



TREATMENT

FOR INDUSTRIAL LIQUIDS



DEGREASING BATHS



HEAT TREATMENT BATHS



CUTTING FLUID : EMULSIONS & WHOLE OIL



NTD, VIBRATORY FINISHING, ELECTROEROSION,
POLISHING EFFLUENTS



WASHING AND RINSING WATERS



COOLING WATERS



OUR MARKETS

& EXPERTISES

Filtration specialist for 60 years, Siebec designs and manufactures a wide range of industrial filters, pumps and industrial liquid treatment. The group is composed of 6 subsidiaries in Germany, Spain and the UK and is present worldwide with over 45 distributors.

Siebec develops a wide range of equipment designed for the treatment of industrial fluids and effluents :

SURFACE TREATMENT



Oil removal,
Recycling of washing and degreasing waters (detergent, alkalins, phosphating...)

MACHINING



Oil removal,
Filtration, recycling of cutting emulsions and swarf
Magnetic separation of small particles and chips
Treatment of effluent before disposal

METAL AND PLASTIC TRANSFORMATION



Recycling of cooling liquids,
Recycling of heat treatment baths
Recycling of water jet cutting and electroerosion waters

INDUSTRIAL CLEANING



Recycling of washing waters with high pressure water jet,
Recycling of washing machine, vehicle washing, floor washing waters...

OUR SOLUTIONS

MINIPURE



Mobile continuous fluid
treatment station.
Up to **9 000 l/h**

OIL MAX



Oil extraction system through
coalescence
Up to **1 500 l/h**

NANOREACTOR



UV disinfection system for
greasy and turbid liquids
Up to **1 000 l/h**

EASYPURE



Effluent treatment station by
500L batch



SELECTION

SELECTION CHART

	MINIPURE	OIL -MAX	NANOREACTOR	EASYPURE
Oil removal from cutting emulsion on machine tools	■			
Oil removal from degreasing baths	■	■		
Oil removal from case hardening baths	■	■		
Filtration of cutting neat oil	■	■		
Oil removal, continuous filtration of cutting emulsions	■			
Cutting emulsion break before disposal				■
Recycling of cutting emulsion and swarf				■
Recycling of mechanical polishing waters				■
Recycling of washing and degreasing emulsion waters				■
Recycling of vibratory finishing waters				■
Recycling of cooling waters (extrusion...)	■			■
Recycling of bleeding effluents	■			■
Recycling of water jet cutting waters	■			■
Recycling of case hardening baths				■
Elimination of bacterial development			■	

MINIPURE

TREATMENT STATION

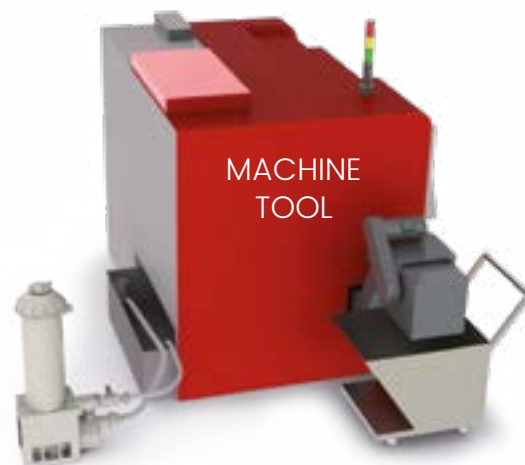
The machines of the MINIPURE range eliminate continuously all micro-chips, powder, solid particles, free-floating oils or in emulsion used for lubricating the machine (for soluble oils). Also suitable for spark machining, water jet cutting...



ADAPTS ON EVERY MACHINE

NEW MINIPURE HOUSING

- Integrated safetech
- Manometer for pressure reading
- Easy access to the pump
- Easy transportation



TECHNICAL FEATURES



TREATMENT

Interchangeable medias : custom made filtration (see following page)

Continuous elimination of all pollutants



OPTIONS

SAFE-TECH kit : dry run protection

Mobile frame

Watering kit : soluble oil cleaning

Surface skimmer

Floating skimmer



CONNECTION

Grooved nozzles or union nuts
Flexible pipes



PUMP

Self repriming centrifugal pump

High efficiency

Low noise

Wide choice of technologies depending on the fluid viscosity





MEDIA OPTIONS

ALL APPLICATIONS

Siebec develops solutions meeting the requirements of all industrial fluid treatments. MINIPURE modular conception enables a wide range of module treatment in order to perfectly adapt to your needs.

Pre-filtration bag : BAG-TECH



Enables the retention of larger swarf

Porosity from 150 to 600 microns.

Washable and reusable.

Assembly and disassembly without tools.

Magnetic filtration : MAG-TECH 3B



The liquide is channeled around the 300mm stainless steel magnetic rods which then collects metallic particles.

Collects up to 3 kg of particles.

Easy assembly and cleaning.

Electromagnetic power of 3 800 Gauss

Pleated cartridge : FIL-TECH



Great capacity filtration cartridge

5 m² filtration area.

Washable and reusable.

Assembly and disassembly without tools.

Porosity of 5, 20 or 50 microns

Siebec patent



Oil recovery : OIL-TECH



The cutting fluid goes throughg the container filled with a load of microfibers

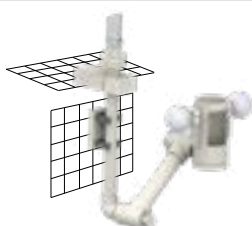
Great retention capacity of hydrocarbon grease.

Hydrophobic: does not retain water or cutting fluid emulsion

One 11L charge of microfibers enables the recovery of 6L of oil.

ACCESSORIES

floating skimmer



Automatically adapts to a large variation in solution level while conserving optimum skimming

Siebec patent



Surface skimmer



Compact and easy installation thanks to a magnetic braket

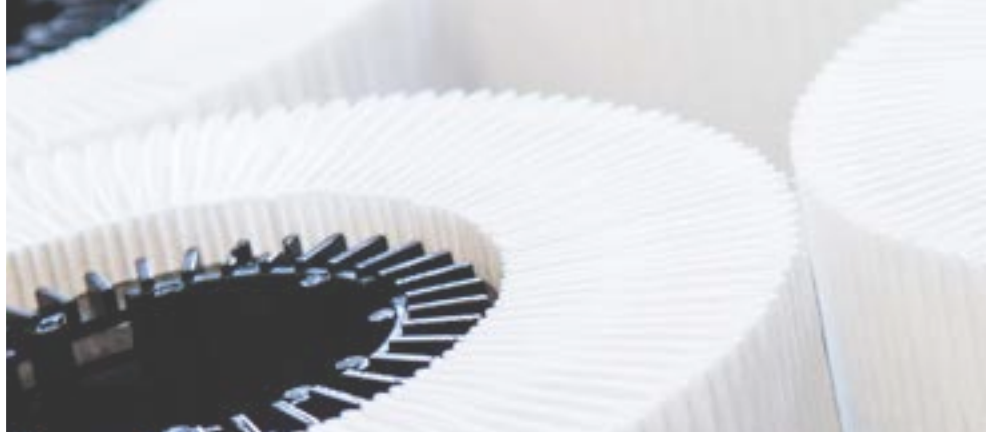
Safe-tech housing



Dry run protection

CENTRIPURE

HIGH EFFICIENCY
TREATMENT



The CENTRIPURE range has been developed for batch treatment of cutting fluid away from the machine tool, often when access is limited. The fluid circulates through the MINIPURE and integral fluid retention tank until the fluid is clean. It can then be returned to the machine tool sump.



OIL REMOVAL

270 or 450 L tank.

MINIPURE station : FIL-TECH catridge and centrigual pump.

Stationnery or mobile assembly.



OPTIONS

BAG-TECH : Prefiltration module

OIL-TECH : Oil removal module

One or two sprinkling pumps.

Temperature regulation with cooling unit and immersed exchanger.

WORKING MINIPURE & CENTRIPURE



INITIAL CONDITIONS ->

Significant presence of floating neat oil and large pieces of swarf



REGENERATED OIL

Free of floating neat oil and swarf



INITIAL CONDITIONS ->

Highly polluted neat oil



REGENERATED OIL

MINIPURE & CENTRIPURE +

Control over
cutting condition



Enhance the quality
of produced pieces



Improves the lifespan of
cutting tools



Increases the lifetime
of cutting fluids



Suppression of odors linked
to bacterial development



Avoids the clogging
of original filters



Reduction of the costs of old
cutting fluid disposal



Improved working
environment





OIL MAX

COALESCENCE EXTRACTION

The SIEBEC coalescors are ideal to recover floating oil in a liquid. The system can recover from 1 to 25 liters of oil per day. The **pressure** technology has low space floor and is easy to instal while the **gravitational** technology enables the best separation for difficult applications.

The liquid charged with oil is first drawn through the SIEBEC skimmers then pumped in the coalescor body inside a separation chamber. Thanks to the coalescncce process, oils migrate towards the upper part of the separation chamber and are then accumulated before being evacuated through the second exit.

A bag for pre-filtration can be added upstream from the coalescor when the liquid is charged with large particles or swarfs.

Improved process quality	Mobile system	Compact technology	Automatable system

TECHNICAL FEATURES

MP-P51-DCG	MP81CP
<p>MP-P51-DCG : Gravitational return of the oil free liquid</p> <ul style="list-style-type: none">+ suitable for difficult seperations+ suitable for emulsion oil removal	<p>MP81CP : Pressure return of the oil free liquid</p> <ul style="list-style-type: none">+ Low floor space+ Good range thanks to the pressure return+ suitable for degreasing baths

MATERIALS	PUMP	OPTIONS & ACCESSORIES
<p>Polypropylene</p> <p>Great resistance to acids, alkalines and oils up to 80°C</p>	<p>Flowrate up to 1 500 L/h</p> <p>Centrifugal self repriming pump</p> <p>Air Operated Diaphragm pump</p>	<p>Programmator : automatic extraction</p> <p>Mobile frame</p> <p>Surface skimmer</p> <p>Floating skimmer</p>

NANOREACTOR

HIGH UV RADIATION



The NANOREACTOR enables the reduction of bacteriologic contamination by the use of high UV radiation (253.7nm). The patented design of the NANOREACTOR enables an efficient treatment of the liquid while preventing the clogging of the UV lamp.

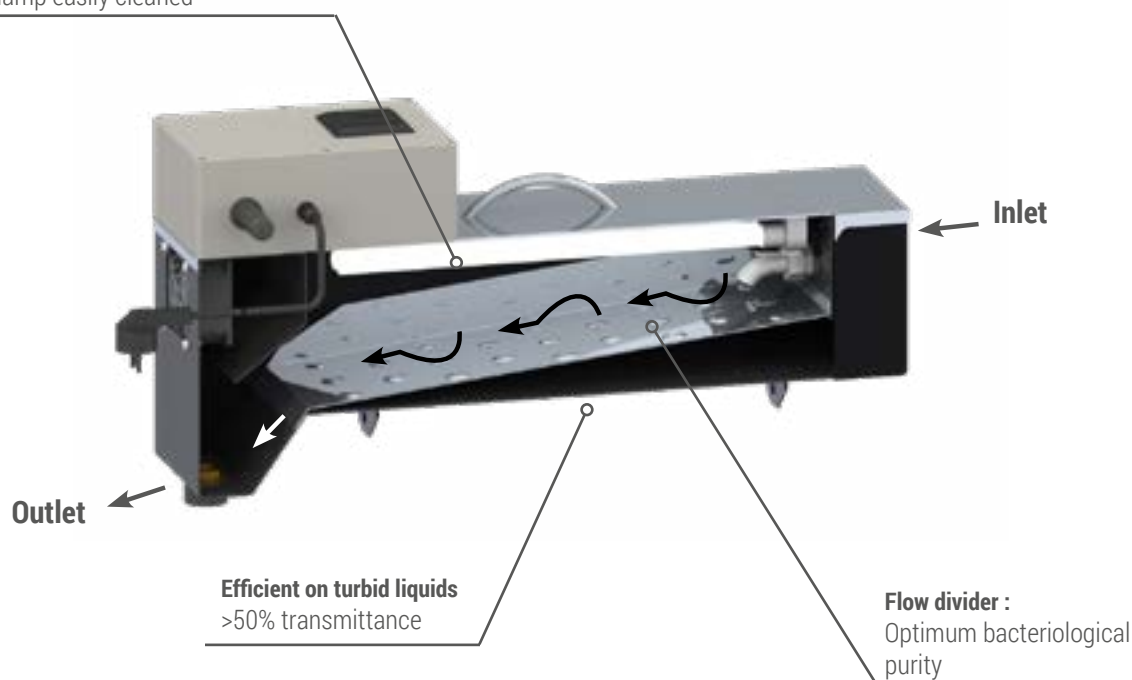
The NANOREACTOR works on applications for the treatment of :

- Swarf
- Washing waters
- Vibratory finishing systems effluents



SIEBEC PATENT : HIGH UV RADIATION SYSTEM COUPLED WITH A FLOW DIVIDER

No fluid contact with the lamp :
UV lamp easily cleaned



EASYPURE

INDUSTRIAL EFFLUENTS TREATMENT STATION

EASYPURE is a **compact & stand alone** effluent treatment system for volume from 0,1 to 5m³ per day. EASYPURE works by batches. it's modular design adapts to all types of liquids wether they are released or recycled.

EASY-PURE works on applications for the treatment of :

- Swarf
- Washing waters
- Vibratory finishing systems effluents

EASYPURE APPLICATION EXAMPLES



Washing machine rinsing waters treatment

Objective : costs reduction of the disposal and destruction of effluents



Constraints	EASYPURE	Results
Daily effluent volume 0,5 m ³ /day	Treatment Coagulation, floculation and agitation	Quality Improves the process quality through the removal of pollutants
Elimination Daily removal	Filtration Active carbon	Return on investment Typically in less than a year, by eliminating effluent disposal and destruction costs
Treated liquid composition Rinsing water with dilluted detergent, particles, oil	Finish Liquid sent in a closed circle before being released	



Recycling of a machine tool cutting oil (emulsion) and swarf drippings

Objective : recycling, lowered disposal costs

Constraints	EASYPURE	Results
Daily effluent volume 0,5 m ³ /day	Treatment Oil removal, filtration, UV	Conformity Oil meets the requirement to be re-used in the machine
Elimination Storage and disposal before destruction	Filtration FIL-TECH cartridge, pre-filtration BAG-TECH, microfibres load OIL-TECH, NANOREACTOR	Savings Saving on Oil and destruction costs.
Treated liquid composition Cutting emulsion, particules, oils, greasing oils	Finish Storage tank installed after the EASYPURE to re-use the liquids	

EASYPURE

INDUSTRIAL EFFLUENTS
TREATMENT STATION



Quick return
on investment



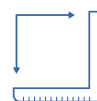
Cost reduction
of effluent disposal



Automatic or
semi-automatic system



Low floor
space



1

SETTINGS

Easy-Pure is programmed for the treatment of a precise type of pollutants, depending on your needs. The start of the treatment is done with the control touch screen.

Main menu



Installation diagram



2

BATCH TREATMENT

Once the liquide has been put in the tank, a system of dosing pumps starts injecting a specific treatment depending on the application:

pH reading



pH dosage



Treatment product injection



Coagulation - flocculation - acid -
alkaline





EASYPURE

INDUSTRIAL EFFLUENTS
TREATMENT STATION

3

EASYPURE RECUPERATION MODULES

Pollutants can be recovered through different modules :

Oil recovery



Sludge / dirt recovery



BIG BAG - Sludge / dirt recovery



For large quantities

4

FINAL FILTRATION

In order to complete the pollutant pre-treatment, a MINIPURE is installed in serie, enabling its treatment with :

Treatment modules

(See MINIPURE)
FIL-TECH / OIL-TECH / BAG-TECH

Carbon or resin

(See MINIPURE)
CARBO-TECH - RESINE-TECH

High UV radiation - Nanoreactor

(See NANOREACTOR)

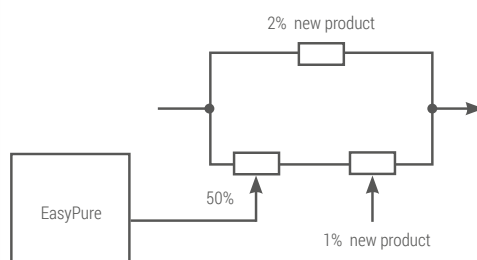


5

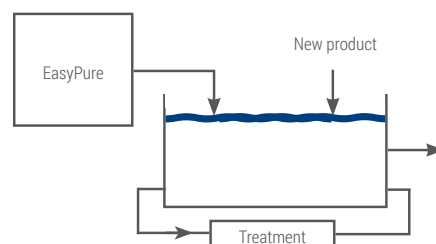
OPTION : ADDITIONAL TREATMENT

In order to re-use the treated liquid or to release it, EASYPURE can be couple with new product injection system of batch treatment systems :

Dosage platform



Batch treatment





SIEBEC GROUP

FLUID FILTRATION, PURIFICATION, TRANSFER



SIEBEC SAS

ZAC Vence Ecoparc
9 rue des platanes
38120 Saint-Égrève
France

Tel: +33 4 76 26 12 09

Fax: +33 4 76 27 04 82
contact@siebec.com

QUALI-FILTRES SAS

ZAC Vence Ecoparc
9 rue des platanes
38120 Saint-Égrève
France

Tel: +33 4 76 26 91 75

Fax: +33 4 76 26 91 74
contact@quali-filtres.com

BOHNCKE GmbH

Auf der Langwies 8
65510 Hünstetten-Wallbach
Deutschland

Tel: +49 6126 9384-0

Fax: +49 6126 9384-75
info@bohncke.de

SOFRAPER SAS

15 chemin des Bois
74 100 Ville La Grand
France

Tel: +33 4 50 84 22 53

Fax: +33 4 50 84 22 59
infos@sofraper.fr

SIEBEC UK LTD

Unit 3 St. Alban's Business Park
St. Alban's Rd
Stafford ST16 3DR
England

Tel: +44 1 785 227 700

Fax: +44 1 785 246 006
sales@siebec.co.uk

P.G. SIEBEC SL

Enric Morera, 14 4º
08950 Esplugues de Llobregat
España

Tel: +34 933 722 024

Fax: +34 902 030 650
ventas@siebec.com

SIEBEC GmbH

Auf der Langwies 8
65510 Hünstetten-Wallbach
Deutschland

Tel: +49 6126 9384-19

Fax: +49 6126 9384-75
info@siebecgmbh.de

SIEBEC SERVICES SARL

5 rue du Valengelier BAT 7
77500 Chelles
France

Tel: +33 1 82 35 01 11

Fax: +33 1 60 20 23 14
contact@siebec.com