their value in recycling channels and to re-using cutting fluids after recovery.

The goal is to:

➤ Ensure a quality of treated waste for a better value with control and traceability.
➤ Supply back fluids to machines tools for further machining operations (circular economy)
➤ Meet environmental requirements (green approach)
➤ Promote an environmentally responsible brand image.

SHF helps you focus on your core business, and offers you different productive and innovative solutions as well as technical and regulatory evolutions, thanks to our expertise in machining chips processing.
SFH offers various solutions for chip recovery:

- Directly on the machine with a suction unit which is able to segregate materials
- From automatic tilting bins.
- Chip bins unloading by forklift.
- At the outlet of the machine conveyor.
A storage system which continuously absorbs all phases of the chips flow.

Fine, short, long or snarled balls are automatically transferred to the treatment equipment by means of conveying screws (from Ø200 to 800mm).

Dripping and recovery of cutting fluids.

Storage capacity from 1 to 40 m³.
These units are used for splitting wired chips or balls as well as detecting and extracting foreign parts.

It guarantees high performances through the lifetime of the equipment.

The advantages of crushing are:
➤ A higher value resale for your compacted chips for their reclamation in recycling channel thanks to chips densification.
➤ Volume reduction, therefore limited CO2 emissions (fewer trucks and reduced transport costs)
➤ Calibration by grids or rotating sieves (specific grain size guaranteed).
➤ Productivity and performance contract overtime.
➤ Environmental requirements compliance and increased workers safety.
Units for continuous centrifugation of chips in a heat-treated steel drum with hydrodynamic slots.

The benefits of centrifuging systems are:

➤ Chips higher resale value.
➤ Humidity Level reduced to 0.5% max.
➤ Cutting fluids recovery for reuse.
➤ Self-automatic cleaning to keep the performance targets overtime.
➤ Compliance with environmental requirements.
The target is to clean and dry chips saturated in coolant emulsion or complete oil to meet aero quality requirements.

The benefits are:
A closed-circuit process is eco-friendly and prevents the release of dangerous fluids in the environment.

SFH dry solutions offers the following advantages:
➤ Green solution, without solvent releases (regeneration by distillation).
➤ Very low consumable costs (solvent regeneration requires only a few additives).
➤ No handling nor direct contact with solvent.
➤ Controlled energy consumption
➤ Virtuous solvent, alternative to chlorinated solvents, referenced by Rolls-Royce CSS 342 and SafranPr-1500

Compliance with new industrial standards, low toxicity, good biodegradability, high flashpoint, easily distillable, non-corrosive.
➤ Compliance with environmental requirements.
➤ Ecologically responsible brand image.
ECOLOGICAL RANGE

Chips

ER44T

ER44T for machining center

ER44T with crusher

To be installed directly under machine tools conveyor

ER20T with crusher

www.sfh.fr
Units designed for briquetting chips with high performance compression.

The advantages of briquetting:

➤ Chip volume and carbon footprint reduction.
➤ Transport costs savings.
➤ Turning chips into dry chips.
➤ Recovering cutting fluid for reuse.
Liquids are recovered from the chips processing units and returned to the machine tank after treatment.

Cleaning by:

➤ Filtration.
➤ Coalescent oil separating.
➤ Circulation dialysis.
➤ Bubbling aeration.
➤ Automatic proportional dosing.

Benefits of regeneration:

➤ Redistribution in customer network.
➤ Reducing «waste» oils and the purchase of new concentrates.
➤ An oil of equivalent quality to a new oil is returned to the machine tank
➤ Environmental requirements are met.
➤ It promotes an ecological and responsible image.
Additional offers

SFH can offer specific integrated processes through partnerships and customized solutions, such as:

➤ Packaging
➤ Detection of specific foreign parts
➤ Maritime container filling
➤ Weighing tables with tracking label printing.
According to your needs, SFH provides turnkey equipment, including study and supply for the implementation of means and systems as well as infrastructures necessary for their integration.

- Integration in dedicated locations.
- Fluid networks connection to equipment.
- Connection to electric and pneumatic power.
- Increased workers safety.
- Assistance during production set up.
- User training.

As part of project feasibility studies related to chip recycling, SFH carries out test campaigns on its testing machines.

SFH engineers study and define the best treatment process in compliance with the expected customer requirements.

SFH relies on its partners and suppliers to provide comprehensive solutions by performing lab analyses and syntheses, and expertise at all time.

The goal is to conclude the technical and economic feasibility of the project to provide the customer the most relevant decision for the best investment.
Production

Long chips managing systems + compactor PM2

YouTube
S.F.H.

7, rue Gustave Deby
B.P. 11
42964 SAINT-ÉTIENNE, FRANCE
T. +33 (0)4 77 92 19 92
www.sfh.fr

Suivez-nous sur LinkedIn