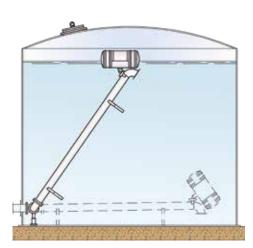


#### PROTEGO® SA/S





PROTEGO® SA/S for fixed roof tanks

## **Function and Description**

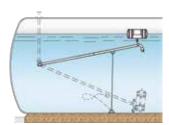
PROTEGO® Floating Suction Units, FSU, are used in storage tanks with very high purity requirements of the substances, e.g., aviation or fossil fuels. They are designed to ensure that product in a storage tank is drawn off just below the surface of the liquid where it is cleanest. This prevents the settled water and residuals at the bottom of the tank from being sucked in.

## **Design Types and Specifications**

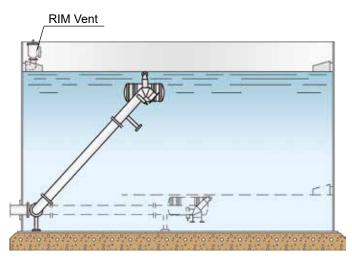
PROTEGO® Floating Suction Units are designed and sized to suit the individual tank specifications and customer requirements.

PROTEGO® Floating Suction Units are designed for long-term operation in full contact with the substances used. We use carbon steel or stainless steel for highly loaded components or aggressive substances.

Sizes are available from 1" to 36" for horizontal or vertical tanks with fixed or floating roofs. Custom designs for unusual stored products are available.



PROTEGO® SA/S for horizontal tanks



PROTEGO® SA/S for floating roof tanks

### Selection and Design

PROTEGO® Floating Suction Units are the result of extensive experience and are well-conceived solutions for the end-user. This includes easy installation, assembly, and full project documentation with design drawings taking into account tank installations.

Essential for the design of the PROTEGO® Floating Suction Unit is the Heavy Duty Swivel Joint, which is designed to work maintenance-free for many years in full contact with the substances used. This design provides the tank operator with operational reliability, and unforeseen and expensive repairs are prevented.

The Swivel Joints are:

- made of carbon steel or stainless steel;
- lubricated with a maintenance-free lifetime lubrication system; and
- equipped with a double row ball bearing with larger sizes to optimize reliability.

PROTEGO® Floating Suction Units are equipped with a suction opening which prevents a vortex from forming and the suction of air.

Floats are all made exclusively of high-quality stainless steel and are 100 % pressure tested.

Options upon request:

- Sampling pipes
- Function indicator
- Stress calculation due to liquid movement
- On-site support

PROTEGO® Floating Suction Units are "Made in Germany" and will provide many years of trouble free tank operation.

# PROTEGO® SA/S

*Maximum filling height: mm  *Material design of floating suction unit:  Product details  *Stored product:  *Product specific density:  Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	*Project: Location: Customer:				
Tank Main Details  *Fixed roof tank					
*Fixed roof tank	*Engineering:				
*Floating roof tank  Tank-No.:  *Tank height:  mm  *Maximum filling height:  mm  *Material design of floating suction unit:  Product details  *Stored product:  *Product specific density:  Maximum product temperature:  °C  Tank details  *Suction line size: DN  *Manhole size: DN  *Manhole size: DN	Tank Main Details				
*Horizontal tank  Tank-No.:  *Tank height:  mm  *Maximum filling height:  mm  *Material design of floating suction unit:  Product details  *Stored product:  *Product specific density:  Maximum product temperature:  °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside):  mm  *Manhole size: DN	*Fixed roof tank	*Fixed roof tank with internal floating roof			
Tank-No.:  *Tank height:  mm  *Maximum filling height:  mm  *Material design of floating suction unit:  Product details  *Stored product:  *Product specific density:  Maximum product temperature:  °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside):  mm  *Manhole size: DN	*Floating roof tank				
*Maximum filling height: mm  *Material design of floating suction unit:  Product details  *Stored product:  *Product specific density:  Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	*Horizontal tank				
*Material design of floating suction unit:  Product details  *Stored product:  *Product specific density:  Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	Tank-No.:	*Tank height:	nm	*Tank diameter: mm	
*Stored product:  *Product specific density:  Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	*Maximum filling height: mm				
*Stored product:  *Product specific density:  Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	*Material design of floating suction unit:				
*Product specific density:  Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	Product details				
Maximum product temperature: °C  Tank details  *Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	*Stored product:				
*Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	*Product specific density:				
*Suction line size: DN  **Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	Maximum product temperature: °C				
**Height of connection flange / length of connection piece (inside): mm  *Manhole size: DN	Tank details				
*Manhole size: DN	*Suction line size: DN				
	**Height of connection flange / length of connection piece (inside):		nm		
Bottom slope:   Slope direction:	*Manhole size: DN				
<u> </u>	Bottom slope:	Slope direction:			
*Are there any obstructions? (supports, heating pipes, etc.)	*Are there any obstructions? (supports, heating pipes, etc.)			if ⋉ - please specify	
*Tank drawing / sketch?	*Tank drawing / sketch?			if 🗵 - specify request	

\*This information must be provided upon request.

Fill in and □ check, if applicable.



for safety and environment

KA / 8 / 0320 / GB 379