

Convert old fuel oil tanks into modern rainwater storage tanks when replacing heating systems.

Continue to use instead of decommissioning
Retrofit your old heating oil tank with AFRISO inner linings at low cost - your specialised company will be happy to advise you.



RAINWATER HARVESTING

Continue to use old fuel oil tanks, reduce drinking water consumption, protect the environment and save money.

Sustainable re-use

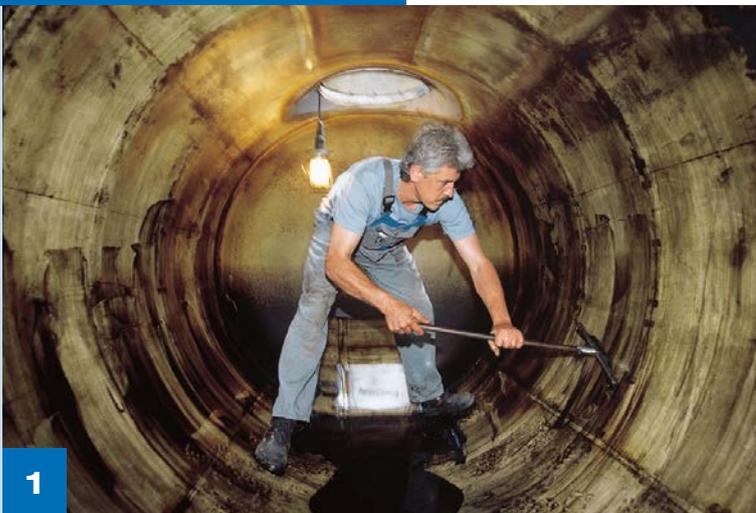
If you are faced with the decision to replace your heating system, it is advisable to carefully scrutinise all options carefully and, in the interests of sustainability, also examine the potential re-use of existing system components. For example, when decommissioning a heating oil storage tank, owners already invest in an essential step for conversion to a rainwater storage tank with the mandatory tank cleaning. So why not take the next step straight away and benefit from free rainwater for watering the garden, flushing the toilet, doing the laundry or cleaning?

Precious and scarce resource

Drinking water is a limited resource, and clean drinking water is more and more difficult to provide in many regions. The price of drinking water has increased by approx. 350 % since 1988. And the price is expected to continue to rise exponentially. On the other hand, expensive drinking water is still wasted in many situations. According to the German Association of Energy and Water Industries (BDEW), the daily water consumption of a person in Germany in 2019 was 125 litres*. Depending on the system layout, up to 45 % and thus more than 55 litres of domestic drinking water consumption can be saved today using rainwater. The old fuel oil tank is the free basis for your customised rainwater harvesting system.

* Source: www.bdew.de, Daten und Grafiken: „Entwicklung personenbezogenen Wassergebrauches“ and „Trinkwasserverwendung im Haushalt“ of November 2, 2020.

This is how easy it is:



1

The old fuel oil tank is drained, cleaned and corrosion-inspected by the specialised tank protection company



2

Depending on the condition of the tank, a fleece layer is placed on the tank floor, for example, for impact protection.



There are many good reasons for rainwater harvesting

- + Environmental consciousness and sustainability:** Preserve the precious resource of drinking water by using rainwater for garden irrigation
- + Good for the plants:** Rainwater is „soft“ and free from minerals and, therefore, better suited for garden irrigation than drinking water
- + Reduction of waste:** Re-use of the old tank instead of decommissioning or removal
- + Cost savings:** „Split wastewater fees“ of the municipalities and your storage and consumption of rainwater have a direct effect on the amount of the wastewater
- + Investment in the future:** The AFRISO inner lining and a submersible pump provide, for example, for cost-effective garden irrigation. The more rainwater you use, the faster your return on invest resulting from savings of expensive drinking water



3

Then the rainwater lining is fitted in the steel tank and inflated by means of a blower; if necessary, the final fit is achieved by means of a vacuum pump. During inflation, the magnets lock against the inner wall and then permanently hold the inner lining to the tank wall



4

The fit of the PVC lining is checked and then it is fastened in the man-hole by means of a fastening ring



5

Done. The tank is ready for storing rainwater immediately after the piping connections have been installed.

The inner lining AR-SM turns the old fuel oil tank into a modern rainwater storage tank



on material and workmanship of inner tank lining

Advantages - your benefits

- Ideal all standard, cylindrical steel tanks with a capacity from 3,000 to 50,000 litres
- Custom-fit plastic inner lining, accurately factory-tailored to the specifications of your tank protection specialist company
- Extremely robust and durable PVC film
- Strong neodymium magnets welded into the film ensure fast installation and reliable fixation
- No subsequent costs due to additional devices or power: The magnets enable operation of the inner lining without pressure or power

Description

The AFRISO rainwater inner lining AR-SM with magnets allows owners to convert a decommissioned steel tank into a rainwater storage tank with very little effort. The rainwater inner lining AR-SM is an extremely durable PVC lining with flat, round, extremely powerful neodymium magnets welded into lateral and top areas. The lining is reliably held at the inner wall by the magnets. Additional equipment such as vacuum type leak detectors, which are used in conventional solutions, are not required for the operation of this rainwater inner lining – which means there are no subsequent costs for power or maintenance.

Technical specifications

Media

Rainwater

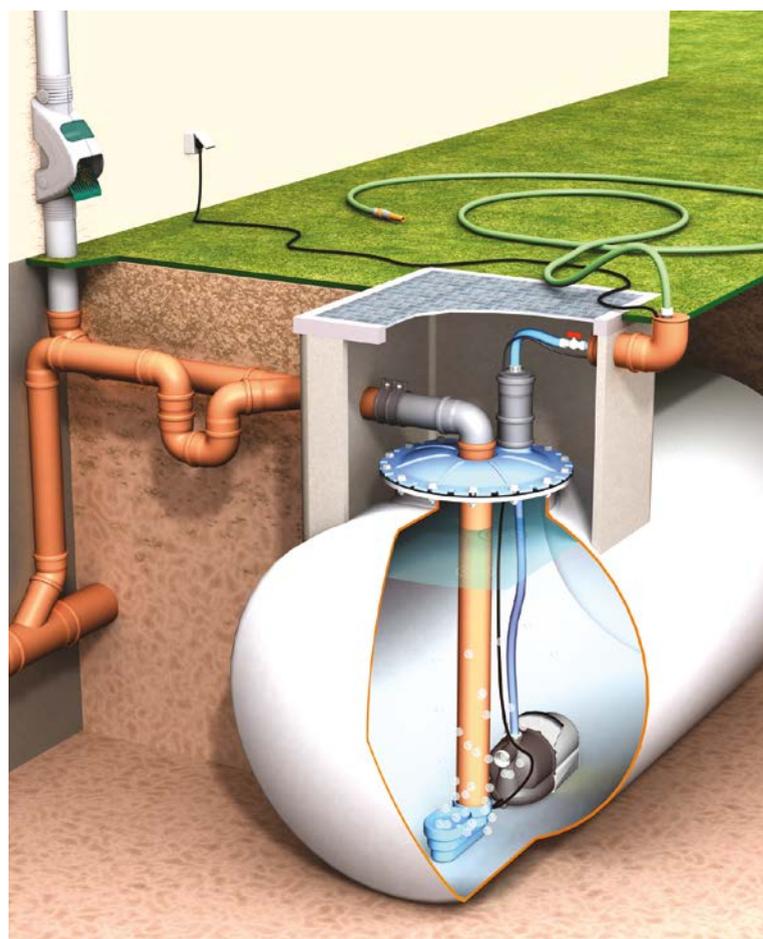
Film

Plastic film Sikaplan® WP5140-08 black, thickness 0.8 mm

Scope of delivery

Rainwater inner lining AR-SM, for closed tanks, with all neodymium magnets welded into the film in the lateral and top areas, with manhole collar for the standard fastening ring.

Example of a rainwater harvesting system for garden irrigation, consisting of a converted fuel oil tank with rainwater inner lining AR-SM, downpipe filter, cartridge filter, manhole cover, calmed inlet and submersible pump.



Accessories for rainwater harvesting

RENA backup controller kit for supplying mains water to the rainwater tank if no domestic water station used

- 1 RENA
- 2 Level probe
- 3 Solenoid valve



Level indicators for remote indication

- 1 Unitel for water (pneumatic)
- 2 DTA 10 / 20 E (electro-pneumatic, battery or mains connection)
- 3 DIT 02 (electronic, battery-operated)



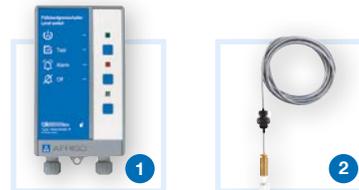
When DTA 20 E is used, the rainwater tank can be conveniently monitored with the AFRISO smart home system. Push messages inform on the current level and history diagrams provide information on the amount of water used.

More details at
www.afrisohome.com



Alarm units for monitoring the drinking water backup or backflow from the drain

- 1 Maximelder-R
- 2 Probe Maximelder



Accessories

- 1 Calmed inlet
Supplies rainwater to the tank without turbulence and swirling up of dirt
- 2 Pipe couplers
For simple mounting of filter and inlet pipe
- 3 Plastic manhole cover Ø 500 mm



Rainwater filters

- 1 Downpipe filter Rainus
For coarse filtration and mounting directly to the downpipe. For roof areas of up to approx. 75 m²
- 2 Cartridge filter PF
For coarse filtration and mounting in the tank. For roof areas of up to approx. 210 m²



The company

AFRISO, founded by Adelbert Fritz in Schmiedefeld, Germany in 1869, is an innovative, medium-sized company with a total staff of over 1,300 worldwide, over 650 of which are employed at the four German sites.



Headquarters in Güglingen (Germany)



AFRISO training centre



AFRISO logistics and service centre



Traditionally, we manufacture measuring and control devices for temperature and pressure. For more than 50 years now, we have also been manufacturing measuring, control and monitoring devices and systems for environmental protection:

- Level indicators
- Overfill prevention systems
- Leak detectors
- Fittings for heating systems
- Flue gas analysers

Our leading-edge, market-oriented products and innovations result from our comprehensive know-how, a highly motivated and qualified staff and the fact that we understand what the market needs.

Our portfolio covers everything from a comprehensive range of standardised, proven off-the-shelf products all the way to high-grade customised solutions.

- Research and development
- Tools and equipment making
- Highly versatile and rational production
- Highest quality levels
- National and international approvals

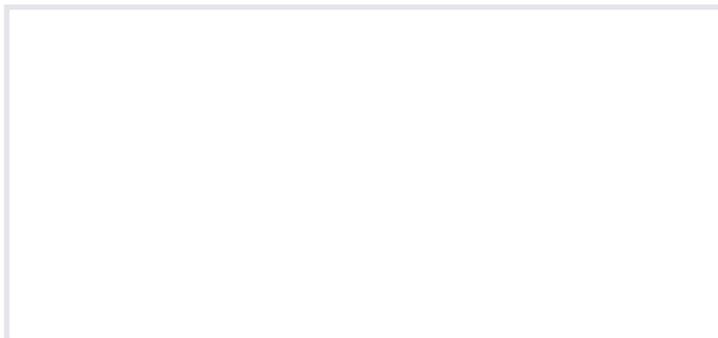
AFRISO stands for leading-edge brand products to meet your requirements.

Environmental management as per ISO 14001 is a matter of course for AFRISO.



For detailed information on our product range, find our online catalogue at www.afriso.com

Your specialised company for rainwater harvesting:



We provide you with exactly the information you need - in person. Please visit www.afriso.com/contact for further information on your specific contact person

