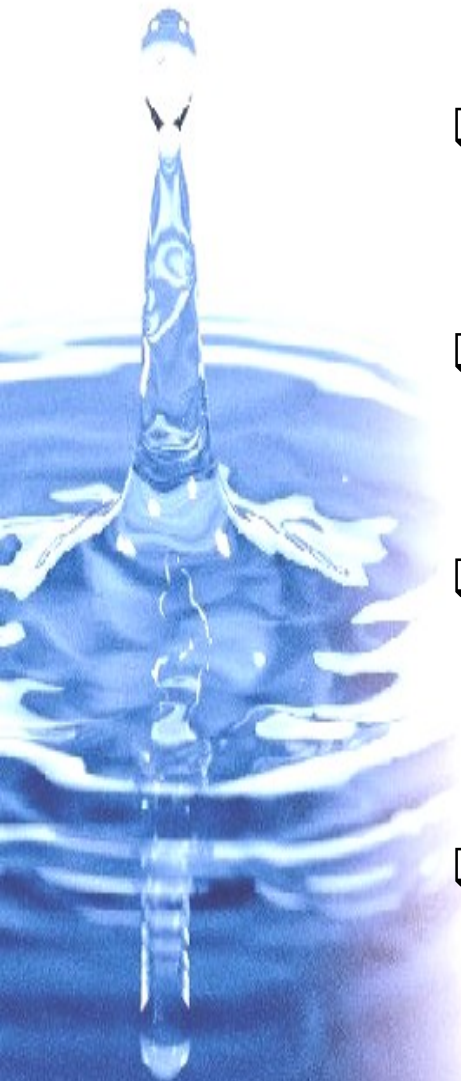




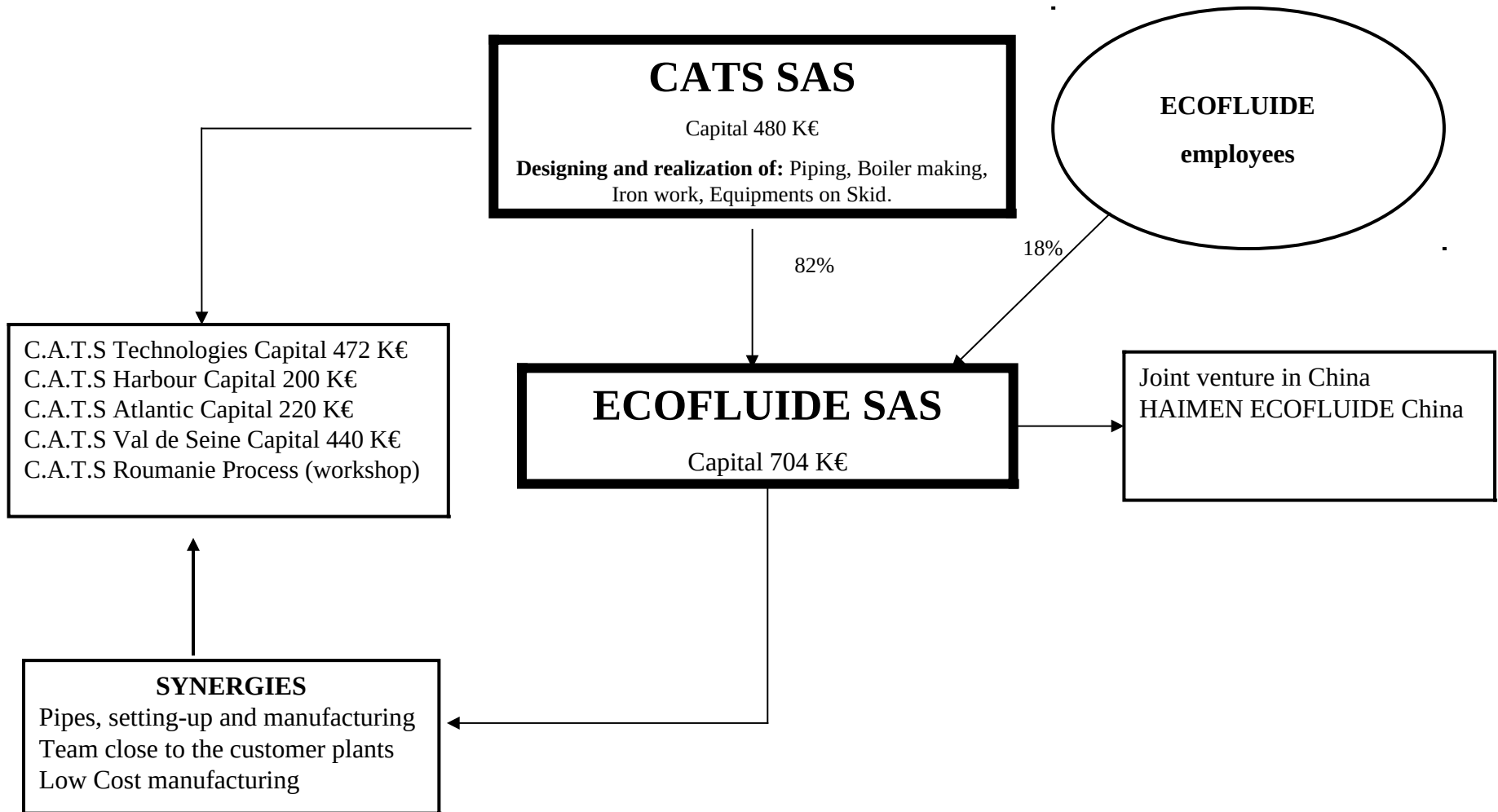
INDUSTRIAL FILTRATION SPECIALIST




Presentation of the company

- 
- A close-up photograph of a water droplet falling into a pool of water, creating a splash. The image is in shades of blue and white, with the droplet and splash being the central focus.
- ❑ Created in 1979, ECOFLUIDE is one of world wide leaders in industrial filtration of coolant, chips processing and water treatment of industrial waste.
 - ❑ The main branches of activity are automobile and aeronautic industries, mechanical industries, rolling mills and environmental projects
 - ❑ ECOFLUIDE is an international company, powerful and innovating. It is based next to Paris, grows on the Chinese market thanks to the branch ECOFLUIDE CHINA and has a workshop in Romania.
 - ❑ Since 2006, ECOFLUIDE is attached to the company CATS, creating thus common technical benefits and synergies.


GROUP CATS - ECOFLUIDE

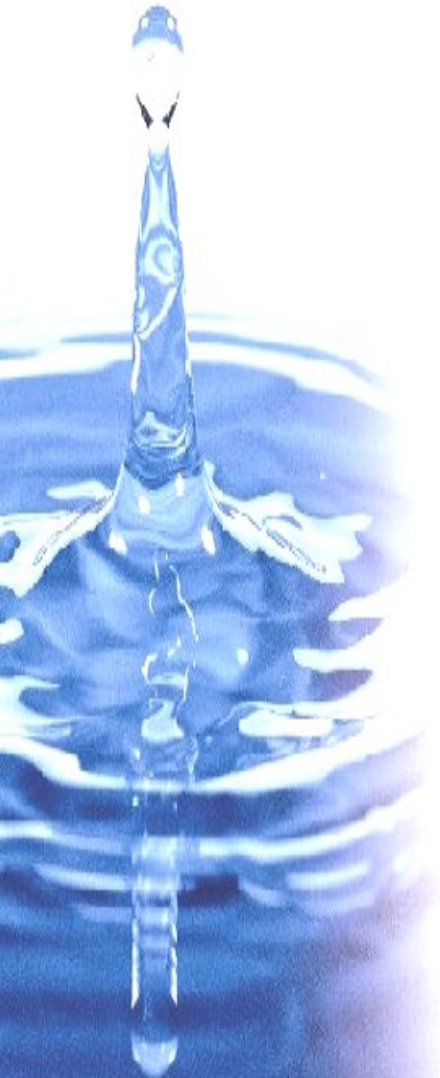


2 Companies, 1 objective

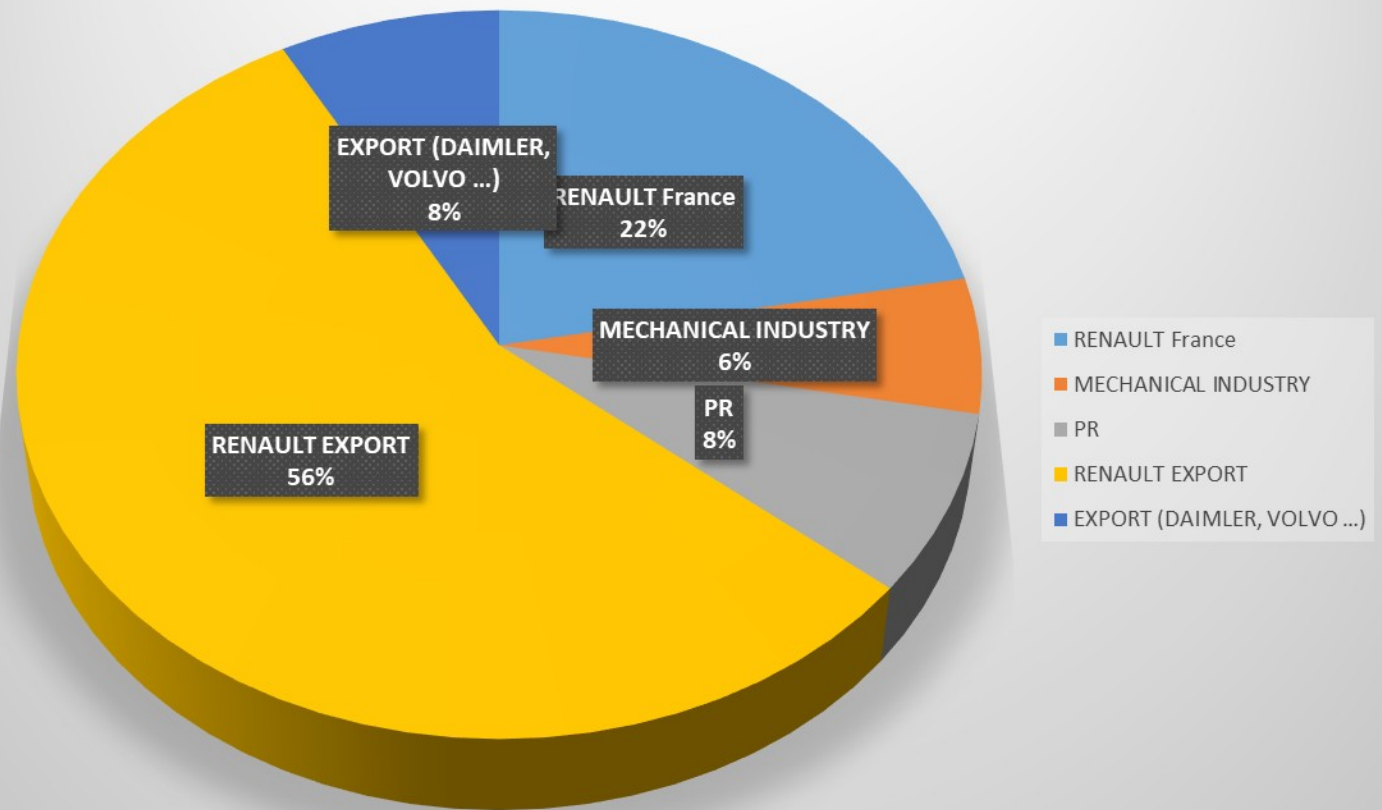
- 
- A close-up photograph of a water droplet falling into a pool of water, creating a splash. The image is in shades of blue and white, with the droplet and splash in the foreground and the pool of water in the background.
- ❑ ECOFLUIDE is one of the world wide leaders in industrial and environmental filtration
 - ❑ CATS, is the leader in the market of industrial piping, boiler making, and iron work.
 - ❑ The group CATS-ECOFLUIDE carries out each year a turnover of 30 to 35 Millions €.
 - ❑ Advantages of this association are :
 - Complementarily know-how
 - Best quality
 - Competitively offers with structure and policy of low-cost
 - Turn-key projects

Key figures

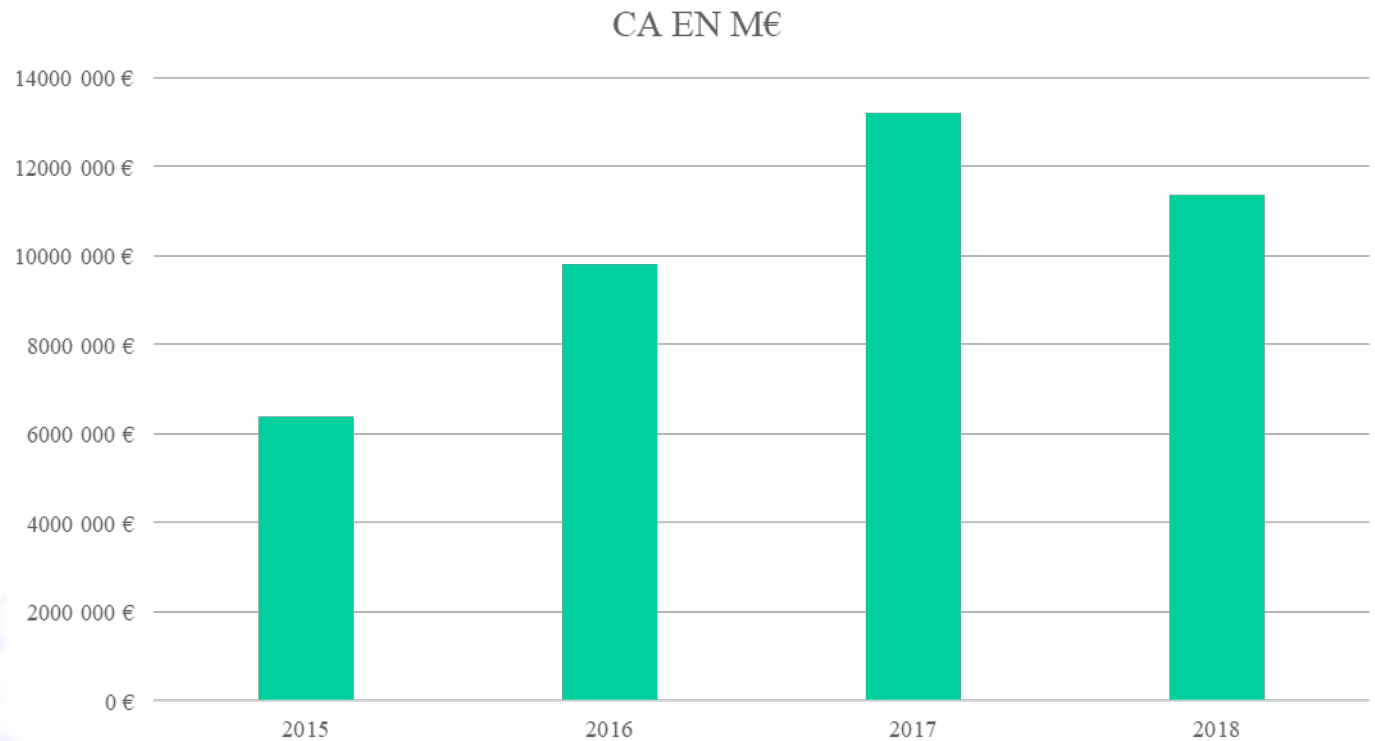
- 
- A vertical water splash is shown on the left side of the slide, with a central column of water rising from a pool of water at the bottom, creating ripples and a crown-like shape at the top. The water is clear and the background is white.
- ◆ ECOFLUIDE staff : 18 persons in Sartrouville
(15 km from Paris)
 - ◆ 3 persons in Belgium – 1 in Italy
 - ◆ Group staff: 150 persons
 - ◆ ECOFLUIDE turnover 2018 :
 - France : 5,2 M€
 - Abroad : 6,1 M€
 - Total turnover : 11,3 M€
 - ◆ Consolidated turnover 2018 : 29 M€




Turnover breakdown



Turnover evolution



Our products

- 
- A close-up photograph of a water droplet falling into a pool of water, creating a splash and ripples. The image is in a monochromatic blue color scheme.
- ❑ ECOFLUIDE proposes turn-key projects
 - ❑ We are specialised for the conception and the realisation of :
 - Vacuum filter
 - Pre-coating filter
 - Backwashing cartridges filter
 - Recovery station - crushing
 - Sludge presser and dryer
 - Ultrafiltration and reverse osmosis

Our customers references





EXAMPLE OF VACUUM FILTER

IN

FAW WUXI DIESEL ENGINE WORKS

TECH. DATA :

- Name of Production line: Cylinder Head and Cylinder Block
- Filtration Unit type: Vacuum Filter
- Flow of the System: 2,840 m³/h (47335 l/min)
- Precision of the filtration (Vacuum filter with Secondary filter):
 - 95 % of particles < 50 μ
 - 100 % of particles < 100 μ
 - Max. pollution < 100 mg/l
- Material of the Chips: Cast iron HT250 (2000 kg/h)
- Type of the Coolant: 8% Emulsion

Filtration Unit 3D Drawing

THE DRAINING TANK:

The draining tank is used for storing the liquid in case of maintenance on the dredge or filter.

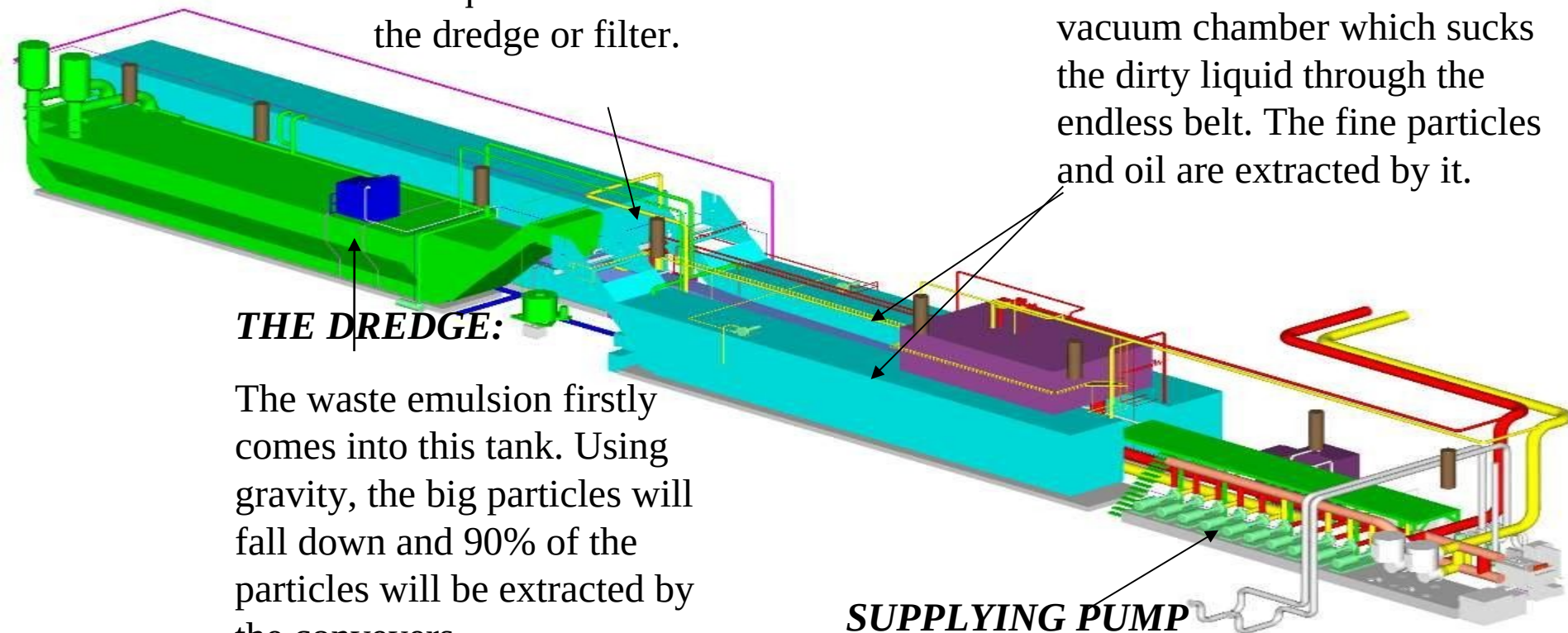
THE VACUUM FILTER:

The bottom of this filter has a vacuum chamber which sucks the dirty liquid through the endless belt. The fine particles and oil are extracted by it.

THE DREDGE:

The waste emulsion firstly comes into this tank. Using gravity, the big particles will fall down and 90% of the particles will be extracted by the conveyers.

SUPPLYING PUMP GROUPS



Project Pictures



Project Pictures



➤ The Vacuum Filter Side-view



➤ The Supplying Pumps Group:
10 Pumps x 90 kW/pump

Project Pictures



➤ The Secondary Filter



➤ The De-oiler:
for separating the oil and water for
recovery using.

Project Pictures



➤ The head of the filter



➤ The wringer: for chips treatment

Project Pictures



- The air chiller:
for regulation of the coolant
temperature



- We can also provide a central air
treatment in the turn-key project for
machining mist oil treatment

Other reference pictures



➤ The Vacuum Filter with Endless belt



➤ The Vacuum Filter with Paper belt

Other reference pictures






PRECOAT FILTERS

2 technologies of filtering elements

- ***Flex-tubes (before 2006)***
- ***Rigid candles (from 2006)***

Applications

- 
- A close-up photograph of a single water droplet falling into a pool of water, creating a crown-shaped splash. The image is in black and white with a blue tint.
- ◆ Flow : from 1 to 600 m³/h (15 l/min to 10 000l/min)
 - ◆ Type of cutting fluid : Synthetic or cutting oil
 - ◆ Type of machining : honing, grinding, finishing, test benches
 - Type of sludge : steel and cast iron mainly
 - ◆ Filtration precision : from 30 to 10 µm
 - ◆ Maximum pollution < 15 to 20 mg/l
 - ◆ Filtering media : filtering elements + powder (consumables)
 - ◆ for the precoating

New precoating technology



- Filtering elements : stainless steel candles, wedge wire profil

Precoating filter- Candles

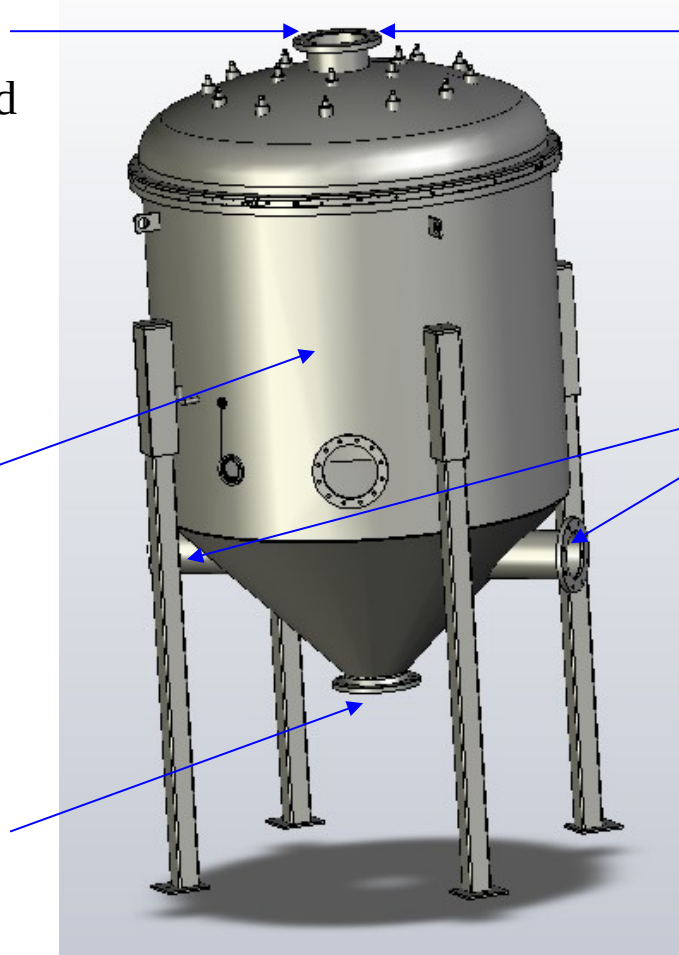
Declogging (draining of powders and sludge) : liquid rinse and air blowing at counter-current

Clean liquid outlet

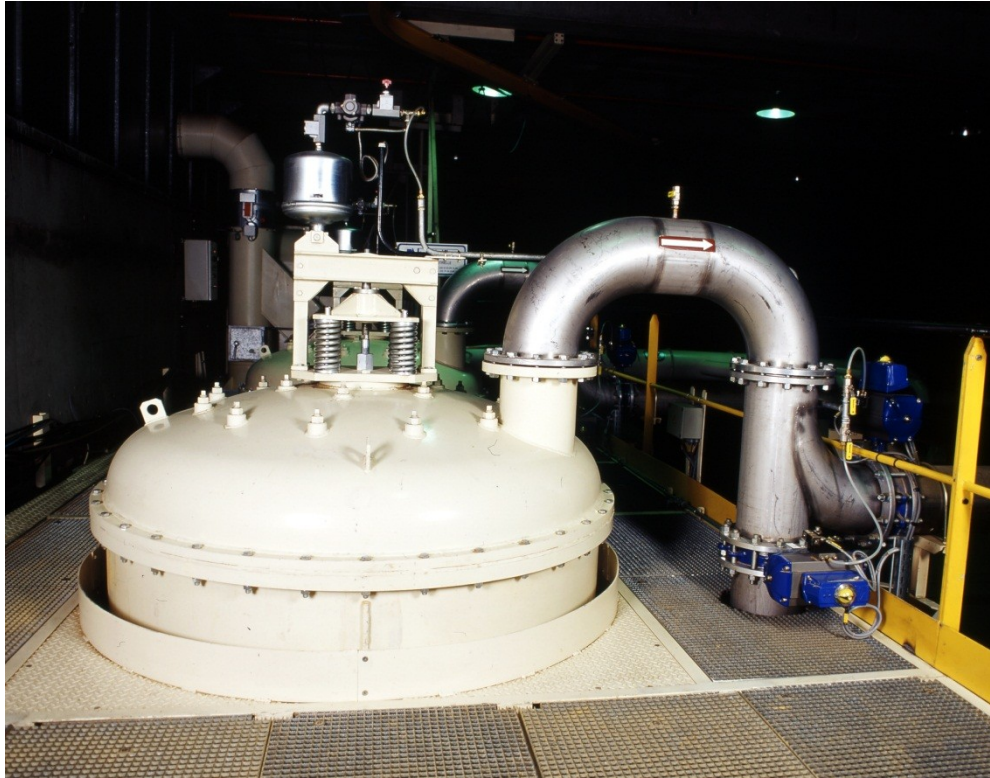
Main body with filtering elements inside

Dirty liquid inlets

Sludge outlet



Reference Pictures



➤ The Pre-coating filter body

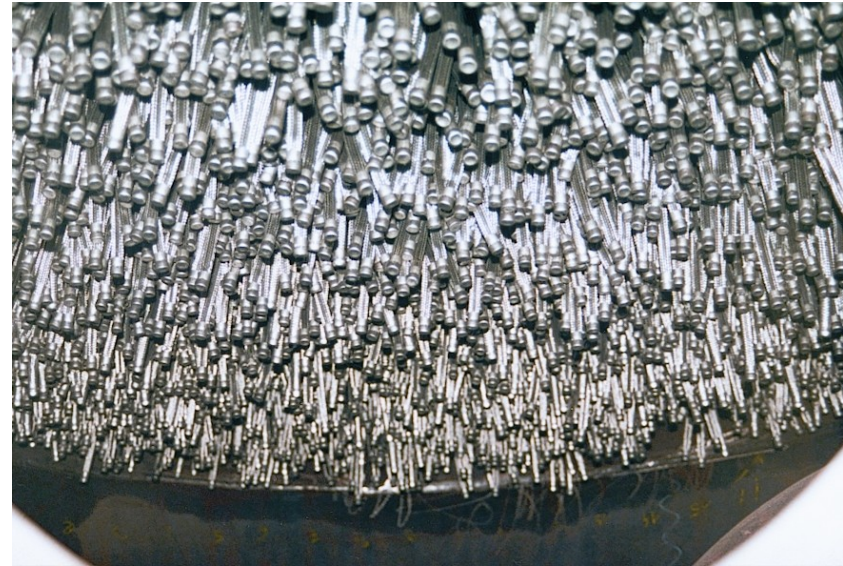


➤ The powder adding funnel

Reference Pictures



➤ PSA Filtration unit for 600m³/h honing



➤ Flex-tubes

Reference Pictures

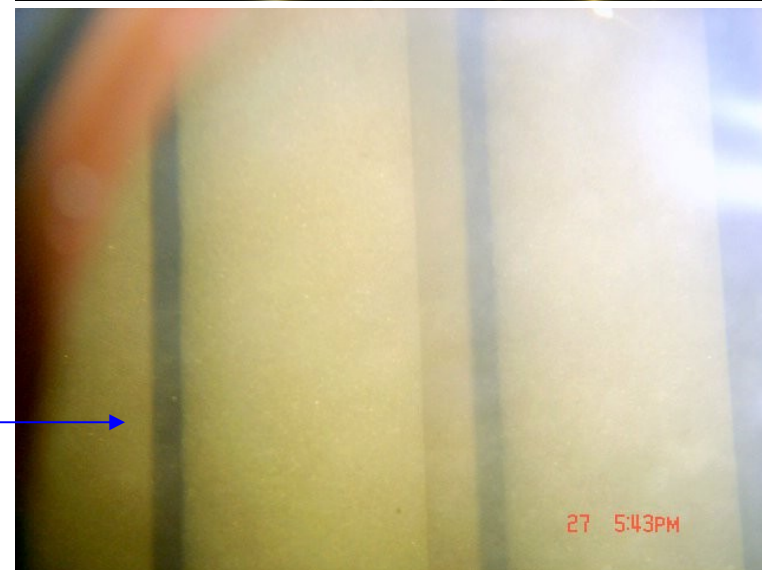
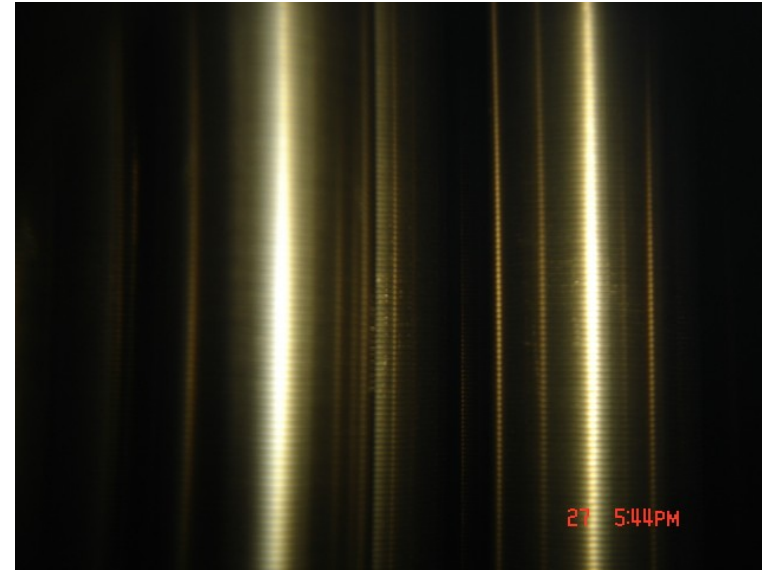


Reference Pictures



Filtering elements

Powder on filtering elements



Precoating filter



Filtration unit for 600m³/h grinding at PSA
(2003) - Flex



Filtration unit for 300m³/h grinding at Dacia (2007) - Candles

Precoating filter



Filtration unit for 200m³/h honing at PSA PSA – Cartridges – FM plant
(2007) – Setting-up and commissioning in 27 days

A close-up photograph of a water droplet hitting a surface, creating a splash. The water is clear and the background is white.

***EXAMPLE OF CARTRIDGES FILTERS
FOR
ROLLING MILLS***

Project Pictures



➤ The cartridges Filter Body



➤ The cartridge plates inside of the filter.

Project Pictures

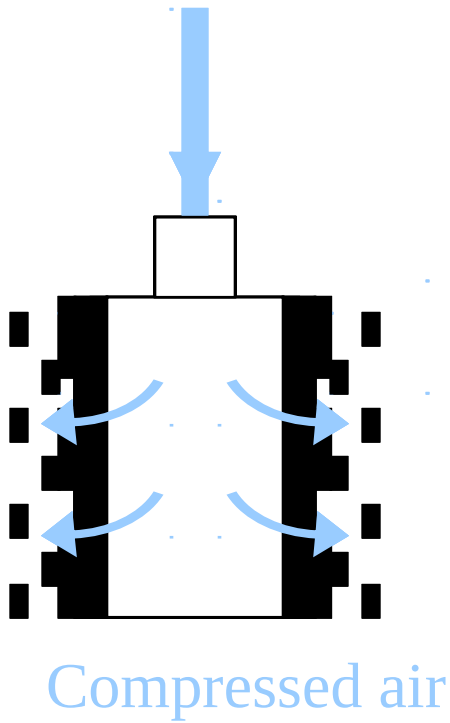


➤ The cartridges

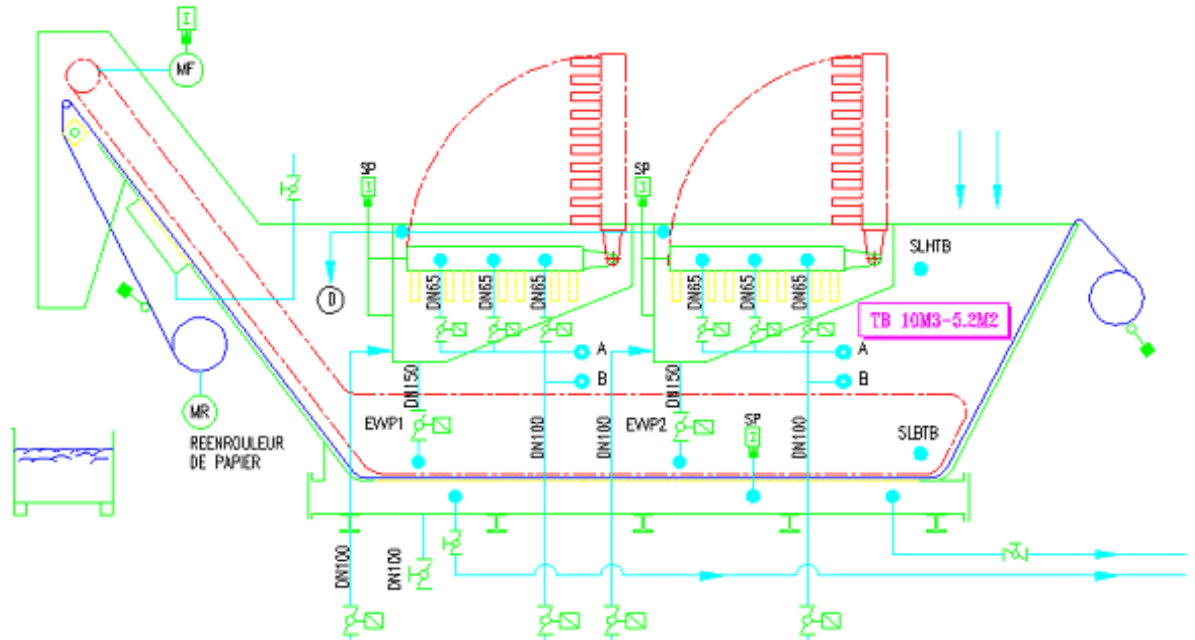
A close-up photograph of a water droplet falling into a pool of water, creating a splash and ripples. The image is in a blue and white color scheme.

***EXAMPLE OF CARTRIDGES FILTERS
FOR
AUTOMOBILE INDUSTRIES***

Project Pictures

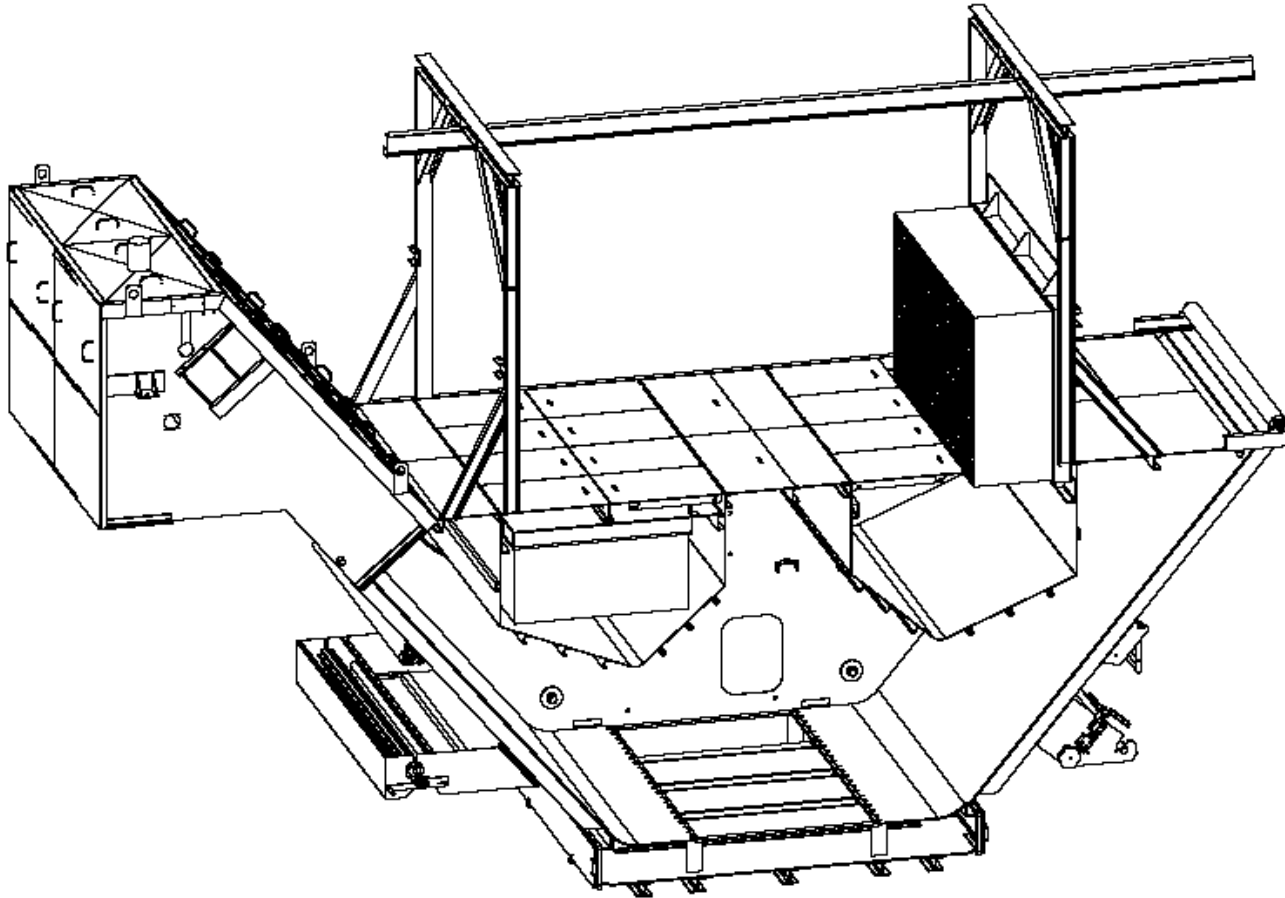


Swarf



➤ Cartridges filtration unit

Project Pictures

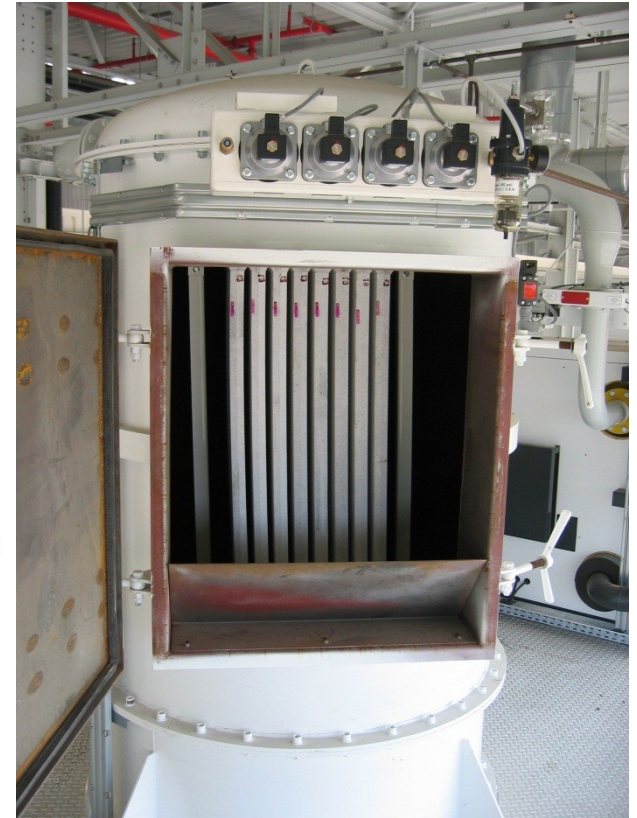
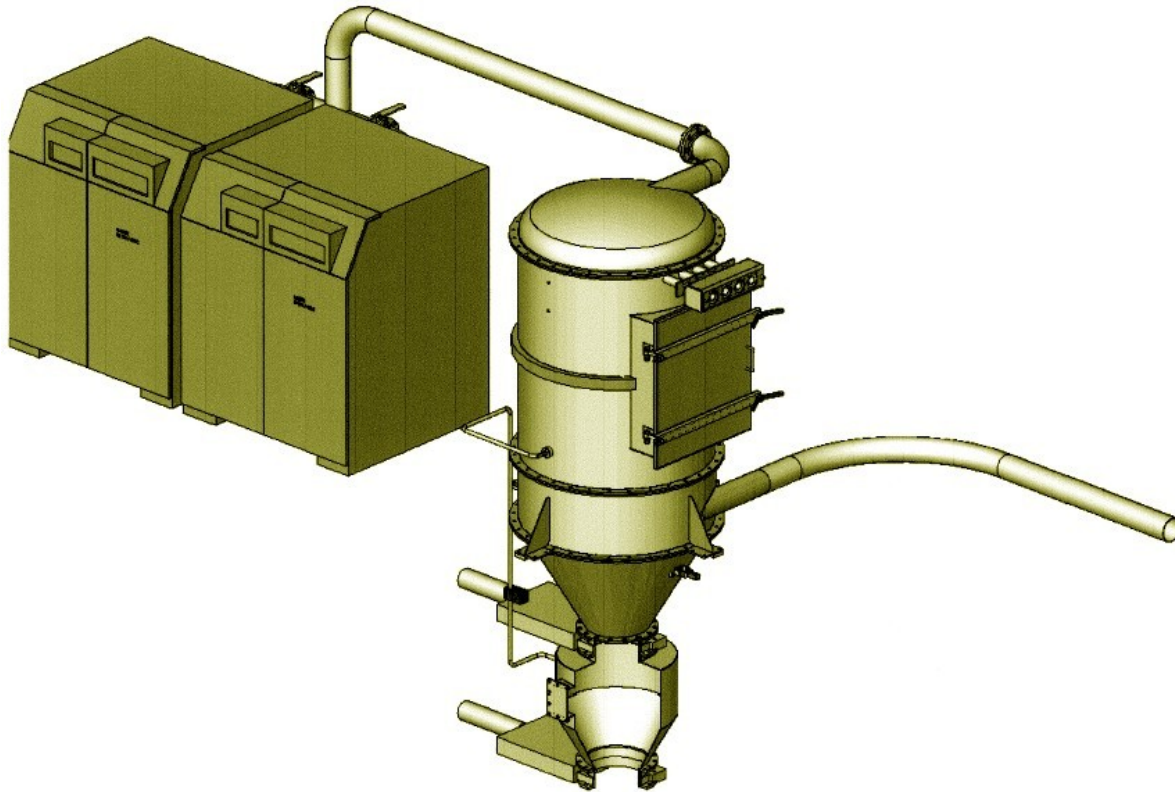


- Cartridges filters mounted in a sludge treatment

A close-up photograph of a water droplet hitting a surface, creating a splash. The water is clear and the background is white.

***EXAMPLE OF SPECIAL AND
ADDITIONAL EQUIPMENTS***

Dry chips suction



- Vacuum system for centralised chips treatment through suction technology

Dry chips suction



➤ Complete unit



➤ Dry machine suction unit
with chips crusher

Environment equipments



Ultrafiltration unit (FM)



Effluent treatment by evaporator (Dacia Romania 2007)

Environment equipments



Washing effluent treatment by centrifugation :

Individual solution - Renault Cléon 2007

Centralized solution - FM

Environment equipments

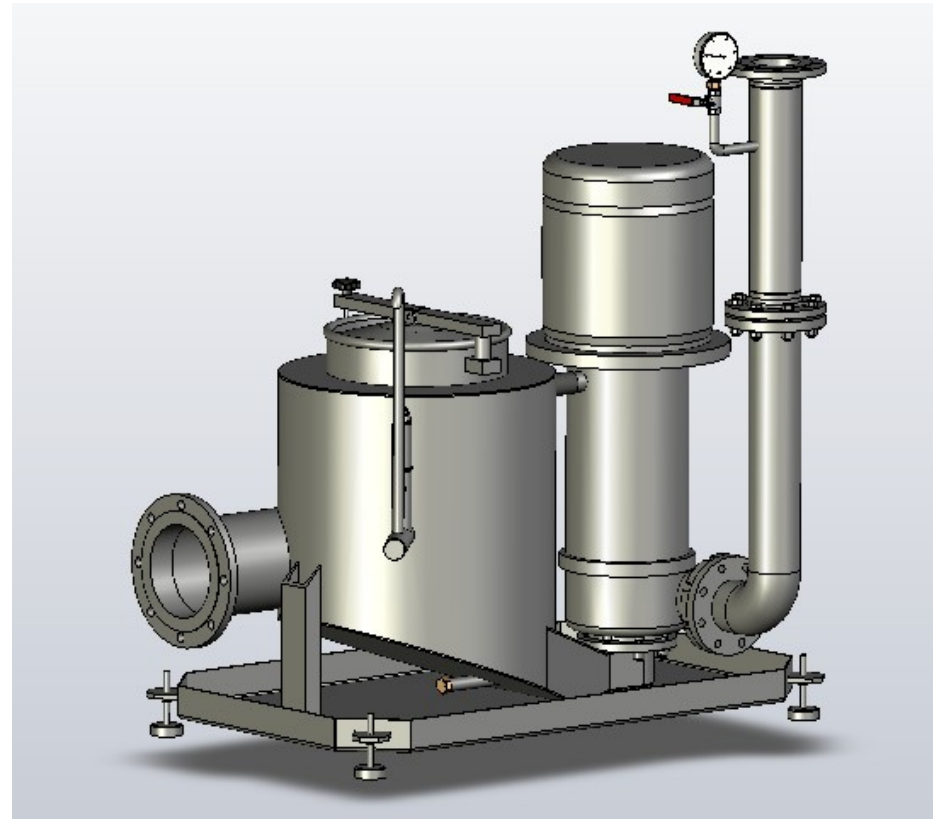


Osmosis unit (FM)

Additional Equipments



Recovery station with crusher
(ERNAULT machine tools at STA)



Recovery station without crusher
(Machine PCI at FM - 2007)

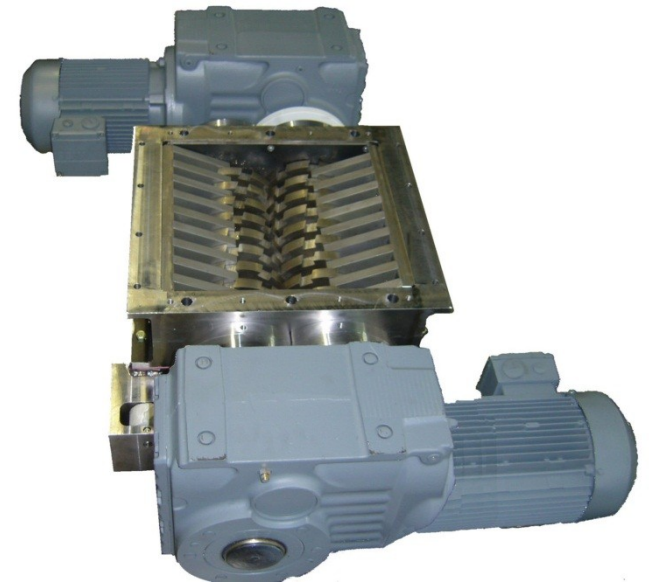
Additional Equipments



➤ Sludge presser

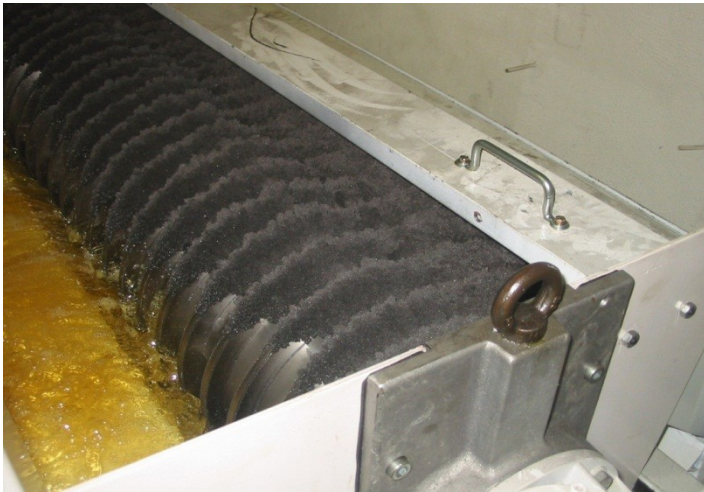


➤ Sludge dryer



➤ Crusher

Additional Equipments



Magnetic separator

Additional equipments



chips wringer



➤ Rotary chips chute



➤ Big bag system

Additional equipments



Network safety filter



Coalescence deoiler

Additional equipments



Chiller



Plate heat exchanger



Gravity hydrostatic
filter

Additional equipments



Chips separation

Research & Development



➤ Filtration plate



➤ Test laboratory



➤ New filtration elements

➤ Others...



Contacts

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