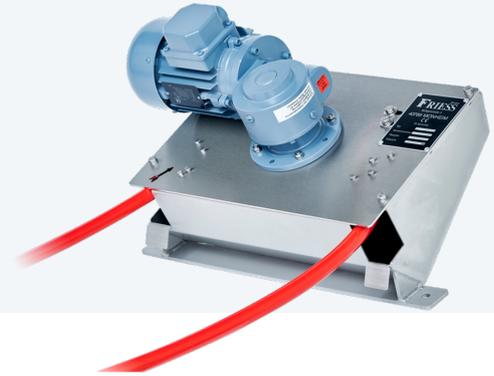


Oil Skimmer

Model W40

The Friess Oil Skimmer Model W40 removes floating oils from emulsion, wash water or waste water



Advantages

- Rapid ROI due to increased service life of emulsion and degreasing baths
- Minimal maintenance required thanks to robust design and high-quality, durable materials
- The oil is drawn off over a large area by the free floating oil collector tube
- Compensated level fluctuations in the tank
- Low assembly effort, as prefabricated assembly systems are available for almost all applications

Technical Data

Removal capacity	10 - 230 l/h
Surface of the tank	min. 800 mm x 800 mm
Installation height above liquid	max. 600 mm
Operating temperature	- 20 °C to +95 °C
Drive power	0,12 kW
Voltage	400 V
Dimensions L x B x H	250 x 420 x 323 mm

Applications

- Wash water
- Cooling lubricant
- Cooling water
- Waste water & rain water
- Pickling baths

1. Construction Principle

An endless, smooth oil collection tube floats freely on the surface of the liquid. Oils and greases, as well as dirt particles bound in them, adhere to the outside of the oil collector tube. This is pulled through special, highly abrasion-resistant ceramic wipers in the oil skimmer. In the process, the oil is stripped off and flows into the oil collection pan below the oil skimmer. From there, the oil is fed into a collection tank.

2. Scope of Application and Special Features

The oil skimmer model W40 removes oil from a wide variety of pools. Whether round or square, open or closed, the oil skimmer model W40 always fits. The oil collector tube can be routed along the entire length of the basin. It creates a rotating motion on the entire liquid surface and reliably removes oil and grease floating even in the corners. The Model W40 oil skimmer is specially designed for continuous operation in harsh industrial environments. The oil skimmer is made of stainless steel. Drive wheel and scraper are equipped with highly abrasion-resistant ceramic components. This guarantees long service life even when used on heavily contaminated cooling lubricants or degreasing baths. The Model W40 oil skimmer can be adapted to a wide variety of operating conditions using prefabricated mounting systems.



Ceramic scraper and W40 in operation for waste water treatment

3. Options

W40 Oil Skimmer with Speed Control

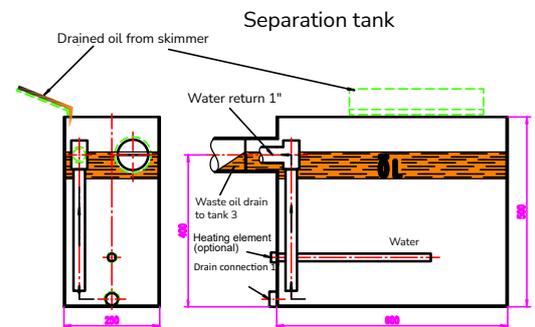
The removal rate of the W40 oil skimmer can be optimally adjusted to the actual amount of floating oil by means of an electronic speed controller. The speed of the drive motor can be continuously adjusted between 100 % and 50 % of the nominal speed. Particularly in the case of low amounts of tramp oil, this significantly reduces the quantity of used fluids to be disposed of and cuts disposal costs.



Oil skimmer with speed control

Oil Skimmer W40 with Oil Separator

Especially in degreasing systems, the bath surface must be free of floating oils to ensure optimum cleanliness of the surfaces of the parts to be washed. The oil skimmer must therefore constantly remove the floating oil phase. Since the floating oil layer is often very thin, a certain amount of washing water is removed with the oil. The washing water settles in the additional separator and is returned to the working tank, while the oil drains off to a collection tank. The discharge of washing water and the amount of used oil to be disposed of is reduced.



Oil skimmer with oil separator

Oil Skimmer W40 for the Removal of Shavings

Very small shavings and particles are produced during the machining of cast iron. Despite the high specific gravity, many iron and graphite particles float up as black sludge on the surface of the emulsion. The Model W40 oil skimmer with oil collector tube with built-in magnets can easily remove this floating ferrous sludge from the surface of the emulsion. Since the oil skimmer's scrapers are made of ceramic and all other components are made of non-magnetic stainless steel, the ferrous sludge from the scrapers falls easily into the collection container located below the oil skimmer.



Oil skimmer with built-in magnets

Oil Skimmer W40 for Use on Aggressive Fluids

The standard version of the oil skimmer model W40 is made of corrosion-resistant stainless steel 1.4301 (AISI 304) and ceramic. Especially for the food and chemical industry the oil skimmer model W40 is available in materials like 1.4571 or 1.4404 (AISI 316). For use on pickling baths or fluids containing chloride, the oil skimmer model W40 is also offered as an all-plastic version.



Oil skimmer plastic version

Oil Skimmer W40 with Open Drain

Often greases and oils, mixed with chips and dirt particles, as well as other highly sticky substances float on the liquid surface. These sticky oils and greases are easily removed by the oil skimmer, but the drain hose often clogs after a short period of use. To remove these sticky, non-flowing contaminants quickly and easily, the Model W40 oil skimmer can be used with an open-bottom console with drain chute. The sludge falls easily into a collection container.

Oil Skimmer Model W40 Atex Version

Especially in refineries and in the chemical industry, oil skimmers must also be used in potentially explosive atmospheres. The oil skimmer model W40 can be supplied in explosion-proof design with ATEX certificate. All parts of the oil skimmer including motor, gearbox, base plate, drive wheel, oil collection tube and so on have been checked in an elaborate approval procedure. An explosion protection certificate that complies with European regulations is available.

For more information, consultation and ordering:

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