



# Filtration & Cutting Fluid Treatment

Itration and Treatment Solutions for Cutting Fluids
Filtration, deciling, treatment & recycling of fluids
Automatic fluid monitoring & correction station
Oil mist filtration
Dirt / solids vacuum cleaners
Versatile draining vacuums
Air treatment & filtration
Filter media



For over 60 years, it is at the heart of the French Alps that we have been developing solutions for the filtration, transfer and treatment of industrial fluids.

# 6 reasons to choose SIEBEC



# **Advice & expertise**

Our experts guide you through the technical evaluation and improvement of your current setup.



# **Quality control**

Our filtration media are developed and tested in our laboratory to ensure optimal performances.



# Media analysis

SIEBEC LTS analyze your media and establish a filtration efficiency report thanks to a normalized bench test.



# **Competitive pricing**

Our management of the entire production cycle allows us to offer our products at highly attractive prices.



# **On-demand**

Our design office is specialized in the creation of installations with the highest requirements.



# **Express delivery**

Many of our products are in stock and shipped within 48 hours. Spare parts shipped in 24 hours.

# Filtration & treatment

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# MINIPURETM

# Filtration & deoiling of cutting fluids

Compact, this station offers continuous filtration of cutting fluids in order to maintain excellent machining properties.



# Complete filtration

Removes microscopic particles, fines, solid particles and whole supernatant or emulsified oils from machine lubrication (case of soluble oils).



# Excellent cutting parameters

Purified, particle-free oil and supernatant oil for optimal lubrication and cooling



# Protection of the machine tool

No risk of clogging the original filter, protection of the spindle rotating joints.

# Improved service life

Retention of fluid characteristics and increased cutting tool life.

# **Options**

- SAFTECH: dry run protection
- Mobile cart or skid
- Carterised station
- · Washing kit to clean the machine tank
- Surface or floating strainer



Cutting fluid before and after filtration through MINIPURE™





Fix surface strainer



Floating

# Customized filtration: 5 interchangeable media on 1 to 3 tanks



FILTECH

Pleated cartridge Filtration from 1 to 100 μm Washable & reusable tool-less setup



**BAGTECH**Prefiltration bag

Filtration from 150 to 600 µm

Washable & reusable tool-less setup



MAGTECH

Magnetic filtration

5 kg of particles recovered Easy setup & cleaning From 3000 to 11000 Gauss



OILTECH

Deoiling microfibers
High retention capacity
Hydrophobic fibers
500 g recovers up to 6 I
of oil



Water absorbent

Water absorbent Removes water from whole oils

# **CENTRIPURE HP**

# High-pressure coolant supply unit – booster

# **Principle**

The CENTRIPURE HP is a compact high-pressure unit designed for machine tools, particularly small and medium-sized machining centers and lathes. This unit can also be configured to be supplied by an island or plant-wide filtration unit, allowing it to operate as a booster. It can be delivered with or without aesthetic casing, depending on production environment integration and design requirements.

### **Specifications**

Flow rate (I/min)

20 - 50

Pressure (bar) 20 - 120

Emulsion or full oil With or without additional buffer tank Up to 4 controllable outlets Dedicated lifting pump

# **Benefits**

It filters the cutting fluid and supplies the machine under high pressure to significantly improve machining performance, tool life, and process stability—especially during deep drilling, heavy milling, or high-performance turning.

# CENTRIPUIRE

# **Configurable filtration system**





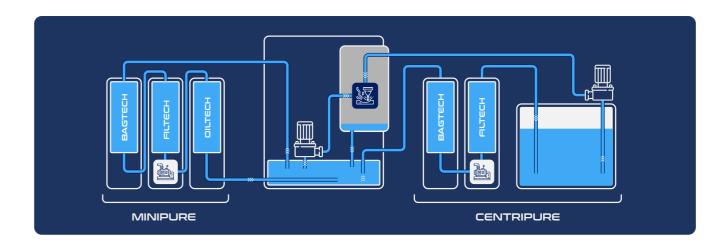


Cartridge FILTECH

Bag BAGTECH

Filter media rolls

BANDTECH



# **PUMPING OF CONTAMINATED LIQUID**

# Lift tanks and pumps



# **Specifications**

- Control possible with frequency converter and radar sensor (non-intrusive)
- Vertical or horizontal pumps
- Flow rate: Up to 2500 L/min
- Pressure: Up to 115 HMT
- Max chip weight percentage in fluid: up to 1.5%
- Full passage up to 80 mm
- High-strength materials

# **Options**

- Dry running
- Cutter or grinder function
- Patented air degassing system

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# MAGNETIC SEPARATOR

# Rotary disc drum

Disc magnetic separator with permanent ferrite magnets for a more robust construction.

# **Specifications** • Up to 1500 L/min in emulsion - 700 L/min in full oil Pre-filtration without consumables • Removes 70% of the incoming load • Can be used alone depending on application or upstream of a band filter

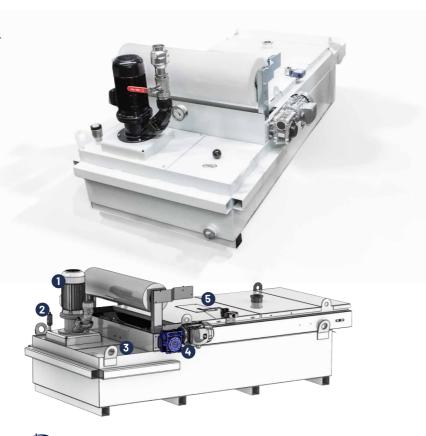
# **ROLL MEDIA FILTRATION SYSTEM** Flat gravity filter

Very attractive technical and economic ratio.



# **Specifications**

- Flow rate up to 500 L/min
- · Standard or custom tanks
- With or without control electric cabinet
- All types of fluids
- Painted steel construction, stainless steel 304/316
- 1 Low and high pressure supply
- 2 Level sensor with float or radar
- 3 Inspection hatch
- 4 Media advance gear motor
- 5 Roll media filter



# **ROLL MEDIA FILTRATION SYSTEM** Hydrostatic belt filters

Deep bag filtration system with sealing belts



# **Specifications**

- Flow rate up to 2000 L/min
- Use of BANDTECH media with high filtration efficiency
- · High incoming load possible
- All types of fluids
- Painted steel, stainless steel 304/316, and plastic construction

### **Benefits**

- High natural pressure exerted by the weight of the liquid in the cradle
- · Promotes the formation of a filtration "cake"
- Reduces consumption of the filter media



# **ROLL MEDIA FILTRATION SYSTEM**

# Compact drum belt filters

The perfect balance between flat gravity and hydrostatic filter with side flange sealing



# **Specifications**

- Flow rate up to 1000 L/min
- · Highly versatile
- Compact footprint
- Painted steel, stainless steel 304/316 construction

Discover our **BANDTECH** media rollspage 24-25

Visuals and data are indicative, not contractual





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# Self-cleaning mesh filter

Automatic cleaning system with pressurized nozzle ramp fed by filtrate



Filter without consumables, equipped with stainless steel mesh



# **Optimized for soft metals**

Particularly suited for machining aluminum and brass



50 - 150



# High and adjustable flow rate

Up to 1200 L/min per drum, combinable in a single housing

# Consumable-FREE FILTRATION Centrifuge

Centrifugation system with manual or automatic sludge removal

# **Principle**

Separation of a solid phase from a liquid (emulsion or neat oil)

Filtration possible < 5µm without consumables



# **Designed for demanding materials**

Ideal for glass, carbide, ceramics or mass finishing media

# **Specifications**

Drum volume (L) max. 15

 $\begin{array}{c} \text{Separation factor (g)} \\ 1800 \end{array}$ 

Emulsion flow rate (L/min) max. 220



# Processing steps of a manual version



# Step 1: Inlet & Distribution

The dirty liquid enters from the top and is evenly distributed in the bowl via a diffuser cone





# Step 2: Filtration

Under centrifugal force, particles stick to the bowl walls, forming sludge. The purified fluid flows out through a specific outlet.



# Step 4: Draining & Removal

After the centrifuge stops, the operator can open and clean the bowl.



# Automatic monitoring & correction of cutting fluids

This intelligent station allows remote monitoring of the quality of cutting fluids and automatic correction of the soluble concentration.



# Capable of managing the parameters of 1 to 4 lubricant tanks



# The assurance of quality machining

Optimal concentration of soluble material. Perfect lubrication of cutting tools.



# Maximum autonomy

Automatic monitoring and correction (soluble concentration, pH, temperature [option]) without intervention. Management of the lubricant tank level.



# Personal space in the cloud

No need to go on site. 24/7 autonomy. Data history.



# **Specifications**

Time programmer (start and stop of operation or synchronization with the start of the plant).

Alarm settings (concentration, pH, temperature, filter clogging, level detection,  $\dots$ ).

### **Cloud option**

- Transfer of data from the controller to a secure cloud server.
- Real-time visualization of parameters on computer or smartphone.
- · Storage of the history.
- Sending of email in case of anomaly (Text message option).
- Data integration on local ERP (option).

# THE KEYS OF SIEBEC KNOW-HOW

Accurate reading of lubricant properties, even over time

Automatic correction of soluble concentration

Management of lubricant level in the machine tank

Notification & follow-up via cloud application.





SPP STEP

# Programmable dosing pump

# **Principle**

Compact and easily integrable, the SPP™ STEP peristaltic dosing pump is ideal for intermittent dosing, ensuring maximum precision and superior reliability thanks to its advanced programming features and modularity.

# **Specifications**

Flow rate (I/h)

1 - 28

Rotational speed (rpm)

65

Power(W)



# **Dosing precision**

Ultra-precise programmable volumetric dosing, essential for high-precision machining applications.

# Easy integration

Programmable and compact interface with direct 230V connection, ideal for adapting to existing systems.



# Simplified maintenance

Intuitive interface and control options for continuous and uninterrupted operation.

# **OILMAX**

# Liquids deoiling

Ideal for removing large quantities of supernatant oil.



# **Excellent phase shifting**

The optimized coalescence ensures efficient phase shifting for sensitive applications.



# High capacity prefilter

BAGTECH™ technology combined with magnetic filtration MAGTECH™ to ensure high efficiency prefiltration.

# **Principle**

The oil present in the liquid in the form of micro-droplets accumulates on the PP coalescing media, then migrates to the surface and is recovered.

# **Options**

- Programmer: automatic extraction
- Mobile version with rolling cart
- Floating skimmer for variable levels





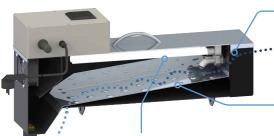
Fixed surface

Floating skimmer [Patented]

### NANOREACTOR

# Antibacterial treatment

Prevents bacterial growth within the fluid in order to preserve its properties.



# Effective on turbid liquid

>50% transmittance

Fluid to be treated

### Flow divider

Maximized bacteriological



Easy to replace



# Patented technology

The gravity design allows efficient treatment of fluids, even turbid, without clogging the lamn.



# Many benefits

Reduction of biocide needs, reduction of bacteria rate (3 log), elimination of bad smells, dermatitis..



# Various applications

Swarf juice, washing water, tribofinishing machine effluents...

# COOLTECH Cooling

# **Principle**

Integration on spray units of a cooling circuit to maintain cutting fluid at a fixed or ambient temperature.



# High-efficiency technology

**High cooling capacity** 

**Custom-made** 

client requirements

Up to 100 kW cooling capacity

Chilled water units with plate or tubular heat exchangers



# **Technologies**

- · Chiller with direct expansion, tankless
- · Immersed coil chiller
- Cooling plates





# OFAP / GKS / OLINOX / OPINOX

Technology optimization according to

# Bag & cartridge filter housing

A wide range of housings for the filtration of your fluids in the workshop.



# **High performance filtration**

FILTECH HighFlow pleated cartridges or BAGTECH bag.



### Plant installation

Large capacity filters adapted to plant filtration.



# Improved filtration

FILTECH high efficiency cartridges increase the quality of filtration at the belt filter outlet.









**QPINOX** QLINOX

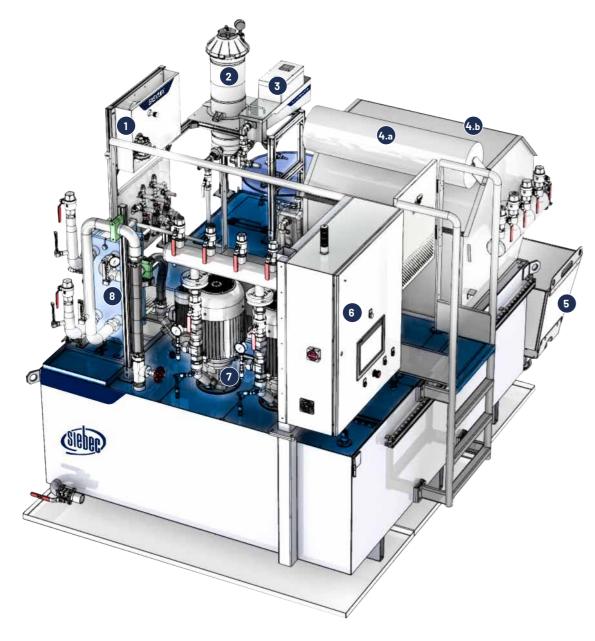
Materials	304/316L stainless steel	304/316L stainless steel	316L stainless steel**	304/316L stainless steel**
Media	Bag	Cartridge (x1)	Cartridge (x1)	Cartridge (x4)
Height	Size 7 / 10 / 20	10" / 20"	20" / 30"	20" / 30"
Porosity (µm)	1 - 1500	0.5 - 100	1 - 100	1 - 100
Max flow rate (m³/h)	-	-	50	250
Max pressure (bar)	10 (110°C)	80 (150°C)	10 (75°C)	7(75°C)

Other pressures available on demand

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# **CONTRACT REVIEWS**

# Design & custom projects



# **Technical solutions**

1 EASYMIX : Analysis / correction of soluble concentration.

2 FILTECH: Fine filtration / OILTECH: Oil removal.

3 NANOREACTOR: Antibacterial UV treatment.

**4.0** BANDTECH: Filter media roll.

4. Filter with rolling media (drum).

5 Used media recovery tank.

6 Automation 4.0

Low & high pressure watering, and frequency inverter (pressure regulation and energy savings).

**8** COOLTECH: Maintaining cutting oil temperature.

Design & custom projects

# **Technical solutions**

1 Low & high pressure spray, and frequency inverter (pressure regulation and energy savings).

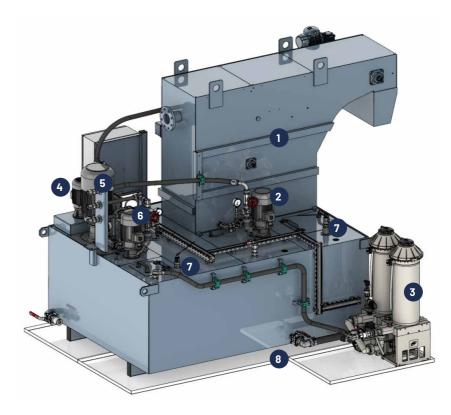
**CONTRACT REVIEWS** 

- 2 Safety sentinel cartridge filter.
- 3 Automation 4.0: IO-LINK protocol and Profinet
- 4. BANDTECH: Filtering media roll
- 4.b Roll media filter (drum).
- 5 Waste media recovery tank
- 6 Pre-arrangement COOLTECH / Immersed coil



# **Specifications**

- Process: Gantry milling
- Machined material: Aerospace aluminum
- Number of connected machines: 1
- · Lubricant: emulsion
- Flow rate: 200 L/min
- Pressure: 12 to 40 bars



# **Technical solutions**

- 1 Rotary drum filter with permanent media (stainless steel mesh) at 50 µm
- 2 Low-pressure pump in the semi-clean compartment
- **3** MINIPURE unit for fine filtration FILTECH and oil removal **OILTECH**
- 4 Screen cleaning pump
- 5 HP pump 30 L/min at 80 bar with pressure
- 6 Low-pressure pump in the ultra-clean compartment
- 7 KEYENCE radar detectors
- 8 Drip containment tray

# **Specifications**

- Process: Large-scale turning
- Material: Aerospace alloys
- Number of connected machines: 1
- Lubricant: Emulsion
- Flow rate and pressure: 30 L/min at 80 bar and 2x 50 L/min at 6 bar



**Specifications** 

• Process: Milling + turning

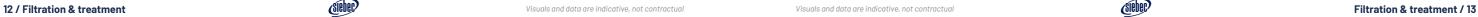
Lubricant: emulsion

• Flow rate: 480 L/min

• Pressure: up to 70 bars

· Machined material: stainless steel

• Number of connected machines: 4



# **ATMOS**

# Oil mist filtration

Provides a healthier working environment and recovers large amounts of cutting oil otherwise lost through pulverization.





# Very high performance

Cyclonic separation removes 90% of the oil in the intake air, with the rest collected by the HEPA filter.



# Safe and healthy environment

The elimination of oil mist reduces health risks for operators due to prolonged contact with a contaminated atmosphere.



### **Lubricant savings**

Cyclonic technology recovers 90% of the volume of oil lost through evaporation during machining and returns it to the machine tank.



# Indicator light

Shows when the HEPA filter is clogged



# Oil recovery

**HEPA filtration** 

Filters out 99.95% of

particles.

The oil is returned to the machine tank for reuse.

### Patented cyclonic separation

90% of the oil is extracted from the intake air.

# **Characteristics**

- Modular design: the ATMOS can be adapted to air flows from 500 to 1500
- Exceptional efficiency: 290 W per 500 m<sup>3</sup>/h module.
- Cyclonic technology: 64 to 192 cyclones separate the oil from the air.
- Minimal maintenance: the cyclonic separation efficiency significantly reduces the frequency of HEPA filter replacement.
- Custom-designed fan wheel for optimum performance.
- · Ultra-quiet system.



**ATMOS 64** 







**ATMOS 128** 

**ATMOS 192** 

# How to choose your ATMOS?









	ATMOS 32	ATMOS 64	ATMOS 128	ATMOS 192
Effective airflow rate (m³/h)	250	500	1000	1500
Power (W)	200	290	580	870
Power supply		230V sing	gle-phase	
Filtration technology		Patented multi-c	yclone separation	
HEPA filter		Yes (HEPA 13 - 99	9.95% efficiency)	
Noise level (db(A))	66	68	69	70
Air inlet diameter (mm)	Ø97	Ø167	Ø167	Ø167
Dimensions (mm Lxlxh)	355 x 355 x 423,5	708 x 462 x 621	708 x 462 x 846	708 x 462 x 1061
Activated carbon container for HEPA filter	N/A	OPTIONAL	OPTIONAL	N/A
Activated carbon container volume (L)	N/A	30	60	N/A

# ATMOS +

# Oil smoke filtration

Special version designed for demanding applications when mist turns into oil smoke.

### **Principle**

Standard machining conditions produce oil mist with droplet sizes considered medium to fine (a few µm). Certain machining conditions (high heating, full oil, very high pressure) cause very fine oil smoke (<1µm), resulting in rapid clogging of HEPA 13 filters.

A technical explanation of aerosol/droplet formation is available in our technical guide on the

https://www.siebec.com/en/products/oil-mist-purification/

 $Sie bec \, therefore \, created \, a \, special \, + \, version \, integrating \, an \, intermediate \, filtration \, stage \, between \, and \, constant \, and \, constant$ the cyclones and the HEPA 13 filter. This intermediate stage captures large quantities of these very fine droplets and preserves the lifespan of the final HEPA filters.

This device is available on AT64+ and AT128+ models.





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### **EASYPURE**

# Autonomous station for recycling fluids and treating effluents

Dedicated to the recycling of cutting fluids directly in the machine shop, the EASYPURE reduces the consumption of new fluid while preserving its original properties.



# (\$)

# Recycled = saved

Reduces the cost of reprocessing used fluid, reduces the purchase of new fluid, increases the life of the fluid used.



# **Optimal properties**

SIEBEC filtration ensures the elimination of particles and lubricating oils, while preventing bacterial growth.



# Better for the environment

On-site reprocessing eliminates trucking and reduces new fluid consumption.
Good for your carbon footprint!



### Wide compatibility

Handles emulsions, micro-emulsions, synthetic and whole oils, chip juices...



- Automatic and/or manual operation through the touchscreen interface.
- · Start and stop control or synchronization with the start of the plant.
- Alarm settings (pH, temperature, filter clogging, level detection).

# **Applications**

Recycling of cutting fluids

Treatment: tribo-finishing / vibro-abrasion water, washing machine rinsing water, penetrant cleaning effluents, degreasing baths...



De	signation	Designation				
0	Used fluid storage	Used chip juices and cutting fluids are stored in the 1000 I IBC. The fluid is then automatically transferred to the station in 500 I batches. Not enough to drain? Find out more about our vacuum dischargers on page 12.				
2	Decanting	The fluid is transferred to the phase change tank. The lubricating oils are collected in the module (A) and the sludge and chips are transferred to a BigBag for disposal.				
3	Filtration & de- oiling	Once sludge, chips and supernatant oils have been removed, the fluid receives a finishing treatment to refine its filtration and eliminate fine particles and traces of lubricating oil.				
4	UV treatment	The regenerated fluid is stored in the final IBC where it receives continuous UV treatment to prevent bacterial growth. See NANOREACTOR page 7.				

# Designation Regenerated Fluid Finishing Treatment (option) The fully regenerated fluid is ready to be transferred to the machine tool lubricant tank for a new life. The recycled fluid can be advantageously mixed with new fluid, and perfectly dosed using the EASYMIX automatic dosing station. Please contact us for more information.

# EASYPURE CONTRACT REVIEWS

# Conception sur mesure



# **Custom filtration unit: 3 filtration stages**

# 1st stage :

The used emulsion, coming from machine drainings, is first directed to a 2,000-liter buffer tank. This first stage helps stabilize and prepare the fluid for subsequent treatments. A coalescence oil separator, equipped with a prefilter bag, then separates foreign oils present in the emulsion. This prefiltration also retains large chips, optimizing the effectiveness of the downstream treatment stages.

# 2nd stage:

The lubricant is then pumped to a conical trunk decanter, where the heaviest particles are separated by gravity. A recovery cart collects micro-chips and sludge, acting as a mechanical prefiltration stage. The clarified fluid is then finely filtered via the specific MINIPURE MP53 module, ensuring optimal quality before being transferred to the final storage compartment.

# 3rd stage :

Finally, the filtered fluids are stored in a final 2,000-liter tank. An integrated NANOREACTOR system provides continuous biological treatment, eliminating bacteria and ensuring the long-term chemical stability of the lubricant. At the same time, our intelligent EASYMIX module monitors the soluble oil concentration in real time and automatically adjusts the mix to maintain optimal parameters. At the outlet, a dedicated pump feeds the machine tanks with fully regenerated fluid, ready to be reused in the machining process.

This pump allows autonomous feeding of

machines.

	Désignation	Description		Désignation	Description
0	Description	Retention up to 2,000 L	8	Retention	The retention allows the full tank volume (500 L) to be contained in case of
2	<b>DILMAX</b> (p.10)	Oil removal from liquids			leakage
<u></u>	<b>1</b> 5 60 12	Filter equipped with a PP OILTECH	9	Agitator	Allows mixing of various effluents and products
3	Pre-filtration	microfiber bag, allowing absorption of oils present in the liquid.	10	Sediment collection cart	Composed of a filter bag
	Oil separator			Cart	
<u> </u>	retention		11	NANOREATOR	Antibacterial treatment of fluids
5	500 L decanter	Containing the volume of emulsions to be regenerated	12	Tank 2,000 L + Retention	Before distribution in the workshop
6	Electrical cabinet	Command and control of the system's proper operation	13	Level control	Radar technology
7	MINIPURE	Fine filtration and final oil removal before transfer to the final compartment	14	EASYMIX	Automatic monitoring & correction of cutting fluids

15 Process pump





# How to chose your industrial vacuum unit?

	AP5	WINDVAC	OPTIMOIL TANKVAC SQ	OPTIMOIL HV TANKVAC HV	GOLDVAC
Dust (dry)	Yes	No	No	No	No
Dry chips	Yes	No	No	No	No
Lubricated chips	Yes Vol. solids > Vol. liquids without separation	No	Yes Vol. liquids > Vol. solids with separation	Yes Vol. liquids > Vol. solids with separation	Yes (precious metals)
Machine tank emptying Emulsions (with chips or sludge) Whole oils (with chips or sludge)	No	Yes without separation	Yes with separation	Yes with separation	Yes (precious metals)
Emptying clear water or detergents (non-foaming)	No	Yes (with stainless option and low volume)	Yes (with stainless option and low volume)	Yes (with separation) ideal for vol. > 500 liters	-
Suction of lubricant retentions	No				
Suction of solvents, toxic products, hydrocarbons, flammable products or ATEX risk	No	No	No	No	No
Deep suction	Yes (1,5 m (vacuum mode) Several meters (ventilation mode))	Yes (up to 6 m)	Yes (up to 4 m with TURBO™)	Yes (up to 5 m with TURBO™)	-
Discharge	No	Yes (differed from the suction)	Yes (simultaneous to the suction)	Yes + high volume transfer MODE. MULTIPLE(	Yes (simultaneous to the suction)
SIEBEC fine filtration (at the outlet)	No	No	Option	Option	Yes (5 µm + 1 µm absolu)
Pre-separation (at the suction)	No	No	2000 µm metal basket (200 µm with bag)	2000 µm metal basket (200 µm with bag)	200 µm with bag
Primary filter unclogging	Semi-auto or cyclical automatic depending on model	No	No	No	No
Energy	Electric or pneumatic	Pneumatic	Electric	Electric	Electric
Pickable with forklift	No	Yes	TANKVAC SQ	TANKVAC HV	No
Towable	No	No	TANKVAC SQ (indoor floors)	TANKVAC HV (indoor/outdoor floors)	No

# AP5

# Dirt & solids industrial vacuums

Suitable for maintenance work and intensive continuous industrial vacuum applications, the APS combines power and robustness.



	102 M	350 D	303 ST	305	511 P	1000 BP	300 P50
Capacity (I)	25	50	50	75	160	100	50
Power (kW)	2,2	3,3 bypass	3	5,5	11	4	-
Supply	230V Mono	230V Mono	400V x3	400V x3	400V x3	400V x3	Pneumatic
Air flow (m³/h)	340	510	320	520	1040	2200	380
Max (-) pressure (mmH20)	2300	2300	2900	2900	2900	430	3800
Unclogging	Semi-auto	Semi-auto	Semi-auto	Semi-auto	Auto	Auto	Semi-auto

# WINDVAC

# Pneumatic draining vacuum

Powered by connection to the compressed air network, the WINDVAC excels in the suction of charged liquids with a maximum flow rate of 200 liters per minute!





	WINDVAC 3	WINDVAC 4	WINDVAC 7
Applications	Slightly loaded liquids	Slightly loaded liquids	Loaded liquids
Function	Suction only	Suction + discharge	Suction + discharge
Flow rate (I/min)	130	200	200
Discharge (I/min)	N/A	200	200
Air consumption (m³/h)	45	42	42
Max (-) pressure (mmCE)	3200	4000	3800/7000





# OPTIMOIL / TANKVAC SQ

# Draining vacuum for machine lubricant tanks

Designed for emptying lubricant pans, the OPTIMOIL and TANKVAC SQ incorporate TURBO technology, which enables them to suck up both cutting oils and chips. The optional fine filtration at the discharge allows the fluid to be recycled directly.

In addition to the functions of the OPTIMOIL, the TANKVAC SQ is equipped with a 600 liter storage tank and an integrated sludge tank.



# **TECHNOLOGY** TURBO®



This patented auto-adaptive multi motors technology is unique on the market. It enables the device to detect the suction context and automatically switch its motor settings to favor powerful vacuum (serial motors) or high flow rate (parallel motors). Thus, it works just as well on liquids as solids!



# Vacuum (x2)





• Flow rate (x3) Solids vacuuming (lubricated chips,

# **FILTRATION** FINE



The fine filtration (20 or  $5 \mu m$ ) integrated upstream the discharge port enables the direct reuse of the fluid into the process. Significant time & money savings!

The L-TECH™ cartridge has a very high filtration area (5 m<sup>2</sup>) and is washable and reusable.



TANKVAC 50

# OPTIMOIL

							-
	103 / 203 M TC	104 / 204	205	209	603M TC	604	605
Capacity (I)	90 / 190	90 / 190	190	190	600	600	600
TURBO™ technology	Oui	Non	Non	Oui	Oui	Non	Non
Power (kW)	3,3	4	5,5	9,5	3,3	4	5,5
Supply	230V Mono	400V Tri	400V Tri	400V Tri	230V Mono	400V Tri	400V Tri
Flow rate (m <sup>3</sup> /h)	480	370	520	750	480	370	520
Max (-) pressure (mmH20)	3800	2900	2900	5000	3800	2900	2900

# OPTIMOIL HV / TANKVAC HV High volume draining vacuums

In addition to TURBO™ and FILTRATION FINE technologies, these units incorporate HV technology that transfers fluid at a rate of 250 l/min..

The TANKVAC HV has a storage capacity of 1,000 or 4,000 liters and is designed to easily navigate outdoor terrain.





# Vacuum everything!

Chips and sludge are separated from the liquid by the pre-filtration basket.



# **Ultra-fast transfer**

These units empty a 1000 liter IBC in only



# Instant recycling

The fine filtration at the discharge allows the fluid to be reused immediately.



# Wheels, cart or skid

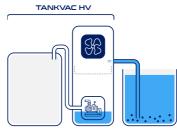
Available in various versions to fit the context of each workshop.

# **TECHNOLOGY HV®**

This patented SIEBEC SOFRAPER exclusivity allows ultra-fast transfer of liquids while quaranteeing complete cleanup of tanks, without any residues liquids nor solids.



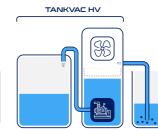
WATCH THE



Storage tank Vacuum tank Tank to empty

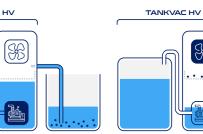
# 1. Standard suction

Enables the filling of the vacuum tank in order to prime the transfer pump.



# Storage tank Vacuum tank Tank to empty

2. Transfer up to 250 I/min Once the pump submerged, the high velocity transfer automatically switches on!



Storage tank Vacuum tank Tank to empty



### 3. Tank bottom suction

Allows the vacuuming of liquids and solids remaining at the bottom of the tank.

	OPTIMOIL HV				TANKVAC HV		
	103 / 203 M TC	104 / 204	205	209	1203M TC	1205	1209*
Capacity (I)	90 / 190	90 / 190	190	190	1000 / 4000	1000	1000
TURBO™ technology	Oui	Non	Non	Oui	Oui	Non	Oui
Power (kW)	3,3	4	5,5	9,5	3,3	5,5	9,5
Supply	230V Mono	400V Tri	400V Tri	400V Tri	230V Mono	400V Tri	400V Tri
Flow rate (m³/h)	480	370	520	750	480	520	750
Max (-) pressure (mmH20)	3800	2900	2900	5000	3800	2900	5000

<sup>\*</sup> Also available in a 4211 version with a capacity of 4000 liters and a power of 11 kW.





# GOLDVAC

# Precious metal recovery vacuum cleaners

The machining of precious metals generates very valuable chips. The GOLDVAC has been designed to recover them in the most optimal way possible, in order to simplify inventories.



104 / 204



# Zero loss of precious metals

Double stage filtration on 20/5 µm calcinable cartridge then 1 µm absolute.



# Simultaneous suction & discharge

Allows to reinject the sucked fluid directly into the lubricant tank.



### Fast return on investment

The recovery of precious metals has a very high economic and ecological potential.

	,	•
Capacity (I)	90 / 170	90 / 170
Power (kW)	3,3	4
Supply	230V Mono	400V Tri
Flow rate (m³/h)	480	370
Max (-) pressure (mmH20)	3800	2900

103 / 203 M TC



# Available options for suction & draining units

Option	Description		
Sludge tank (30 liters)	Separated collect of sludge and chips (3 m flexible included)		
HP effect lance	Simplified cleaning of tanks		
Prefiltration bag	From 2000 µm to 200 µm prefiltration		
Fine filtration	Fine filtration at the discharge on 5 or 20 µm cartridge		
Level indicator	Visual control of the content of the barrel		
Stainless steel barrel	Ideal of corrosive and non-foaming washing products		
Electrical cutoff float	Stops the motor for maximal safety		
Removable pistol grip	Easier and faster transfer		
IBC 1000   kit	Connects the OPTIMOIL™ to a high capacity tank		
Towing bar	Enable the unit to be towed for faster moving		

Consult us to know the compatibility of these options with the various units.



# Centralized vacuuming for dust, solids and lubricated chips

High-pressure suction particularly suitable for the suction of lubricated chips, dust and heavy particles with discharge of the collections into the waste disposal bin.









# AIRCLEAN

# Particles suction & air treatment

Collection, filtration and evacuation of smoke and dust directly from the workstation or in a centralized installation.



Mobile or wall-mounted High suction power HEPA filtration Smoke / dust separation Automatic unclogging

## Setup

Centralized vacuuming Work station vacuuming Machine vacuuming











### BANDTECH

# Filter media rolls

A wide range of materials and weights, specifically developed for belt filters, ensuring effective filtration and optimal purity for industrial liquids.



Optimize your industrial filtration processes with a full range of filter

Designed to deliver performance suited to various environments, these media are available in a variety of materials and specifications to meet the specific requirements of each application.

# **TECHNOLOGIES**







**COMPACT DRUM** 



PRESSURE BELT



**VACUUM BELT** 

# **NON-WOVEN FILTER MEDIA AND WEIGHTS**







**VISCOSE / POLYESTER** 50 | 66 | 90 g/m<sup>2</sup>



POLYESTER 25 | 32 | 50 | 70 g/m<sup>2</sup>



**NEEDLE-PUNCHED POLYESTER** 

80 | 100 | 150 | 300 g/m<sup>2</sup>



**POLYPROPYLENE** 30 | 50 | 70 | 100 g/m<sup>2</sup>

Reliable filtration of impurities and solid particles in all types of fluids

# PROCESS TREATMENT



# Emulsions (soluble oils)

Filtration of emulsions to remove particles and ensure the efficiency of cooling and lubrication systems.



### Whole oils

Specialized filtration to remove metallic residues and maintain process efficiency.



24 / Filtering Media

# Washing baths, electroplating and phosphating

Filtration to preserve the quality of surface treatments and extend equipment life.

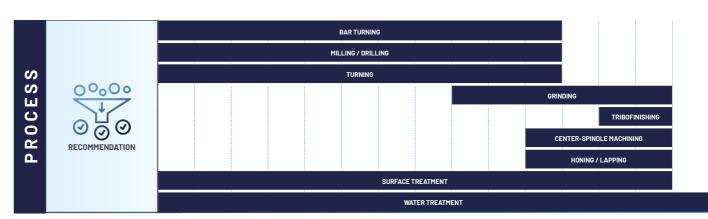


SEE PAGE 6, GRAVITY CENTRAL PLAN

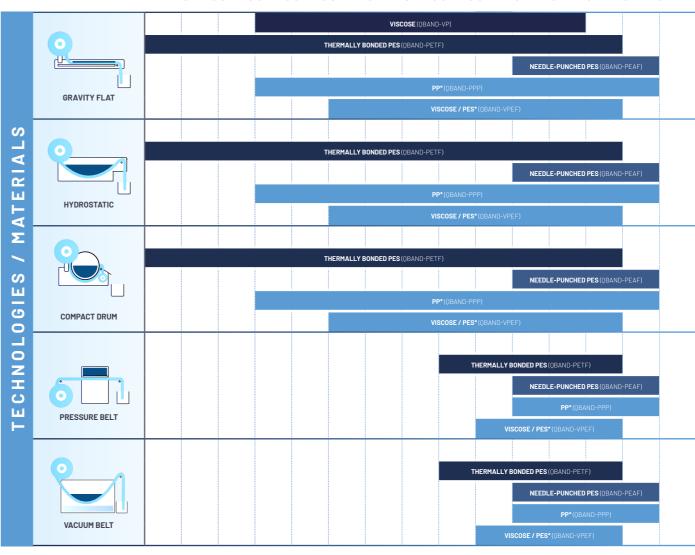
# How to choose the right filter paper for your industrial process?



Nominal rating (µm) 70 65 60 55 50 45 40 35 30 25 20 15 10



40 35 30 25 20



65 60 **55** 50 45 40 35 30 25 20 15 10

# Filter Bags

High-quality and high-finish filter bags

Our range is divided into several families including standard, high-capacity, and high-efficiency bags.

Felt and high-efficiency bags are 100% welded to guarantee the best filtration performance. This construction provides a real improvement compared to sewn bags. The sewing process generates holes within the media and injected rings, causing preferential flow. Conversely, complete welding ensures a 100% tight seal between the media and rings, with no bypass.

The laser cutting process of the media eliminates any risk of contamination. Unlike electric scissors cutting, the laser cauterizes the cutting edge, preventing the fabric from fraying. This technology is perfectly suited to all filter media.

SIEBEC has developed a complete range of injected plastic rings, enabling perfect retrofitting with the biggest brands on the market. We will always find a compatible ring for your existing installation.





# **Chemical Compatibilities**

	Polypropylene	Polyester	PTFE	Nomex®	Nylon
Alkaline	+++	-	+++	+++	+++
Acid	+++	+++	+++	+	-
Oxidizer	-	+++	+++	+	+
Solvent	+	++	+++	+++	++
Tmax(°C)	90	140	260	200	120

<sup>+++</sup> Excellent | ++ Good | + Fair | - Non-compatible

# **Ring Shapes**



# **Available Sizes**

Code	Diameter (mm)	Length (mm)
10	180	450
10W	180	450
20	180	820
20W	180	820
30	260	860
40	260	1070
03	95	230
04	107	230
05	110	230
07	95	385
08	107	385
09	110	385
X100	152	510

# Filter Bags

A wide range of technologies for demanding applications











MAGNETIC





Filtering Media / 27

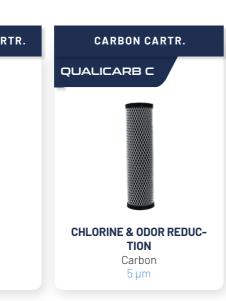
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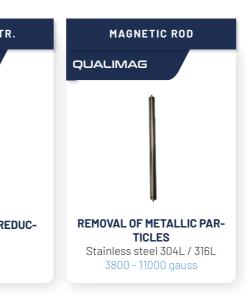
# **FILTRATION MEDIA**

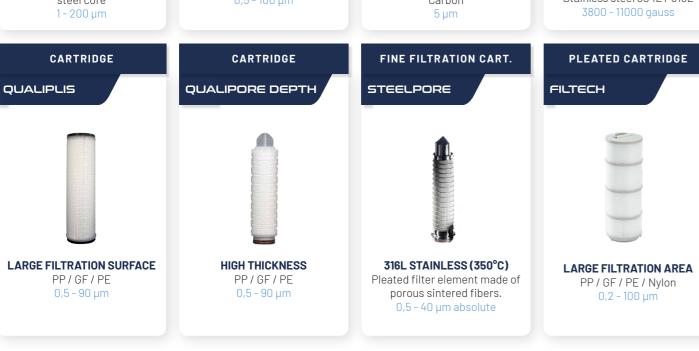
# Filter cartridges

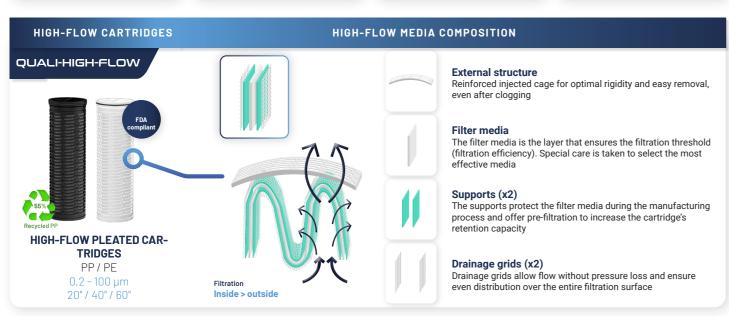












# **FILTRATION MEDIA**

# Filter baskets, absorbents, filter fabrics & wire meshes



Filtration additives for socalled "precoat" filtration systems.



SAFE FOR DISPOSAL Unlimited storage in a dry environment. 500 g collects 6 liters of oil.

ABSORBENT SHEETS ABSORBENT BOOMS



LIOUIDS Surrounds, contains and absorbs.

**ABSORBENT BOOMS FOR ALL** 



**COMPATIBLE WITH ALL** LIQUIDS Single or double thickness. Available in pre-cut rolls.



### PRESSTECH



FILTER PRESS CLOTH Sewing: simple / double / dot / welded. Option: double bottom Attach: VELCRO®, ties, holes, eyelets...  $140 - 1000 \, a/m^2$ 

# **CENTRIFUGE BAG**



**BAGS FOR SPIN-DRYERS** Wide range of materials and porosity. Filter bags, panels and diaphragms.

# **MACHINE TANK BAG**



**SOCK IN MACHINING TANK** Option to include drawstrings or zipper closure for easier handling during retrieval 0,2 - 100 μm

# FILTER BIG BAG



**SLUDGE FILTRATION** PP felt / PE 1-200 µm

# PREFILTRATION BASKET



**316L STAINLESS BASKET** Custom design to fit your machine. 5 - 5 000 µm

# METAL MESH



STAINLESS STEEL MESH Custom design to fit your machine.

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# **FILTRATION MEDIA**

# Air filters

# Media rolls

Ideal for protecting electrical cabinets, motors and compressors.



# **Dedicated application**

Pre-filtration for the protection of key components present in the metallurgical industry. To be cut from the roll or ordered in custom sizes.



Media	Fiberglass; Polyester  110º C (polyester media) 120º C (fiberglass)  Packaged in rolls or pre-cut format  G2, G3, G4, M5		
Maximum temperature in continuous service			
Туре			
Efficiency EN779:2012			
Recommended final pressure drop	150 Pa		
Dimension	Format: All sizes available Roll: Width 1m / 2m - Length 20m		

# Filter classification

Filter class	G1	G2	G3	G4	M5	M6	F7	F8	F9
Category		Coars	se		Med	lium		Fine	
Average Retention (AR) of Synthetic Dust (%)	50 < AM < 65	65 < AM < 80	80 < AM < 90	90 < AM					
Average Efficiency (AE) on 0.4 µm Particles (%)					40 < EM < 60	60 < EM < 80	80 < EM < 90	90 < EM < 95	95 <em< td=""></em<>
Minimum Efficiency on 0.4 µm Particles (%)							35	50	70

# Filter categories

G filters: Coarse

They serve as pre-filtration of air intakes: they stop dust, hair, insects, ashes... These filters protect the ventilation system as the first barrier against perceptible particles.

M filters: Medium

They serve to refine filtration as they stop pollen, smoke, and finer dust particles.

F filters: Fine

They meet even stricter standards as they ensure filtration of very fine particles, VOCs, mold, bacteria.

H filters: Absolute

For specific applications, especially in air exhaust inside the workshop close to the operators.

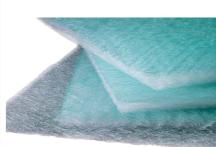
# Air filters

### FILTRATION MEDIA



# PRE-FILTRATION Available in rolls, cut pieces, usable for flat and pleated filters... PES

# FILTRATION MEDIA FIBERGLASS



PRE-FILTRATION & PAINT BOOTH EXTRACTION
Improved dust capture capacity thanks to deep filtration.

# PLEATED CARDBOARD FOR PAINT BOOTH



FOR SOLVENT-BASED AND WATER-BASED
PAINTS
Used for overspray filtration in paint

Used for overspray filtration in paint booths and spray gun applications.

Retention capacity: 5 à 18kg/m²

# METAL FILTERS



# PRE-FILTRATION Washable filters generally used for hightemperature processes. Galvanized, stainless steel

# GALVA PLEATED FILTER PLG



**PRE-FILTRATION**Thermally bonded PES fibers.
Disposable or rechargeable pleated filter.

# GALVA FLAT FILTER PJG



**PRE-FILTRATION IN AIR HANDLING UNITS**Disposable flat filter.

Disposable flat filter.
Thermally bonded PES fibers /FV

# GRAVIMETRIC MULTI-POCKET FILTER



HIGH-EFFICIENCY MULTI-POCKET FILTER
Pre-filtration in air handling units.

Visuals and data are indicative, not contractual

# POLYHEDRON FILTER WITH METAL FRAME



POLYHEDRON MINI-PLEAT HIGH EFFICIENCY
Terminal filtration.

Terminal filtration. Galvanized steel frame. FV

# HEPA PANEL FILTER



# HIGH-EFFICIENCY MINI-PLEAT FILTERS

Terminal filtration. Galvanized steel frame. FV

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Filtering Media / 31





A question? Need advice? Our experts answer you.

Discover all our innovations on www.siebec.com





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45 distributors across the world

