Gunclean Toftejorg i65 S

Single-nozzle tank cleaning machine

Alfa Laval's Gunclean Toftejorg i65 S is a high-impact, fully programmable tank cleaning machine with a single nozzle. Developed to meet the toughest tank cleaning requirements, it is the first tank cleaning machine on the market to feature a hysterisis clutch with built-in speed adjustment.

This innovative clutch construction is a substantial improvement over standard magnetic clutches, as it eliminates both slippage and the leakage risk of a speed adjustment shaft. In combination with optimized design and new, wear-resistant materials, it makes the Gunclean Toftejorg i65 S a simple and reliable choice for cost-effective operation.

Application

The Gunclean Toftejorg i65 S is designed for use in fixed installations aboard chemical carriers, product carriers and bulk carriers, as well as in offshore applications. Its reliable operation and wear-resistant design make it suitable for use in all types of tank cleaning applications.

Features and benefits

Hysterisis clutch.
The Gunclean Toftejorg i65 S clutch comprises six strong magnets and a hysterisis plate. Unlike a standard magnetic clutch, in which two opposing magnets must be synchronized, it will not slip during water hammering – thus eliminating false starts. The clutch works as a soft starter, making sure that the tank cleaning machine always begins to operate.

Topside speed adjustment.
Speed can be adjusted above deck without changing the drive media flow, simply by increasing or decreasing the distance between the magnets and the hysterisis plate.

No speed adjustment shaft.
The hysterisis clutch does away with speed adjustment at the turbine. This removes the need for a shaft penetration on the turbine side, taking away a potential source of seal leakage and cross contamination.

Optimized turbine.
The Gunclean Toftejorg i65 S turbine is specially designed for better power transmission, which contributes to increased machine lifetime.

High-tech ceramics.
Balls and plates of high-tech, wear-resistant ceramics have been used in the turbine construction. These reduce friction in the gear system and reduce the consumption of spare parts.

Isolated gearbox.
The gearbox is located above deck and can be removed without exposing the tank atmosphere. An extra gearbox can be kept as a backup, if desired.

Robust construction.
The gearbox has a stronger construction than previous tank cleaning machines and involves fewer wear parts.

Operation

A flow of cleaning media or product is used to drive a turbine connected to the Gunclean Toftejorg i65 S gear unit. This drives the cleaning head horizontally while the nozzle moves vertically, which directs the cleaning media in a helical cleaning pattern.

The current nozzle position and degree of rotation are indicated at all times. Both pitch angle and rotation speed can be adjusted during operation, thus making it possible to optimize the cleaning cycle.

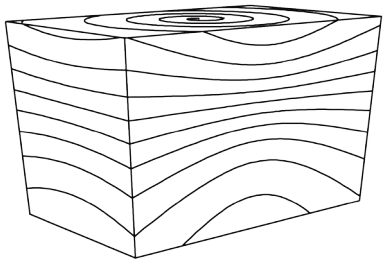
Options

- Deck flange with customized dimensions.
- 2” ball valve with strainer and CAM lock coupling (male) with dust cap.
- Sensor connection for all cargo control systems.
- Multi-level installation.

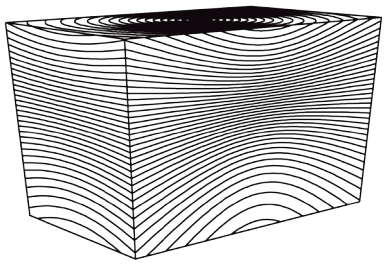
Regulations

The Gunclean Toftejorg i65 S is fully compliant with IMO regulations and the requirements of the classification societies.

Cleaning pattern



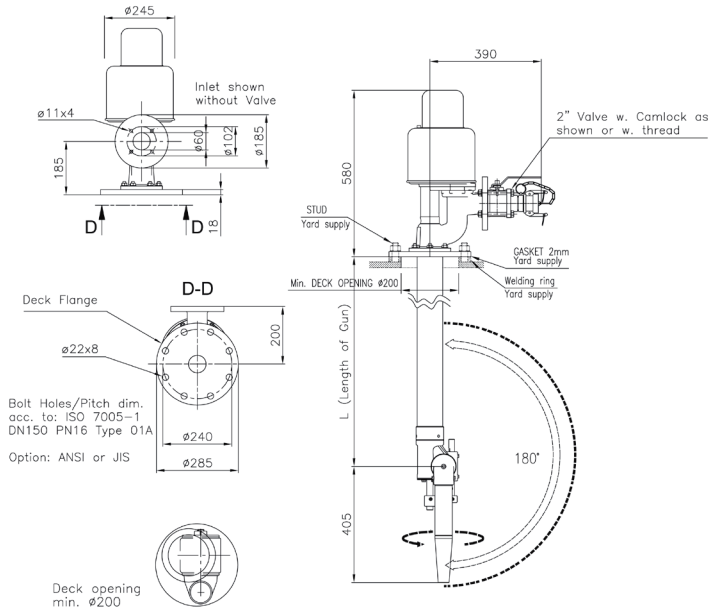
Coarse pattern



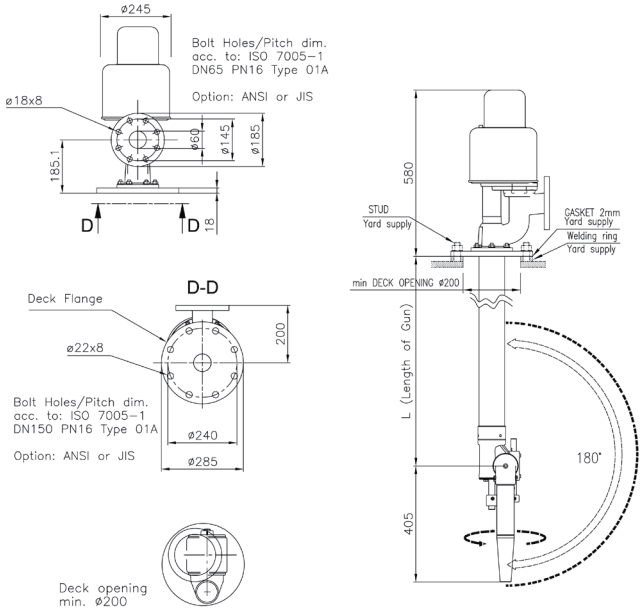
Dense pattern

Specifications

Materials, main parts	316 as standard
Sealings	Oil, product or chemical resistant
Lubricant	Grease
Working pressure	6-12 bar
Max. working temperature	0-95ºC (32-203ºF)
Capacity	5-65 m^3/h
Effective design jet length	Up to 33 meters
Programmability	4 cleaning programs
Sealings	
Inert gas	0-0.7 bar (0-10 psi)
Cleaning fluid	0-12 bar (0-174 psi)



Gunclean Toftejorg i65 S with inlet ball valve



Gunclean Toftejorg i65 S with inlet flange

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How to contact Alfa Laval
Contact details for all countries are continually updated on our web site.
Please visit **www.alfalaval.com/marine** to access the information direct.