



# Alfa Laval Gunclean Toftejorg i40 S

## Single-nozzle tank cleaning machine

Alfa Laval's single-nozzle Gunclean Toftejorg i40 S is a second-generation high-impact, fully programmable tank cleaning machine.

Developed to meet the toughest tank cleaning requirements with optimized design and wear resistant materials, the Gunclean Toftejorg i40 S is a simple and reliable choice for cost effective operation.

### Application

The Gunclean Toftejorg i40 S is designed for use in fixed installations aboard chemical and product 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. With a required deck opening of only 145 mm, the i40 S machine is the optimal machine for upgrading older tank cleaning machines on chemical tankers.

### Energy Efficient Design

Energy efficient design With Alfa Laval's optimized design of the cleaner head and nozzle, the i40S machine outperforms any other single nozzle machine on the market. The design ensures high impact cleaning with the least possible water consumption, leading to savings in both time and costs.

Reduced maintenance Due to high-tech, wear-resistant ceramics and stainless ball bearings in the cleaner head inside the tank, the need for lifting out the machines for maintenance is practically eliminated.

### Optimized turbine

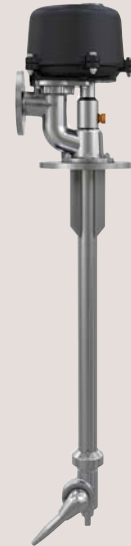
The turbine of the Gunclean Toftejorg i40 S is specially designed for better power transmission, which contributes to increased machine lifetime.

### Isolated gearbox

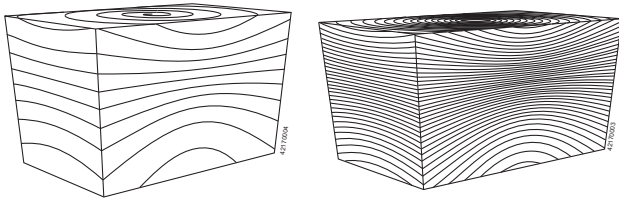
The oil-free gearbox is located above deck and can be removed without exposing the tank to the atmosphere. This facilitates service.

### Robust construction

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



## Cleaning patterns



Coarse pattern

Dense pattern

## Operation

A flow of cleaning media or product is used to drive a turbine connected to the Gunclean Toftejorg i40 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.

## Regulations

The Gunclean Toftejorg i40 S is fully compliant with IMO regulations and the requirements of the classification societies.

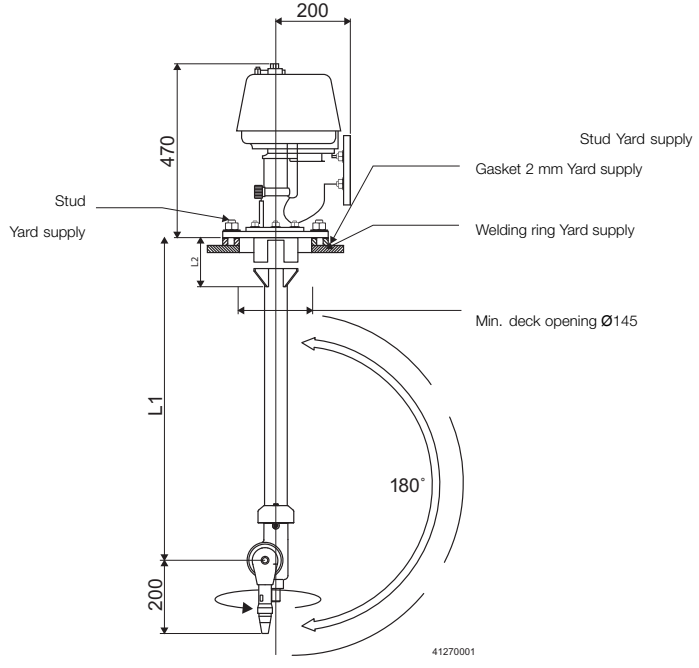
## Specifications

Materials, main parts	AISI 316 as standard
Sealings	Oil, product and chemical resistant
Lubricant	Grease
Working pressure	4 –12 bar
Max. working temperature	0– 95°C (32–203°F)
Capacity	3 – 56 m3/h
Effective design jet length	Up to 40 m
Programmability	4 cleaning programs
Sealings	
- Inert gas	0– 0.7 bar (0 –10 psi)
- Cleaning fluid	0–12 bar (0–174 psi)

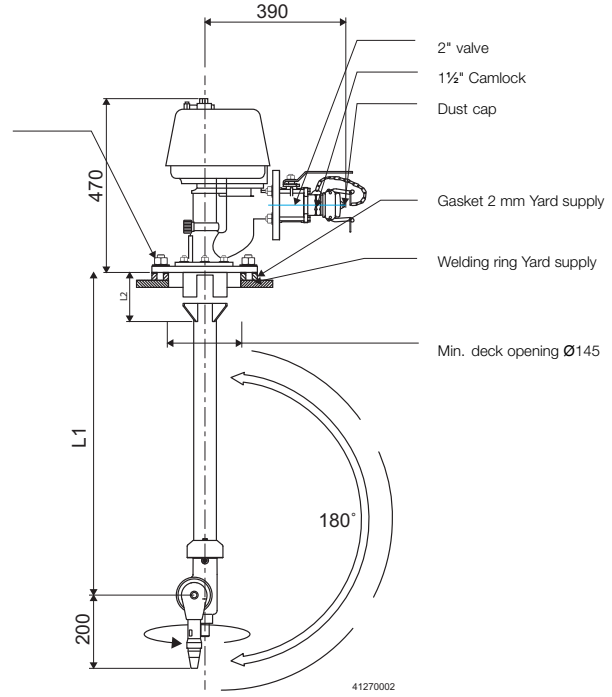
## Options:

- Deck and inlet flanges with customized dimensions
- 2" Ball valve with strainer and CAM lock coupling (Male) with dust cap
- Sensor connection for cargo control system Multi-Level installation
- Split pipe
- Hysteresis coupling or traditional mechanical shaft drive

**Gunclean Toftejorg i40 S with inlet flange**



**Gunclean Toftejorg i40 S with inlet ball valve**

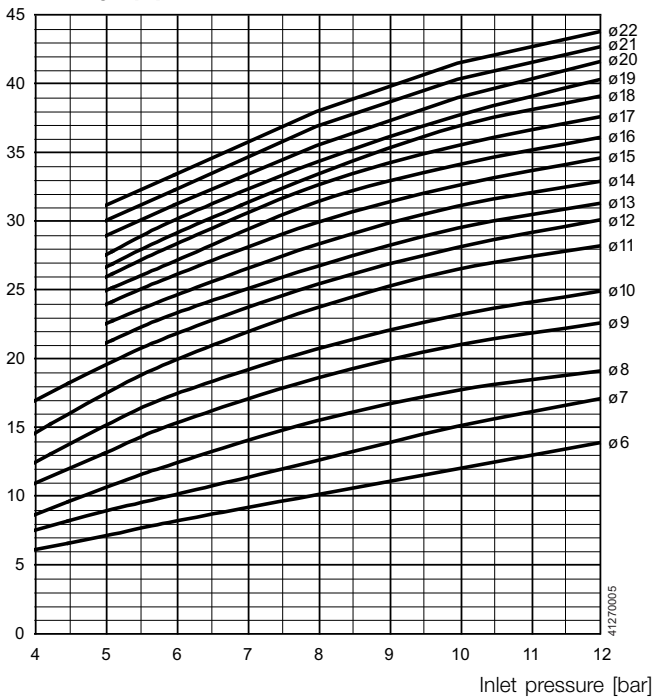


**Performance diagram Design Throw Length**

Alfa Laval Type: Gunclean Toftejorg i40S

Throw length [m]

Nozzle size

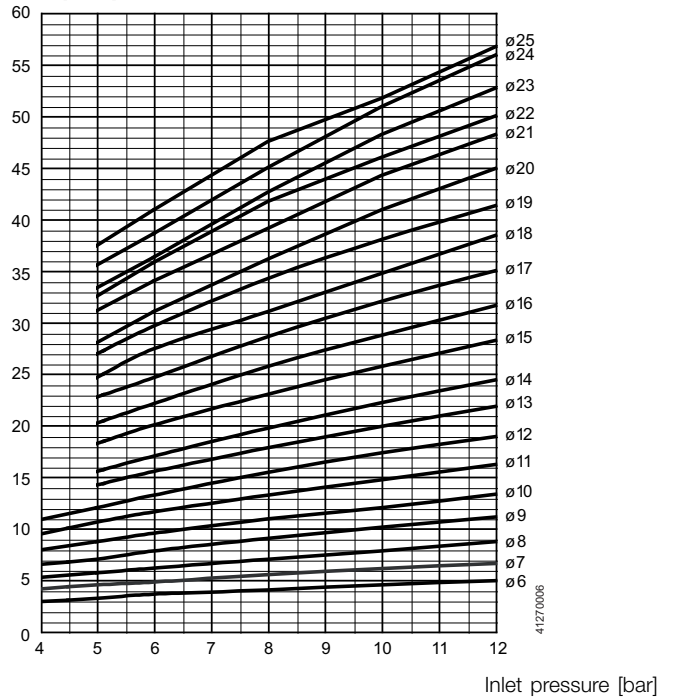


**Performance diagram Flow Rate**

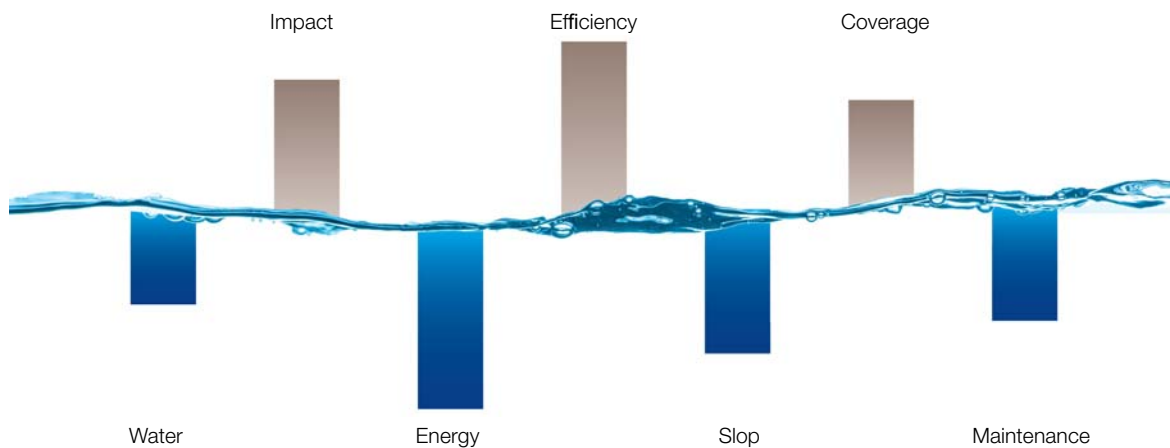
Alfa Laval Type: Gunclean Toftejorg i40S

Flow [m³/h]

Nozzle size



# Performance is more than surface deep



## Tank cleaning for certainty and savings

For decades, Alfa Laval Gunclean Toftejorg tank cleaning solutions have been trusted for perfect results. But we've continued to optimize – because a spotless tank isn't all you're after.

Today's solutions have a higher impact at a longer range, which reduces your water consumption, energy use and slop for onshore disposal. Thanks to stainless steel ball bearings, you also perform almost no nozzle maintenance, which means fewer spare parts and no winching of the cleaning head out of a confined space..

Discover full optimization at [www.alfalaval.com/marinetankcleaning](http://www.alfalaval.com/marinetankcleaning)



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Alfa Laval reserves the right to change specifications without prior notification.

## How to contact Alfa Laval

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