

# 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 choise 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

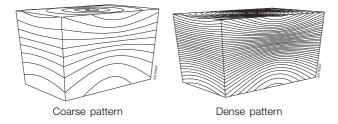
The oil-free gearbox is located above deck and can be removed without exposing the tank to the atmosphere. This facilitates service.

### Robust construction

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



### Cleaning patterns



### 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

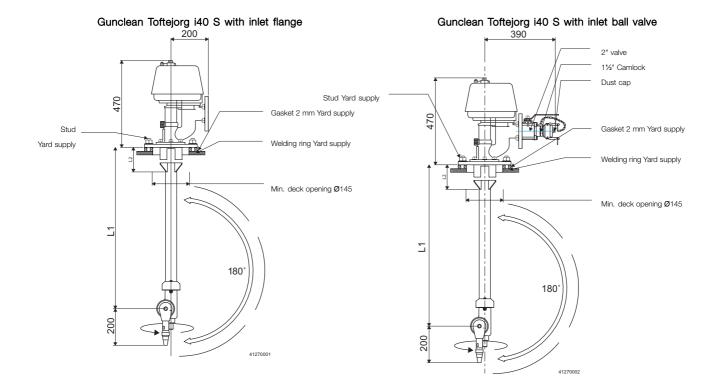
The Gunclean Toftejorg i40 S is fully compliant with IMO regulations and the requirements of the classification societies.

### Specifications

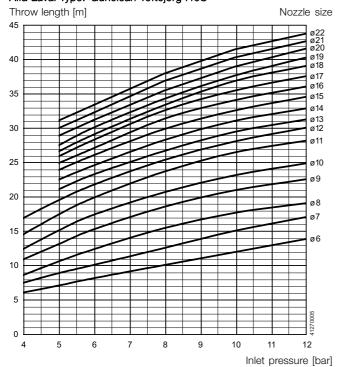
| Materials, main parts       | AISI 316 as standard                |
|-----------------------------|-------------------------------------|
| Sealings                    | Oil, product and chemical resistant |
| Lubricant                   | Grease                              |
| Working pressure            | 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:

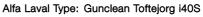
- Deck and inlet flanges with customized dimensions
- 2" Ball valve with strainer and CAM lock coupling (Male) with dust cap
- Sensor connection for cargo control system Multi-Level installation
- Split pipe
- Hysteresis coupling or traditional mechanical shaft drive

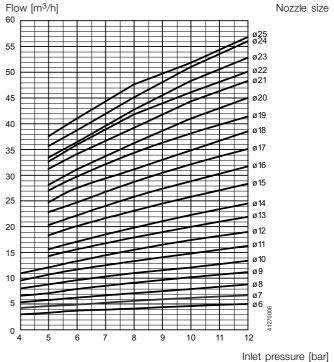


### Performance diagram Design Throw Length Alfa Laval Type: Gunclean Toftejorg i40S



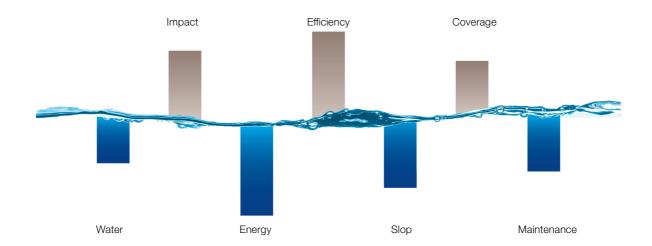
# Performance diagram Flow Rate





# Alfa Laval is a trademark registered and owned by Alfa Laval Corporate AB.

# 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



Alfa Laval Gunclean Toftejorg i40 S



Alfa Laval Gunclean Toftejorg i40 D

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