MAX

THE OIL SKIMMING EXPERTS

we know the problems, we provide solutions

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THE **MAX LINES**

CIRCULAR **ECONOMY**

MAX IL DISOLEATORE has for years produced the designed belt, disc and pipe floating oil separators from our workshop, responding to a need: to reuse processing fluids containing waste.

Today **MAX IL DISOLEATORE** is a brand that continues to focus on oil separation but which offers a wide range of solutions for each individual industrial fluid process:

- Water treatment
- Mixing
- Filtration
- Oil separation

CHARACTERISTICS

The distinctive feature of our products has always been **SUSTAINABILITY**

- **DESIGNED TO LAST OVER TIME**
- **REPAIRABLE**
- **THEY CONTAIN WASTE AND WASTAGE**
- **THEY REDUCE THE RISK OF IRRITATIONS SUFFERED BY THE OPERATOR**
- **THEY IMPROVE THE QUALITY OF THE WORKING ENVIRONMENT**

These latter two aspects are guaranteed, in particular, by the **COMPRESSED AIR OXYGENATION SYSTEM** thanks to which the fluid is sanitised, during oil separation, for the benefit of the working environment and the health of the operators.

OUR SERVICES

- Constant research into raw materials and components
- Specialist labour
- MADE IN ITALY product
- Tailor-made solutions
- Sales and after-sales consultancy
- Export throughout Europe
- In stock spare parts
- After sales service
- Maintenance

WATER TREATMENT

OSMIX 200

OSMIX is one of the latest solutions in the MAX line.
The OSMIX system consists of a reverse osmosis kit that demineralises the water, which is then used by a mixture to create the coolant emulsion.

The reverse osmosis removes all suspended and dissolved substances from the water. This process consists of applying a higher pressure than the osmotic one to a concentrated solution generating a reverse flow to the natural one so that the salts dissolved in the concentrated solution are extracted through a discharge stream. It is a membrane process that generates two outflows: the part of incoming water that crosses the membrane constitutes the permeate (poor in salts) that goes to use, while the remaining part comes out with a high salt concentration, due to the accumulation of all the salts that have not been able to cross the membrane, this is the concentrate (waste).

Some regions of Italy (Emilia Romagna, Marche, Lombardy, Tuscany, Lazio, Calabria and Sicily) are characterized by a high hardness of the water, a critical factor for the quality of industrial production.

The use of demineralised water for the preparation of the coolant emulsion offers considerable benefits as it:

- Reduces the oil consumption necessary to create the emulsion;
- Avoids oxidation of machined and stored parts;
- Avoids oxidation of tools and machine tools;
- Prevents the formation of bacteria and bad smells.

OSMIX 200

Salinity of supply water 300 mg/l
Water hardness 25 °F
Water temperature 15 °C
Operating pressure min 2- max 7 Bar
Flow rate 30 lt/h - 70 lt/h a 4 Bar*
Permeate water flow rate +/-3%
according to the changes of the operating temperature
Permeate water salinity >6%
Recovered permeate water 25%
Plant sizes 1500x1000x2100 h mm
Weight 300 kg approximately

*the production is directly proportional to the operating pressure: it decreases with decreasing pressure and increases with increasing pressure

The image is indicative of the model, but not binding.

CHARACTERISTICS

- Support frame in painted perforated sheet metal
- Containment tank in painted iron
- Walk-on galvanized grating
- Reverse Osmosis Kit
- Cylindric polyethylene water tank (200 lt)
- Self-priming stainless-steel pump with fluidcontrol
- Venturi or Volumetric Mixer
- Electrical panel for plant management
- Security indicators
- CE Mark

IMPORTANT NOTE

The rejection of a membrane, that is the ability to remove the solute present in the water, is influenced by various parameters such as the characteristics of the water itself, the operating pressure and temperature; in any case, demineralisation is around 96%.

DOSA MAX VR 1/2"

"Venturi" system

The DOSA MAX mixer, according to Venturi system, uses water pressure to optimize the mixture of the coolant fluid.

The image is indicative of the model, but not binding.

ADVANTAGES OF THE SYSTEM

- **Built with high quality materials:** stainless steel, brass, aluminum and pvc.
- **Powered by water pression** and not by electricity.
- **Easy to be installed** thanks to the PVC ring that can fix the device directly to the oil barrel.
- **It ensures an optimal and long lasting mixing** water / oil emulsion.
- **It is equipped with vacuum gauge** to grant a proper running and prove the presence of oil in the barrel
- **Good quality / price**

CHARACTERISTICS

- PVC ring for installation on oil barrel
- Regulation of the oil concentration
- Vacuum gauge for checking the presence of the oil
- Check valve with filter installed on the oil suction pipe
- Water inlet through hose
- Water-oil emulsion outlet through hose
- On / off valve
- Rubber pipe in stainless steel
- Dimensions 43 X 35 X 12 cm
- Weight 3kg
- Capacity: 15 lt / minute with inlet pressure 2 BAR

MAX VM1

EMULSIFIABLE REFRIGERANT OIL MIXER

Adjustable emulsion percentage 1 - 10%
Max viscosity 400 CPS at 20°
Flow from 80 to 1600 litres/hour
Water pressure from 0.7 to 4 Bar
Self-priming device

The image is indicative of the model, but not binding.

CHARACTERISTICS

- Double oil separation mixing system
- Acetal resin adjustment cylinder
- Acetal resin clamps
- PP piston
- Steel wall bracket supplied
- Aluminium emulsion adjustment nut
- Single-mold acetal resin hydromotor body
- Viton O-Ring seal for improved durability
- Metal-Flex 1.5 M suction hose supplied with stainless steel filter and non-return valve
- Aluminium cover for perfect cylindricity and optimal functioning of the piston body
- Acetal resin graduated scale
- CE mark

MAX FILTER T series

Greater performance, in a small space

The image is indicative of the model, but not binding.

The new series of belt filters contains innovative operating principles that offer **very high yields and simplified management**, in fact they reduce paper consumption by at least 2/3, **taking up approximately half the space of a common paper filter.** They are all made from sturdy galvanised sheet (stainless steel on request) and consist of: frame with inclined perforated slide on which the filtering media rests, fabric dragging and rewinding system, float, pendular scraping for sludge separation.
Filter roll extraction and reset system excluded.

BENEFITS

Continuous purification

They are suitable for the filtration of emulsions and whole oils with a maximum viscosity of 20 cSt at 40°C.

- High levels of filtration
- Low fabric consumption
- Minimum disposal costs
- Compact dimensions

ECO

MAX FILTER M series

Special magnetic disc separator

To be combined with the T SERIES, belt filtration

ET 300

Dimensions 760x1010x510h
Tank capacity 135 Lt/min
Emulsion flow rate 25-60 Lt/min
Whole oil flow rate 10-30 Lt/min

ET 500

Dimensions 960x1310x510h
Tank capacity 240 Lt
Emulsion flow rate 60-100 Lt/min
Whole oil flow rate 30-50 Lt/min

ET 700

Dimensions 1250x1810x510h
Tank capacity 465 Lt
Emulsion flow rate 100-170 Lt/min
Whole oil flow rate 50-85 Lt/min

ET 1000

Dimensions 1620x1810x510h
Tank capacity 610 Lt
Emulsion flow rate 100-250 Lt/min
Whole oil flow rate 50-125 Lt/min

THE **MAX LINES** OIL SEPARATION

MAX oil separator range solve in a simply, advantageous and economic way the problems caused by the presence of oil and waste in the lubricant coolant emulsion of machine tools.

The MAX oil separators extract the used oil and the various processing dregs and channel them into a collection container.

USE

Designed for use in machine tool tanks, the oil separators of the **MAX** line satisfy the oil/water/dregs separation requirements in different fields and sectors:

- **Tool machines**
- **Industrial washing**
- **Heat treatments**
- **Surface treatments**
- **Water treatment**

ECO

MAX range and tailor-made constructions

The range includes oil separators combined with **BELT, DISC, FLOAT TUBE** and for all models, **CUSTOM CONSTRUCTIONS** upon the specific request of customers.

We constantly research performance materials capable of solving problems of oil separation in the presence of aggressive ph and high temperatures

THE ADVANTAGES

- **SAVINGS:** the cleaned emulsion lasts longer and is disposed of in smaller quantities
- **NO MANAGEMENT COST:** the oil separator requires only ordinary cleaning of the mechanical parts and of the oil conveyor
- **HIGHEST PERFORMANCE AND DURATION OF THE PROCESSING FLUIDS**
- **DELAYED WEAR OF MACHINERY**
- **BEST QUALITY OF PRODUCTS BEING WORKED**
- **REDUCTION OF RISK OF IRRITATION FOR THE OPERATOR**
- **BEST WORKING ENVIRONMENT QUALITY** thanks to the reduction of odorous fumes.

INNOVATIVE SYSTEM TO OSSIGENATE
compressed air diffusor

By connecting the compressor air enters the tank and:

• **OXYGENATES THE BATH** to prevent the stagnation and the growth of bacteria

• Moves the liquid and **CHANNEL THE WASTE** towards the belt of the oil skimmer

OIL SEPARATION

MAX BAND 12/24V

Power supply 230V - 50 Hz
Gearmotor 12V - Max power 5.5 W. speed - adjustable through setting potentiometer 3,5V - 12V
Gearmotor 24V - Max power 25 W. speed - adjustable through setting potentiometer 9V - 24V

MAX 1 (300)

Belt width 25/50/100 mm
Depth of extraction 300 mm
Emulsion processing 3-7-10 lt/h
Total height 410 mm
Max length of top part 260 mm
Weight 5-7 kg

MAX 400

Belt width 50/100 mm
Depth of extraction 400 mm
Emulsion processing 7-10 lt/h
Total height 580 mm
Max length of top part 260 mm
Weight 7 kg

MAX 500

Belt width 50/100 mm
Depth of extraction 500 mm
Emulsion processing 7-10 lt/h
Total height 700 mm
Max length of top part 260 mm
Weight 8 kg

MAX 2 (600)

Belt width 50/100 mm
Depth of extraction 600 mm
Emulsion processing 7-10 lt/h
Total height 800 mm
Max length of top part 260 mm
Weight 10-12 kg

CHARACTERISTICS

- Stainless steel, aluminum alloy and PVC
- Polyurethane or PVC belt
- Low voltage planetary gearmotor, isolated and protected from moisture, dust and accidental bumps
- Speed-adjustable trough setting potentiometer
- Automatic belt tensioning
- Compressed air system
- Compressed air system on oil scraper (optional)
- Universal clamp for connection to tank
- LED power indicator light
- Security indicators
- CE mark

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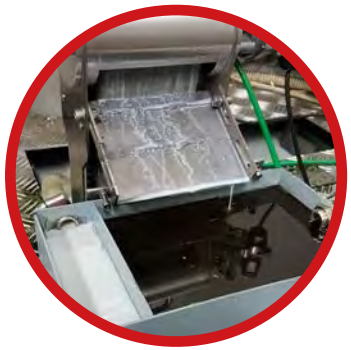

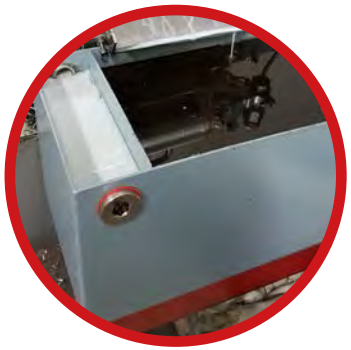

* Compressed air system on oil scraper (optional)

MAX BAND 230V

Power Supply 230V - 50 Hz
Single-phase gearmotor 230V - 50Hz - 5,22 rpm - 0.1 A
On request: gearmotors 230V/400V, 50/60Hz, IP65, cURus certification.

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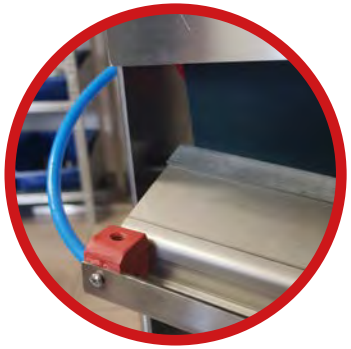
MAX BAND 230V

Depth of extraction 300,400,500,600,1000 mm
Emulsion processing 5-7-10 lt/h
Total height According to the depth of extraction
Max length of top part 260 mm
Weight 5-15 kg

CHARACTERISTICS

- Stainless steel, aluminum alloy and PVC
- Polyurethane or PVC belt
- Single-phase gearmotor with power cable without plug
- Wider motor body, free from tie rods to facilitate the passage of any muddy substances.
- Universal clamp for connection to tank
- Automatic belt tensioning
- Compressed air system
- Compressed air system on oil scraper (optional)
- ON/OFF switch
- Handle for easy transport
- Security indicators - CE mark



* Compressed air system on oil scraper (optional)

EasyMAX

Entry-level product

Power supply 230V - 50Hz
Gearmotor 12V - 5.5 W
speed - adjustable through setting potentiometer 3,5V –12V

EASYMAX

Depth of extraction 300 mm
Belt width 25 mm
Emulsion processing 3 lt/h
Total height 410 mm
Motor dimensions 80x170 mm
Weight 5 kg

The image is indicative of the model, but not binding.

CHARACTERISTICS

- Simplified frame in stainless steel, aluminium alloy and PVC
- Polyurethane belt
- Low voltage planetary gearmotor, isolated and protected from moisture, dust and accidental bumps
- 7 adjustable-speed through setting potentiometer
- Universal clamp for connection to tank
- Handle for easy transport
- LED power indicator light
- Security indicators - CE mark

MAX DISC

Power Supply
Single-phase gearmotor 230V - 50Hz - 5,22 rpm - 0.1A
On request: Gearmotors 230V/400V, 50/60Hz, IP65, cURus certification.

MAX DISC 300

Disc diameter 320 mm
Depth of extraction 115 mm circa
Emulsion processing 3-5 lt/h
Total height 350 mm
Total length 410 mm
Total width including oil scraper 284 mm
Weight 6 kg

MAX DISC 500

Disc diameter 500 mm
Depth of extraction 220 mm circa
Emulsion processing 5-7 lt/h
Total height 550 mm
Total length 610 mm
Total width including oil scraper 284 mm
Weight 10 kg

The image is indicative of the model, but not binding.

CHARACTERISTICS

- Stainless steel frame
- Plexiglass disc or stainless steel disc
- Single-phase gearmotor with power cable without plug
- Watertight box
- Can be attached to the edges of the tank through specific screws
- Compressed air system
- Compressed air system on oil scraper (optional)
- ON/OFF switch
- Security indicators - CE mark

MAX RING

Power Supply 230V - 50 Hz
Single-phase gearmotor 230V - 50Hz - 20,2 rpm - 0.1A

CHARACTERISTICS

- Central body of stainless steel, aluminium and PVC
- Foam rubber rod
- Single-phase gearmotor with power cable without plug
- Watertight box
- ON/OFF switch
- Connection to tank through special fixing screws
- Handle for easy transport
- Security indicators - CE mark

MAX RING

Rod diameter 15 mm
Length of rod standard 2000 mm, (other length on request)
Emulsion processing 3 lt/h
Stainless steel frame height 250 mm
Stainless steel frame length 200 mm
Total width including motor 180 mm
Weight 5 kg

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MAXI RING

Power supply
Three-phase gearmotor 380/400V - 50/60Hz - 20 rpm - 0.43 A - IP55
On request: Gearmotors 230V/400V, 50/60Hz, IP65, cURus certification.

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MAXI RING

Rod diameter 20 mm
Length of rod On request
Emulsion processing 10 lt/h
Stainless steel frame height 300 mm
Stainless steel frame lenght 300 mm
Total width with oil scraper 300 mm
Total width without oil scraper 250 mm
Width of oil scraper 85 mm
Weight 10 kg

CHARACTERISTICS

- Central body of stainless steel, aluminium and PVC
- Foam rubber rod
- Three-phase gearmotor with power cable without plug
- ON/OFF switch
- Connection to tank through special fixing screws
- Handle for easy transport
- Security indicators - CE mark

Double **MAXI RING**

Power supply
Three-phase gearmotor 380/400V - 50/60Hz - 20 rpm - 0.43 A - IP55
On request: Gearmotors 230V/400V, 50/60Hz, IP65, cURus certification.

Double MAXI RING

Rod diameter 20 mm
Length of rod On request
Emulsion processing 10 lt/h
Stainless steel frame hight 300 mm
Stainless steel frame length 300 mm
Total width with oil scraper 300 mm
Total width without oil scraper 250 mm
Width of oil scraper 105 mm
Weight 12 kg

The image is indicative of the model, but not binding.

CHARACTERISTICS

- Central body of stainless steel, aluminium and PVC
- Double foam rubber rod
- Three-phase gearmotor with power cable without plug
- ON/OFF switch
- Connection to tank through special fixing screws
- Handle for easy transport
- Security indicators - CE mark

MAX COALESCENT

Purification efficiency for the entire production cycle

How does separation work? Thanks to an innovative coalescence filter, suitably inclined and positioned inside the machine, the separation of oily substances and hydrocarbons from water or emulsions is obtained.

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BENEFITS: COALESCENCE FILTER

The filter specifically designed for these models is in alveolar propylene, with a density of 0.9 g/cm3 and a melting point at 165°C. The oil settling principle is optimised by the coalescence process and allows filtration up to 2,700 l/h.

- High tensile strength
- Low density
- High thermal resistance
- High abrasion resistance

DC6MX

Small oil separator
Mobile/wheeled system
Ideal for multiple tanks
up to 300 Lt of capacity
Maximum flow rate 600 l/h
Dimensions 500x350x850h

DC18MX

Standard oil separator
Mobile/wheeled system
Ideal for multiple tanks
up to 3000 litres of capacity
Maximum flow 1800 l/h
Dimensions 700x450x1120h

BENEFITS: CONTINUOUS PURIFICATION

- **Lower cost of disposal**
  These specific products are used to evacuate only unwanted oils, thereby minimising waste volumes; these oils, considered used, are collected free of charge by COOU (Mandatory Consortium for Used Oils);

- **Reduction of bacterial loads and unpleasant smells**
  Continuous treatment of the lubricant-coolant allows its recirculation and oxygenation, with the advantage of significantly reducing the colonies of anaerobic bacteria which, together with stagnation, cause dermatitis and unpleasant odours;

- **Greater yield of the cooling lubricant**
  The treated coolant has the following advantages: it maintains it qualities for longer; it avoids replacement of the entire quantity; it reduces the incrustation of pipes and feed nozzles; it improves pump efficiency; it keeps the work area cleaner with a lower incidence of maintenance costs;

- **Less toxicity of evaporations**
  The filtration system used in our machinery is used to return an emulsion containing oils and hydrocarbons that are generally in quantities not exceeding 10 parts per million (ppm). In fact, the equipment removes not only the oil evident on the surface but also that mixed in with the liquid, thus avoiding a situation whereby the latter, coming into contact with the work area, could generate unhealthy vapours.

MAX SPECIAL BAND 1000

The image is indicative of the model, but not binding.

Power Supply 230V - 50Hz
Single-phase gearmotor 230V - 50Hz - 5,22 rpm - 0.1 A
On request: Gearmotors230V/400V, 50/60Hz, IP65, cURus certification

MAX SPECIAL BAND 1000

Depth of extraction 1000 mm
Belt width 100 mm
Emulsion processing 10 lt/h
Total height 1200 mm
Max width of the top part 340 mm
Weight 12 kg

CHARACTERISTICS

- Stainless steel
- Polyurethane belt
- Single-phase gearmotor with power cable without plug
- Wider motor body, free from tie rods to facilitate the passage of any muddy substances
- Universal clamp for connection to tank
- Automatic belt tensioning
- Compressed air system
- Compressed air system on oil scraper (optional)
- ON/OFF switch
- Handle for easy transport
- Security indicators - CE mark

ECO

MAX SPECIAL BAND 1500

Power supply Three-phase gearmotor 380/400V - 50/60 Hz - 20 rpm - 0.43A - IP55
On request: Gearmotors 230V/400V, 50/60Hz, IP65, cURus certification

MAX SPECIAL BAND 1500-100

Depth of extraction 1500 mm
Belt width 100 mm
Emulsion processinge 15 lt/h
Total height 1840 mm
Max width of the top part 400 mm
Weight 20 Kg

MAX SPECIAL BAND 1500-200

Depth of extraction 1500 mm
Belt width 200 mm
Emulsion processing 20 lt/h
Total height 1840 mm
Max width of the top part 480 mm
Weight 20 Kg

CHARACTERISTICS

- Stainless steel, aluminum alloy and PVC
- Polyurethane or PVC belt
- Three-phase gearmotor with power cable without plug
- Universal clamp for connection to tank
- Automatic belt tensioning
- Compressed air system
- ON/OFF switch
- Security indicators
- CE mark

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SPECIAL PROJECTS

MAX UNIT VM1

Emulsions processing capacity: 1000 lt

CHARACTERISTICS

- Emulsion collecting tank with different dimensions and capacities
- Varnished iron collecting tank for possible overflowing liquids, with zinc-coated grill and exhaust valve
- Oil separator MAX SPECIAL 1000-100 (draught 1000 mm - belt width100 mm) or other models suitable for the tank capacity
- Compressed air system
- Fluid Control
- Water pump
- ON/OFF switch
- Security indicators - CE Mark


MAX
IL DISOLEATORE
OIL SEPARATOR
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www.effecimeccanica.com

MAX UNIT GVM 3Q

The image is indicative of the model, but not binding.

Emulsions processing capacity: 3000 lt

CHARACTERISTICS

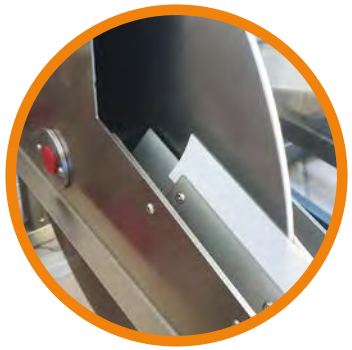
- Stainless steel frame
- Stainless steel collecting tank for possible overflowing liquids, with zinc-coated grill
- Ball valves for liquid dumping
- Pressure regulator with filter
- Oil skimmer MAX DISC 800/stainless steel or other models suitable for the tank capacity
- Fluid Control
- Water pump
- ON/OFF switch
- Security indicators - CE Mark

MAX DISC 800 INOX

Power supply
Gearmotors 230V/400V, 50/60Hz, IP65, cURus certification

CHARACTERISTICS

- Stainless steel frame
- Stainless steel disc d.800 mm
- Three-phase motor with reduced obstruction
- Power cable without plug
- Watertight box
- Speed reducer
- Grill to protect the disc
- Support legs (on request)
- Security indicators - CE Mark



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STIRRER

Suitable for large tanks. **It keeps the emulsion in motion and conveys it to the oil separator belt, facilitating its recovery.**

STANDARD

Application of machine tool tanks

Gearmotor 12V - 50 Hz + power supply unit
Pole length 485 mm
Blade Width 250 mm

STANDARD PLUS

Chiller application, machine tool tanks

Gearmotor 230V/380V - 50/60 Hz - IP65,
(also available with certifications for the American market)
Pole length on request
Blade Width 250 mm (customized, on request)

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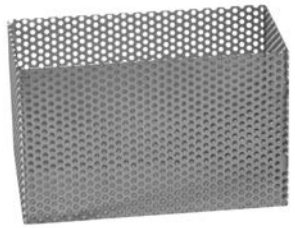

CHIP FILTER

Steel filter to be placed on the bottom of the collection tank, at the base of the oil separator device.

It is used to filter out any chips present in the emulsions

FLOATING

Level meter for liquids connectable to the oil separator gear motor.

It stops the device when the quantity of oil recovered reaches the safety limits.

PEDESTAL

Height adjustable steel structure, to be used where it is not possible to connect with universal clamp.

It facilitates the positioning of the oil separator in various tanks of different heights.

DIGITAL PROGRAMMER

It allows the setting of a pause-work program. Control panel supplied with box and digital clock, 12/24V motor programmer and 230V single phase. Complete with certification.

SOCKET TIMER with digital timer

Allows the setting, easily and economically, of a work break for the oil separator.
Power supply 230V - 50 Hz

SEPARATION TANK oil water

The oil separator together with the oil removes the emulsion part from the tank. This tank consists of two compartments and separates the oil by specific weight, recovering the emulsion which can be feedback into the machine tool tank and reused in the work.

MAX
THE OIL SKIMMING EXPERTS

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