

# WASTX OIL

With the WASTX Oil of the Biofabrik it is possible to recycle liquid residues such as waste oil, used diesel, fuel oil residues, kerosene and shipping oils decentrally and highly profitably.

Known from:

**Umwelt  
Magazin**

**EUWID**

**HYDROCARBON  
ENGINEERING**

**RECYCLING  
magazin**



The WASTX Oil processes up to 3,000 liters per day and module. For higher throughput rates, the modules can simply be connected parallel.

## ➤ **Economical and ecological**

Problematic waste products become valuable products: The recycled oil can be used by the company itself or sold at a profit.

## ➤ **Processes up to 3,000 liters of wasted oil per day**

A plant with a floor space of three euro-pallets is capable of processing 3,000 liters of waste containing mineral oil.

## ➤ **Production of clean oils and fuels**

Waste disposal and industrial companies, cities and municipalities work more economically and can produce their own recycling oils and fuels.

## ➤ **Only 0.35 kWh per liter**

The plant requires only about 0.35 kWh to process one liter of mineral oil waste.

## ➤ **Compact and highly effective**

The WASTX Oil requires only little space, operates autonomously and has an efficiency of up to 90%. Residual materials can also be sold.

## ➤ **Decentralized and fully automatic**

The plants are located where waste oil is produced which eliminates high transport costs. The WASTX Oil operates fully automatically and is remotely monitored.



<https://vimeo.com/444469977>

# POSSIBLE USE CASES

Worldwide, 25 million tons of waste oil are produced every year. This corresponds to a chain of tankers strung together from the North Pole to the South Pole. Even in countries where there is an infrastructure for the disposal of old oils, these valuable oils are usually simply used as substitute fuel instead of being returned to the material cycle.

## Waste Oil Disposer

The WASTX OIL makes your work easier and more environmentally friendly.

## Tank Storage

The WASTX OIL plant is used wherever waste oil accumulates.

## Industrial Companies

The electricity generated by WASTX OIL can be used to power facilities

## Airlines

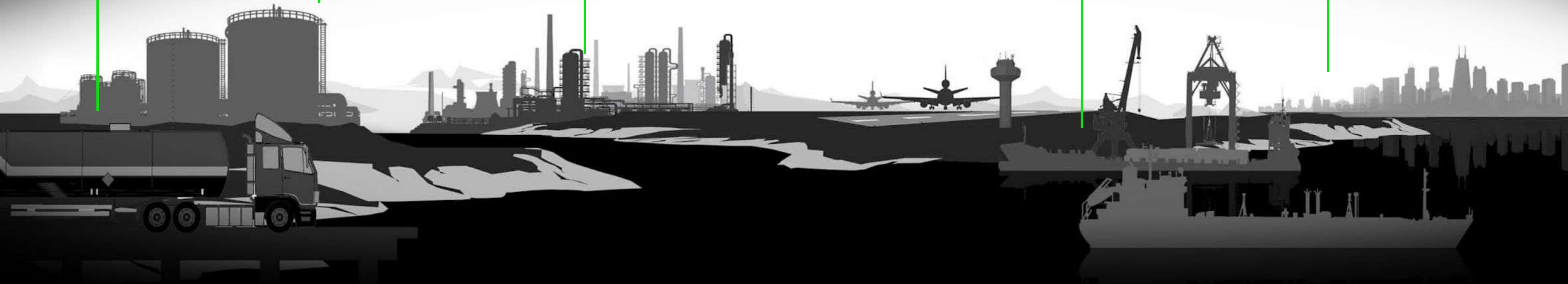
The WASTX OIL purifies dirty kerosene and oil mixes

## Ships & Ports

The WASTX OIL plant may also be installed on ocean-going ships.

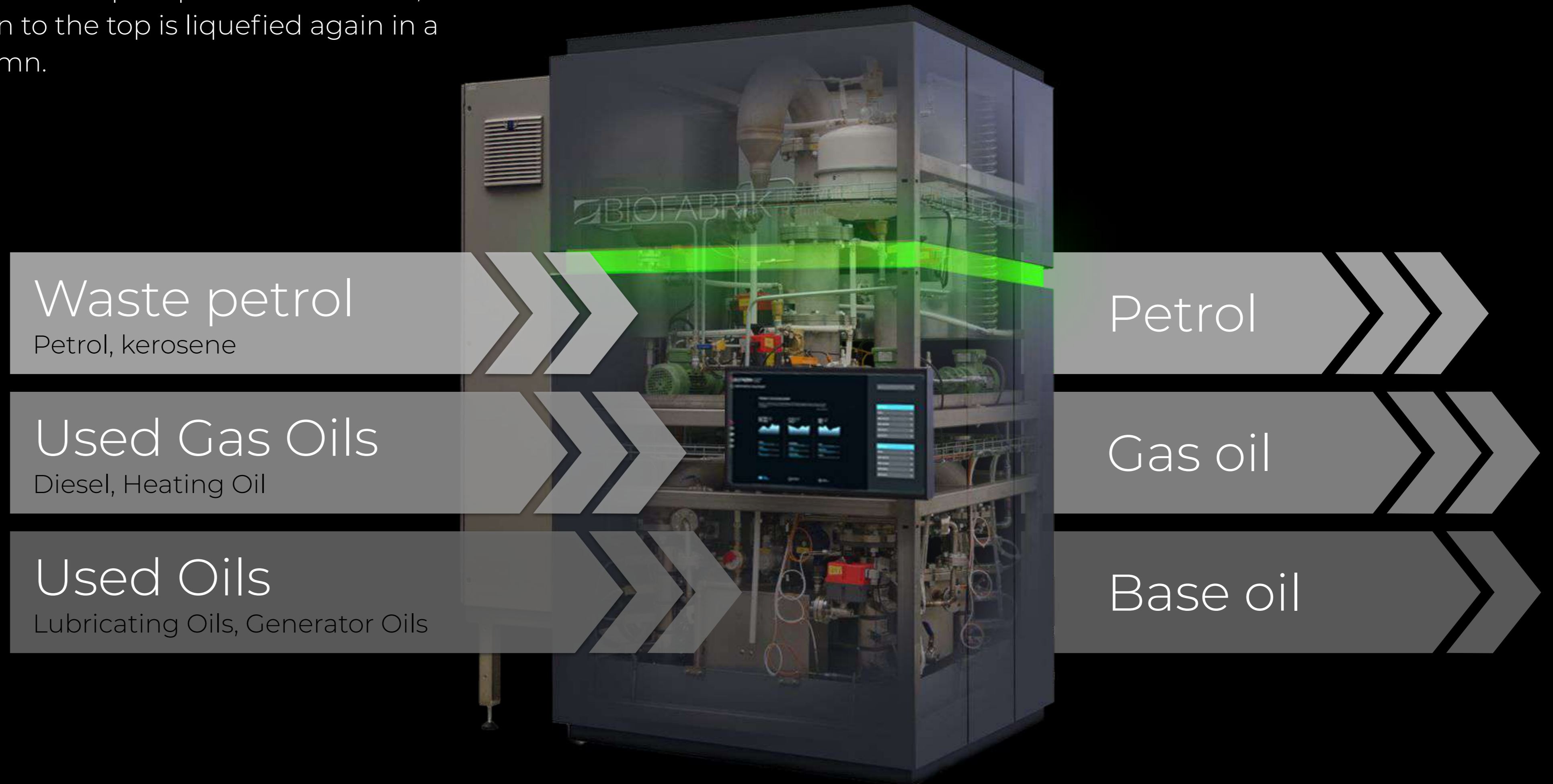
## Cities & Municipalities

WASTX OIL makes your oil recycling work easier and more environmentally friendly.



# INPUT AND OUTPUT OF THE WASTX OIL

In the WASTX Oil reactor (patent pending), oil-containing residues become gaseous within milliseconds. Contaminants contained in the oil precipitate downwards, while the gas that has risen to the top is liquefied again in a special condensation column.



# PROCESS-STEPS

## Input-Material

### 1 Storage container / contaminated substrates

A gear pump conveys the contaminated fuel oil/diesel as well as waste oil\* from tanks or IBCs into the inlet pipe of the four parallel reactors, where it is brought to process temperature.

### 2 Evaporation reactors

The inserted substrate is indirectly heated via a heat transfer medium, heated to a temperature of approx. 300°C, and for the most part transferred into the gas phase.

### 4 Separator

In the separator, all residual materials which are not transferred to the gas phase at boiling temperature are collected and discharged. They are properly stored and disposed of.

### 3 Condensation column

In the subsequent column, the gas phase is purified and condensed back into the liquid phase.

### 5 Cooling system

The condensation heat is extracted via condensers and coolers and released into the ambient air. This reliably returns all vapours to their liquid state. There are no gaseous end products.

### 7 Generator

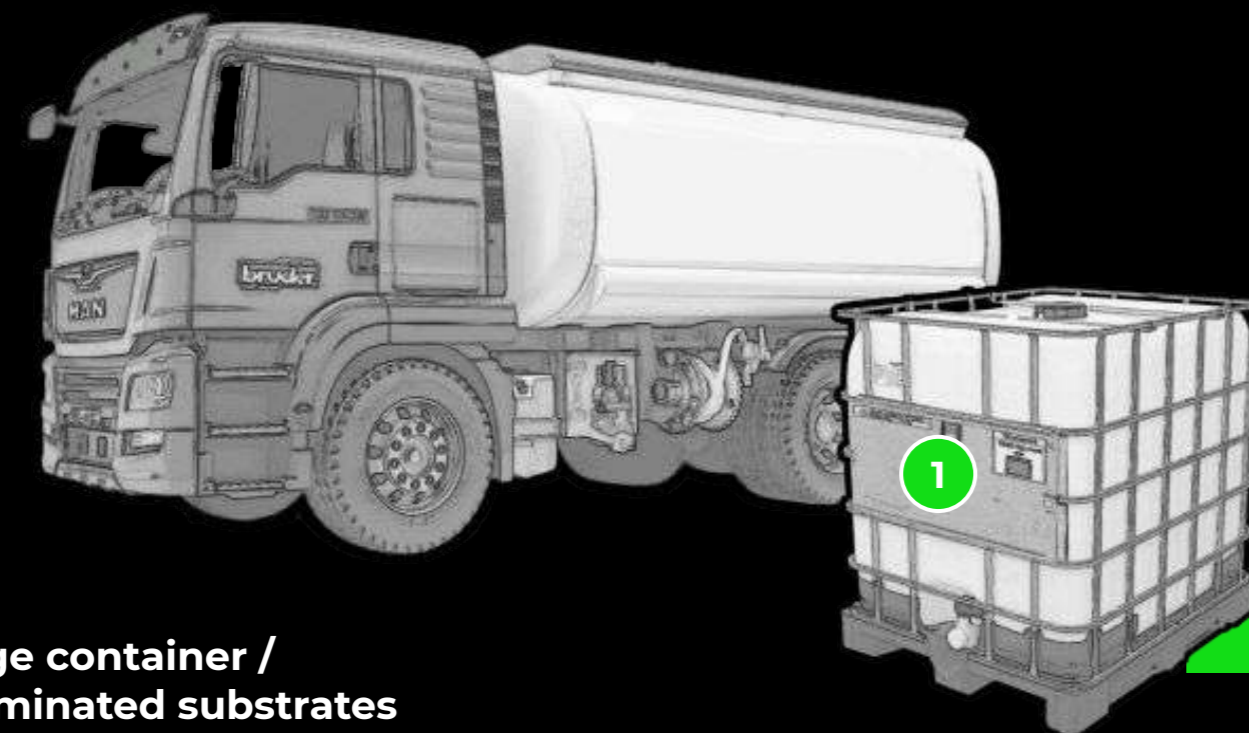
Optionally, the final product can be partially or completely used for process energy generation (or beyond) when converted to electricity directly at the site.

### 8 Monitoring & Control

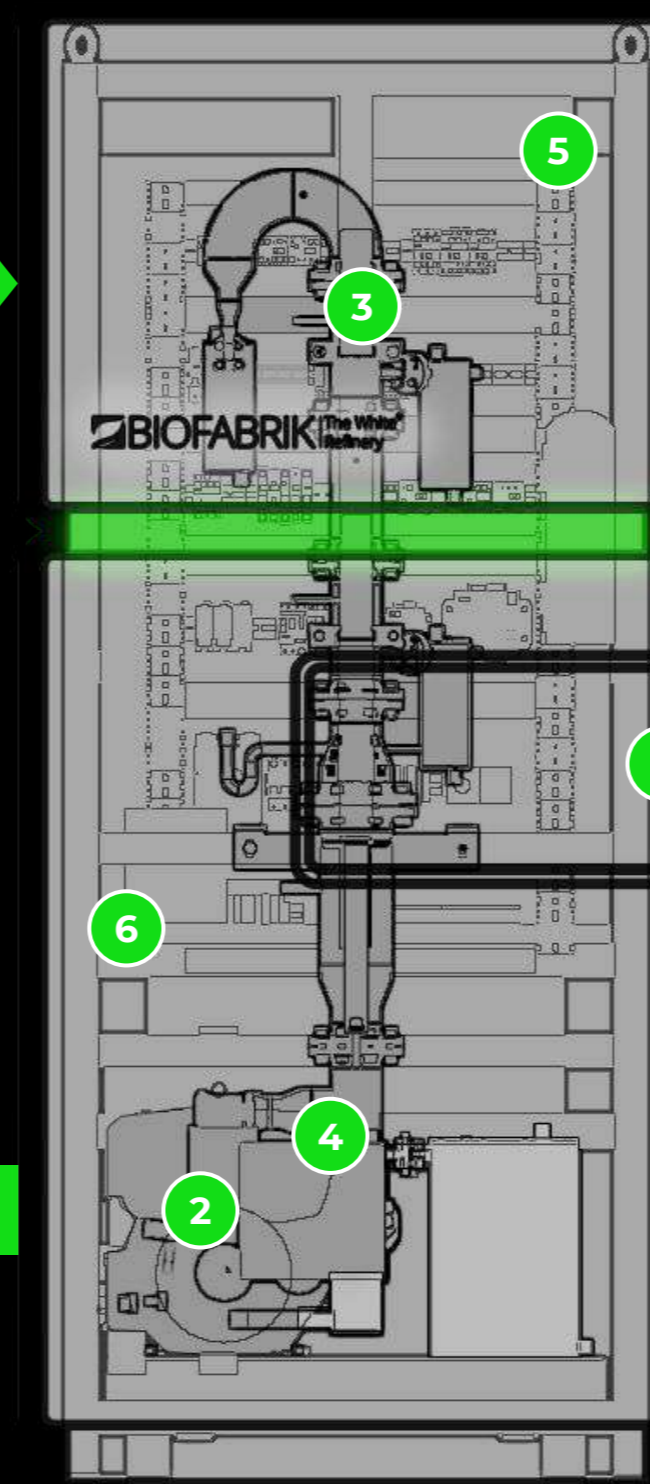
The entire system is highly automated and controlled. The system can be monitored and, if necessary, managed by the operator on site or remotely via specified interfaces.

### 6 Vacuum system

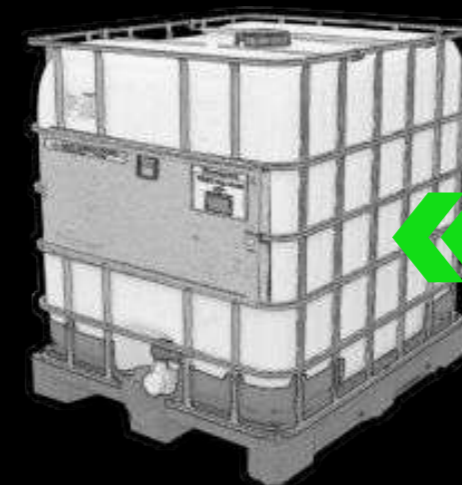
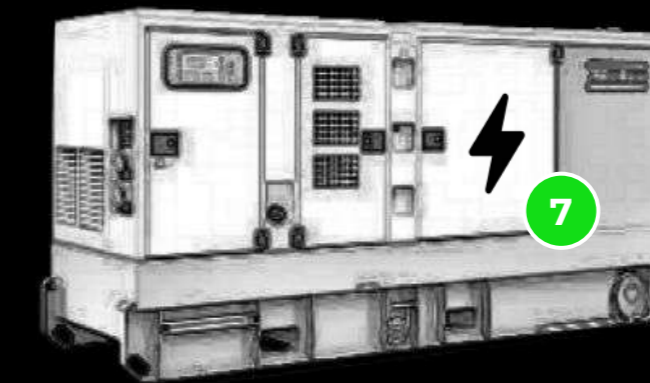
With an optional vacuum system, the process temperature can be lowered, thus enabling a gentle treatment of the oils.



INPUT

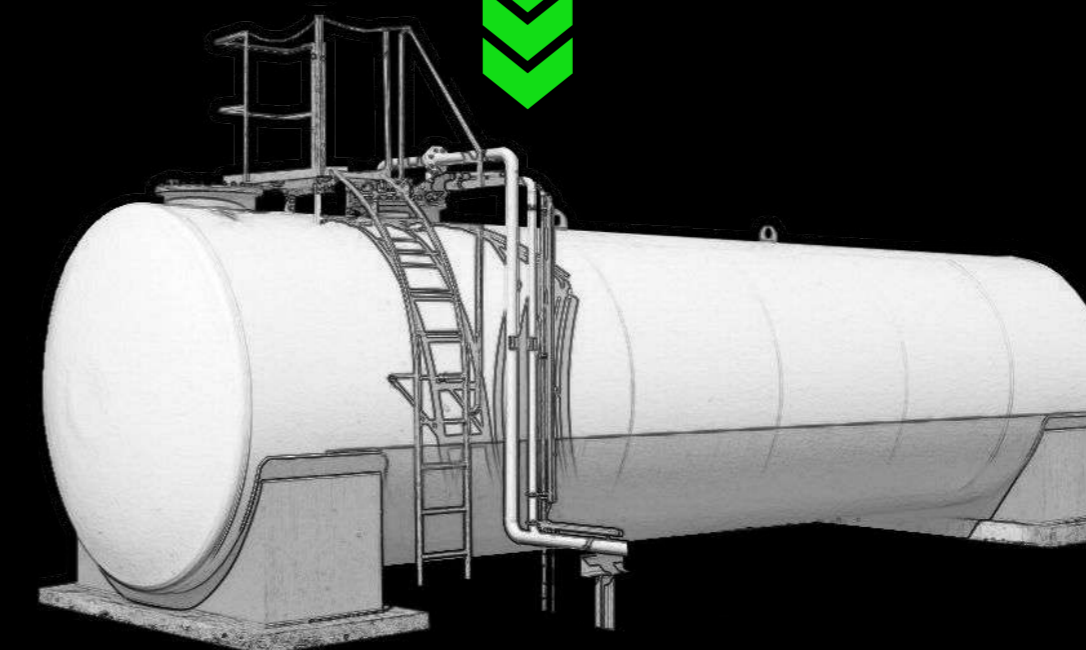


CONDENSATE OUTPUT

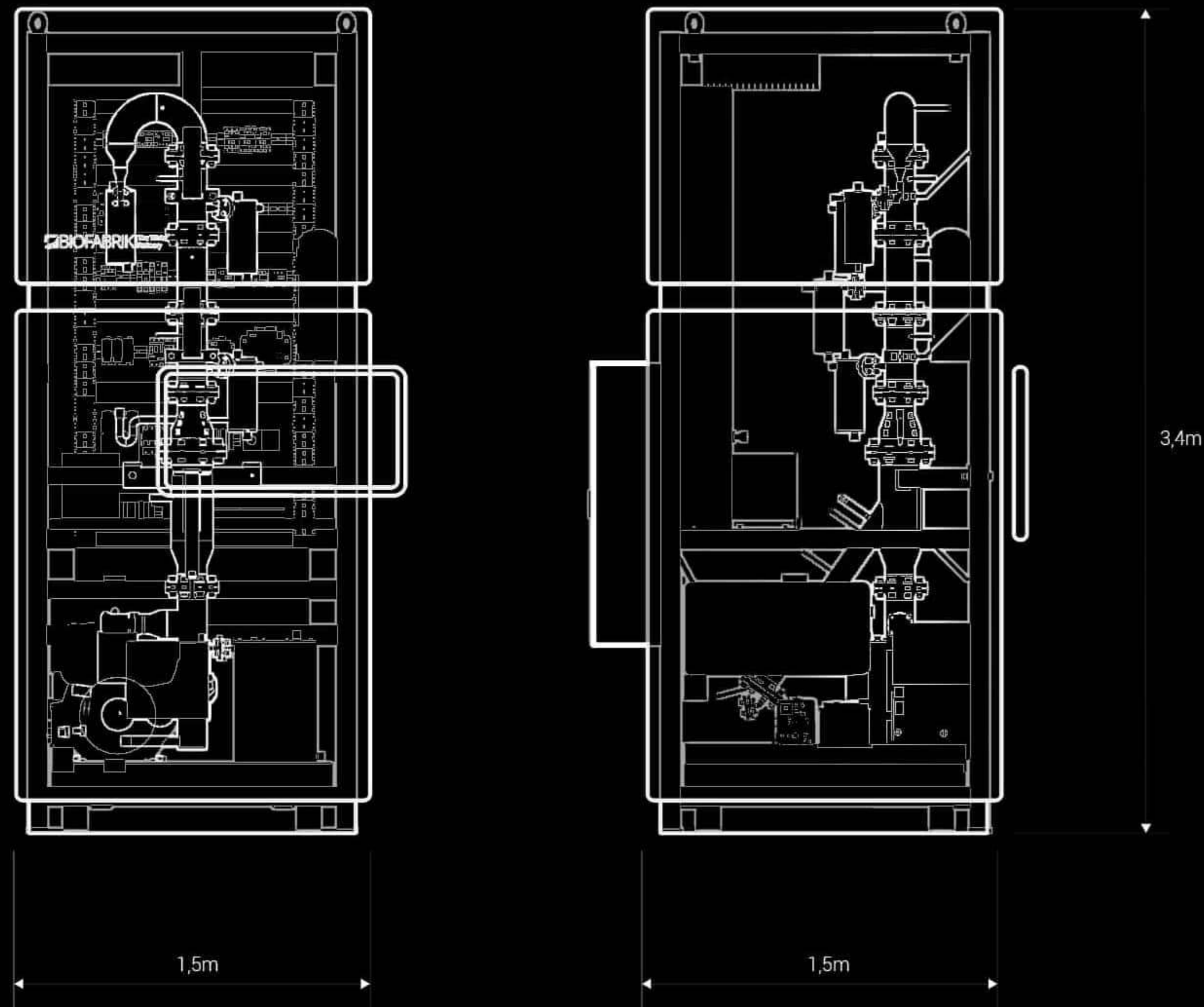


RESIDUE

WASTX OIL



Use or  
Commercialization



## TECHNICAL DATA (EXTRACT)

- Welding frame with drip tray
- Feed system with gear pumps
- Evaporation reactors made of stainless steel with 5 heating zones and high temperature insulation
- Separator and residue discharge for gravity separation of the residues from the oil vapors
- Condensation column with 3 shots and overhead steam tube
- Cooling system with 4 product coolers
- Filter and discharge system with 3 product containers, discharge pumps and cartridge filter
- Vacuum lock system for input and output streams
- Siemens control system with extensive sensor and safety technology
- 19" touch display

## RECYCLABLE MATERIALS

| ASN    | Inputmaterial   |
|--------|---|
| 130701 | Contaminated diesel or fuel oil   |
| 130703 | Other fuels including mixtures  |
| 130110 | Non-chlorinated hydraulic oils on mineral oil basis                     |
| 130111 | Synthetic hydraulic oils  |
| 130112 | Easily biodegradable hydraulic oils                                     |
| 130113 | Other hydraulic oils  |
| 130205 | Non-chlorinated machine, gear and lubricating oils on mineral oil basis |
| 130206 | Synthetic machine, gear and lubricating oils based on mineral oil       |
| 130207 | Easily biodegradable machine, gear and lubricating oils                 |
| 130208 | Other engine, gear and lubricating oils                                 |
| 130307 | Non-chlorinated mineral oil-based insulating and heat transfer oils     |
| 130308 | Synthetic insulating and heat transfer oils                             |

# CONTÁCTANOS

Para más información o cualquier pregunta,  
no dude en contactar con nosotros

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