GEA CLEANING TECHNOLOGY

Product portfolio

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GEA STATIC CLEANERS

Soiling Classification I

STATIC CLEANERS

Effective rinse cleaning with low pressure

Our static cleaners offer robust technology suitable for a large variety of different cleaning tasks and production applications.

Soiling Classification I
Water-soluble products or products that have little or no adhesion to the vessel walls.

Maintainance-free, easy cleaning
Static cleaners are the perfect choice to rinse easier-to-clean products with little investment and effort. Various spray patterns and performances can be achieved using a variety of spray ball designs, materials and surfaces. High flow capacities are available to assist in flushing out solids.

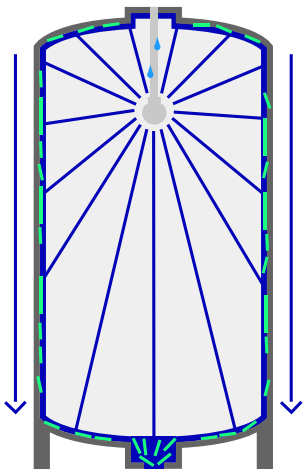
Offering our cleaners in various configurations makes at least one of our static cleaners a serious consideration for your Food, Beverage, Pharmaceutical, Bio-chemical or Personal Care application where attention to detail and effective cleaning performance are essential.

Increased performance through better design
The high design standards and product quality of our static spray balls ensures good cleaning performance even over extended spraying distances.

Our long-established principles of hygienic engineering enable us to develop and produce products meeting all your standards – no matter if 3A, ATEX or other regulations need to be met.

Effective cleaning results ensure that our static cleaners offer particularly high return on investment.

Working principle



The cleaning of vessels within soiling classification I requires a liquid distribution which delivers large volumes of fluid simultaneously over the complete vessel. Static spray balls apply lower mechanical force so they rely on the liquid running down the vessel walls to create surface friction or to dissolve the residues.

A series of solid jets fan out as they hit the tank wall, causing the liquid to run down the walls and rinse off the contamination. Despite the low pressure, a high flow rate ensures efficient and effective operation.

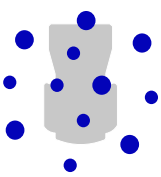
GEA FREE ROTATING CLEANERS

Soiling Classification II

FREE ROTATING CLEANERS

GEA's free rotating cleaners deliver effective, powerful and economic cleaning performances

The unique construction as well as their flexible operation and installation are key benefits of this range.



Soiling Classification II
Water-soluble solutions with low adhesion to the surface of the vessel.

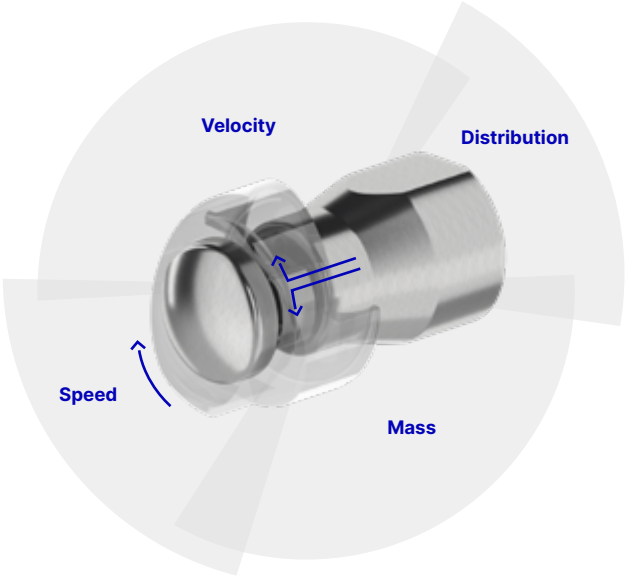
Meeting all requirements
Compact in design, effective in performance: free rotating cleaners from GEA meet the exacting demands expected from a premium cleaning technology manufacturer.

GEA is maintaining the highest hygienic manufacturing standards while harnessing and directing the mechanical forces to provide the optimum cleaning potential for this classification of cleaners.

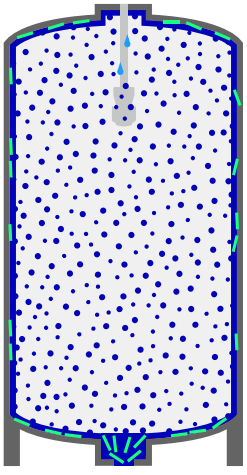
We offer our cleaners made from various materials to suit all applications and specific industries. This makes at least one of our free rotating cleaners a serious consideration for your Food, Beverage, Pharmaceutical, Bio-chemical or Personal Care application where attention to detail and effective cleaning performance are necessary.

Utilizing the latest technology to provide effective solutions
Using the latest technology and innovative design concepts allows us to optimize the power of the incoming CIP liquid supply and amplify the cleaning effect onto the vessel wall.

Our long-established principles of hygienic engineering enable us to develop and produce products meeting all your standards – no matter if FDA compliance, ATEX approval or other regulations need to be met. All our free rotating cleaners are easy to install and free of maintenance.



Working principle



All our free rotating cleaners are driven by the wash liquid entering the cleaner through the inlet. Using contoured internal flow paths allows to minimize the internal pressure- and energy drops while directing the liquid into high velocity droplets. This is done via a series of specially shaped rotors that effectively distribute the liquid in the designated spray patterns.

These powerful, high energy droplets produce a fast and intensive cleaning action, delivering maximum cleaning power in a very short timescale. Its thought-out design applies the minimum amount of wash fluid to deliver optimum and effective performance keeping the total cost of ownership to a minimum.

Turbodisc / Chemidisc

Torus / Chemitorus

Clipdisc / Sanidisc

GEA SLOW ROTATING CLEANERS

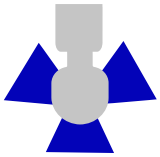
Soiling Classification III




SLOW ROTATING CLEANERS

Increased cleaning power improves process profitability.

Thanks to the efficient jet design and reduced rotation speeds, our slow rotating cleaners minimize the consumption of valuable liquids and detergents during tank cleaning by increasing the mechanical cleaning force on the inner tank surface.



Soiling Classification III
Stubborn residues with a stronger adhesion to the vessel walls. Ideally the product is still wet and cleaning can be carried out before any drying takes place.

Higher-impact tank cleaning using targeted jets
Optimized for consistent cleaning success with highest efficiency: slow rotating cleaners from GEA meet the exacting demands expected from a premium cleaning technology manufacturer.

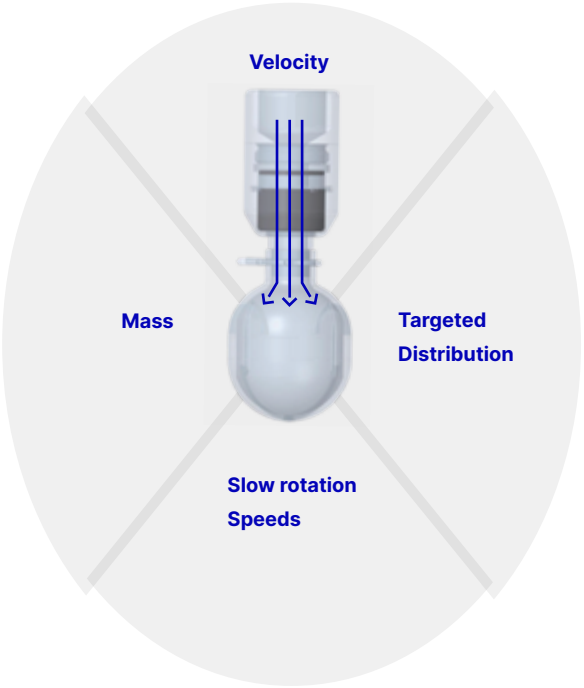
GEA is maintaining the highest hygienic manufacturing standards while harnessing and directing the mechanical forces to provide the optimum cleaning potential for this classification of cleaners.

Offering our cleaners in various configurations makes at least one of our slow rotating cleaners a serious consideration for your Food, Beverage, Pharmaceutical, Bio-chemical or Personal Care application where attention to detail and effective cleaning performance are essential.

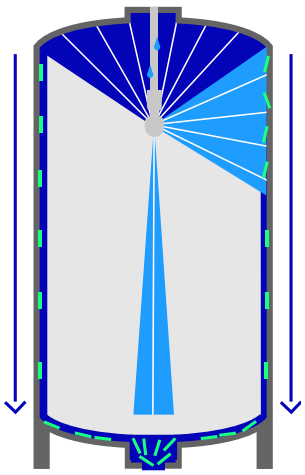
Cost-effective solution for difficult-to-clean vessels
To ensure a high mechanical cleaning effect, the targeted jets of our slow rotating cleaners deliver direct impingement on all surface areas. Slow rotation entails longer dwell time for reproducible clean results. The optimized use of water, chemicals and heat reduces operating costs.

Our long-established principles of hygienic engineering enable us to develop and produce products meeting all your standards – no matter if FDA compliance, USP class VI, ATEX approval or other regulations need to be met.

For extended service life our slow rotating cleaners are equipped with fluid-lubricated bearings.



Working principle



GEA's slow rotating cleaners use targeted flat or round jets to project the cleaning solution onto the vessel walls. These units operate at higher liquid pressures than traditional free rotating units but, because of their design, maintain slower rotation speeds. This enables these devices to impact greater cleaning forces onto the vessel walls than the free rotating units. As the rotation is slowed down, the spray jets have an increased dwell time, providing even more cleaning power.

Sanitor

Turbo SSB

Troll Ball

Rotating Jet Cleaner

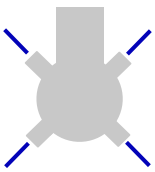
GEA ORBITAL CLEANERS

Soiling Classification IV

ORBITAL CLEANERS

Optimized spray jet projection and cleaning power onto the vessel walls.

Orbital cleaners benefit from GEA's solid stream nozzle technology to deliver the best cleaning results.



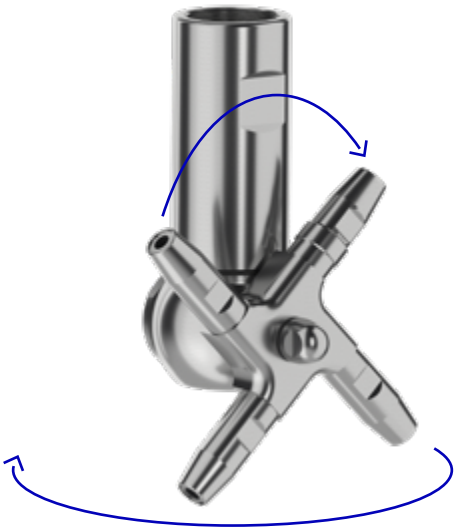
Soiling Classification IV
Encrusted or dry products with a higher adhesion to the vessel wall.

Robust cleaners ensure plant availability and powerful cleaning.
The hygienic and compact design of our orbital cleaners, combined with powerful jets, makes these cleaners perfect for cleaning a variety of vessel sizes and equipment, especially where hygienic safety is a priority and where sticky residues can make cleaning difficult.

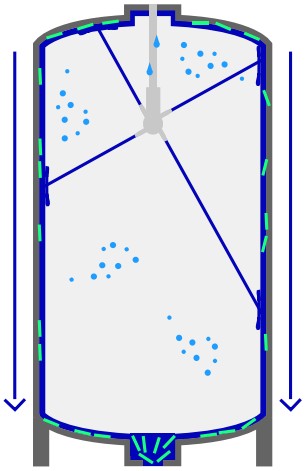
High performance for every application.
Our highly reliable orbital cleaners can be used in the brewing, beverage, dairy, food, chemicals, coatings and transport industries – as permanently fixed or mobile installations.

Offering our cleaners in various configurations makes at least one of our orbital cleaners a serious consideration for your Food, Beverage, Pharmaceutical, Bio-chemical or Personal Care application where attention to detail and effective cleaning performance are essential.

Hygienic design
For hygienically safe processing and storage, our orbital cleaners have smooth surfaces on which the product cannot settle, which significantly reduces the risk of contamination. The units are self-draining and equipped with back wash nozzles for effective self-cleaning. Thanks to the simple internal design, our orbital cleaners can be easily disassembled and reassembled to extend their excellent service life.



Working principle



Orbital cleaners from GEA create spray patterns that optimize the cleaning performance on the vessel walls.

The cleaning medium enters the cleaner via the downpipe which drives the motor. By using a planetary gear set the speed of the drive is reduced and causes the driven body to rotate slowly around the vertical axis. Couped with the controlled rotation of the nozzle carrier, this creates a highly effective 3D matrix spray pattern on all internal surfaces, resulting in excellent cleaning performance in hard-to-clean applications and vessels of any size.

Cyclone

Twister

Typhoon

Tempest

Tornado

OC200

Jumbo 6

GEA INDEX CLEANERS

Soiling Classification IV

INDEX CLEANERS

High-impact cleaning solutions for the most difficult applications

Our index cleaners optimize the efficiency of cleaning operations with efficient high-impact 360° or 180° spray patterns.

Soiling Classification IV
Encrusted or dried on products with a higher adhesion to the vessel wall.

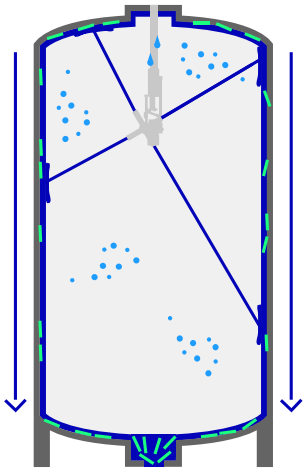
Matching high efficiency and minimum wear
The slow operational movement of index cleaners makes them the best choice to remove heavy soiling of all kinds from process vessels, storage tanks and transport containers in any industry.

Offering our cleaners in various configurations makes at least one of our index cleaners a serious consideration for your Food, Beverage, Pharmaceutical, Bio-chemical or Personal Care application where reliability and effective cleaning performances are essential.

Great fit for demanding applications
The long-established design of our index cleaners make them especially suitable for demanding applications where robust design and reliability is key. Due to their unique working principle and jet paths they are an excellent choice for any kind of vessel including open and rectangular tanks.

In contrast to GEA's orbital cleaners, index cleaners can also spray 180° in upward or downward direction.

Working principle



GEA's unique range of index cleaners provide highly effective cleaning performance through their piston-operated index mechanism. The advantage of this type of cleaner is that large amounts of energy can be applied by the slow moving operation, directly onto the vessel walls.

The solid stream nozzle technology optimizes spray jet projection onto the vessel walls and cleaning power. The unique piston-operated mechanism produces high-impact, long-range jets which oscillate through 90° while the index cleaner continually indexes around the central axis.

Fury TWB-HP

Fury 404

Fury 602

Tankmaster

GEA CLEANING TECHNOLOGY

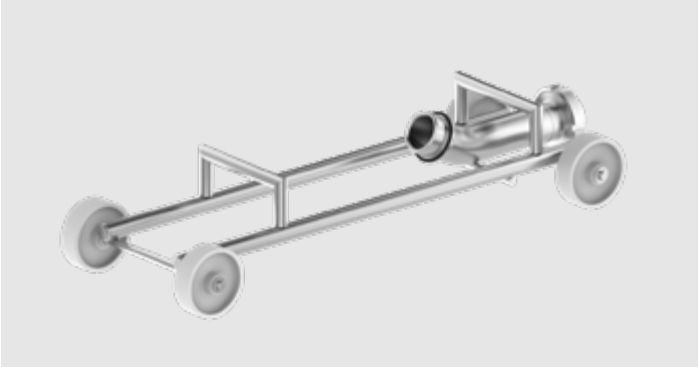
Accessories

ACCESSORIES

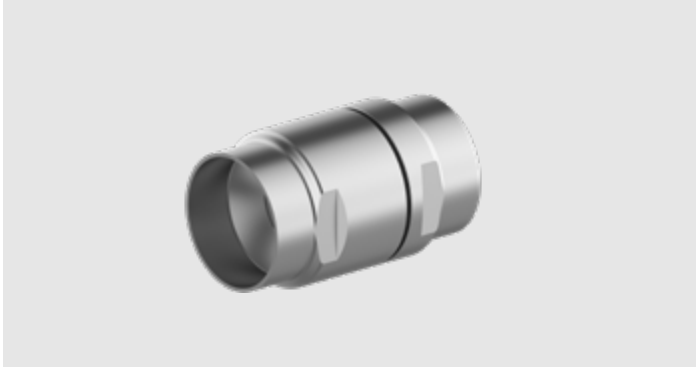
GEA's variety of different accessories completes the portfolio to offer a smooth and fulfilled cleaning process.

Having a wide range of different Accessories, offers more possibilities of adaption to make the cleaners even more suitable for each of our customer's needs. The following selection of Accessories shows the most common of our broad portfolio.

Mobile Trestle
The mobile trestle is the perfect accessory for mobile cleaning tasks in different applications. It offers an easy handling to insert the cleaner from the bottom of the vessel.



Pipe Union TS
GEA's Pipe Union TS is a quality-made fitting equipment to connect two pipes wherever needed. It is available in different sizes to be fitted into processes of any kind.



Dirt Arrester
GEA recommends installing the dirt arrester in the CIP supply line close to the cleaner to protect it against particulate blocking or damage. Consequently, downtimes of cleaning devices can be avoided and planned availability can be increased.

Protection Cage
The protection cages for orbital and index cleaners help to prevent nozzle damages caused by inserting and removing the cleaners into or from vessels. Due to the special design there are no shadow areas during cleaning.

Welding Nipple
To connect the cleaner to the cleaning lance, welding nipples are fitted with one end welding and one end thread. Available in different sizes for all kinds of cleaners.

Cleaning Lance
Cleaning lances are available in different lengths and with different tank and pressure connections for all types of cleaners to connect the cleaner to the production system.

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