## Successful products for Floating Roof Tanks-HELICOAT<sup>®</sup> and Water Absorbent Tank Seals



## The innovated guide pole cover of IMHOF for complete sealing of guide poles.

Guide and measurement poles, especially when equipped with numerous holes or slots over the complete height of the poles, produce high quantities of emissions.

One guide pole of a tank with gasoline service emits approximately 5000 to 7000 kg per year and is the biggest source of emissions at floating roof tanks today.

This extreme source of emissions can be closed since some years by our guide pole cover HELICOAT<sup>®</sup>.

At the same time the penetration of quantities of rain water into the storage product at the guide pole is eliminated.

Due to the advantageous construction of our HELICOAT<sup>®</sup> with integrated and continuous spring steel helix, the HELICOAT<sup>®</sup> retains its stable tubular shape during all vertical movements of the floating roof. Another important advantage of our construction is the <u>zipper</u> over the total height of the HELICOAT<sup>®</sup>. This makes it possible to install the HELICOAT<sup>®</sup> even when the tank is filled, and the dismantling of the measurement equipment at the top of the guide pole is unnecessary.

At the upper end the HELICOAT<sup>®</sup> is fixed to the top end of the guide pole. At the lower end the HELICOAT<sup>®</sup> is connected to the metallic guide pole seal which penetrates through the floating roof (see page 2).

The HELICOAT<sup>®</sup> cover is fabricated from a highly weather- and UV-resistant Hypalon membrane, fabric reinforced, antistatic and self-extinguishing in case of fire.

The continuous spring steel spiral is made of stainless steel. All other metal parts and connecting elements on the upper and lower HELICOAT<sup>®</sup> connection as well as the metallic passage through the floating roof are also made of stainless steel.

## Water-absorbent secondary seals of IMHOF can substitute additional tank roofs.

Since more than 30 Years IMHOF supplies special secondary and tertiary seals which are able to <u>absorb all rain water films from inner tank walls</u> of open top floating roof tanks.

In 2016 IMHOF supplied a special design of water-absorbent secondary seal for a 60 m <u>external floating roof tank with Jet-Fuel service</u> for a tank farm close to Paris.

In addition to this the tank was equipped with a HELICOAT<sup>®</sup> at the guide pole. The result was water-free storage and lowest emissions (see page 3).

In the enclosed diagram, the emission reductions and the corresponding investment costs for upgrading floating roof seals and guide pole seals are shown using the example of a 20 meter gasoline tank.

In this example, annual gasoline emissions are reduced from 11000 to 600 kg per year. For the guide pole only the emissions are reduced from 6680 to 21 kg per year.

The total investment for all improvements and reduction of emissions is payed back in shortest time.











## Floating Roof Tank with $\emptyset$ 20 m,

IMHOF

plus rim mounted secondary seal