

Liquids to Value



VARIPURE Rotating Cleaner

for tank and vessel cleaning

Made by GEA Tuchenhagen



VARIPURE Rotating Cleaner



GEA Tuchenhagen offers a comprehensive product range for almost all cleaning tasks.

All VARIPURE cleaner are to the latest state-of-the-art designed and manufactured. The devices meet your high hygiene claims considered by the geometrical shape and the best surface texture. These parameters proven best meet the requirements to use our cleaners in the brewing and beverage industries, in the cosmetic and pharmaceutical, chemical, paint and coatings as well as in the biotechnology industry.

The new GEA Tuchenhagen VARIPURE cleaners - that is where environmental protection starts!

In hygienic processes, tank cleaning priorities have changed during the past years. In the past, the most important task was to have a clean tank after being subjected to a certain cleaning method, but today a higher awareness of environmental as well as economical issues do play a decisive role also.

The new VARIPURE cleaners for tank and vessel cleaning as well as for special applications can help you to make an important contribution to protecting the environment and also to save on investment costs.

Carefully designed cleaners by GEA Tuchenhagen do need a minimum of cleaning medium and still achieve an optimal cleaning result - due to a strong, mechanical spray pattern.

The savings as well as the benefit for the environment are obvious:

Due to the considerably reduced volumes of cleaning media smaller quantities of chemicals will be required. And there is less need of heating energy during the cleaning process.

Supply and return pumps as well as the necessary piping can also be smaller. All this together reduces energy consumption and minimizes investment costs.

The amount of expensive waste water is considerably reduced, too.

GEA Tuchenhagen offers a comprehensive VARIPURE cleaner program – static cleaners, rotating cleaners and orbital cleaners, each tailored to the specific cleaning task.

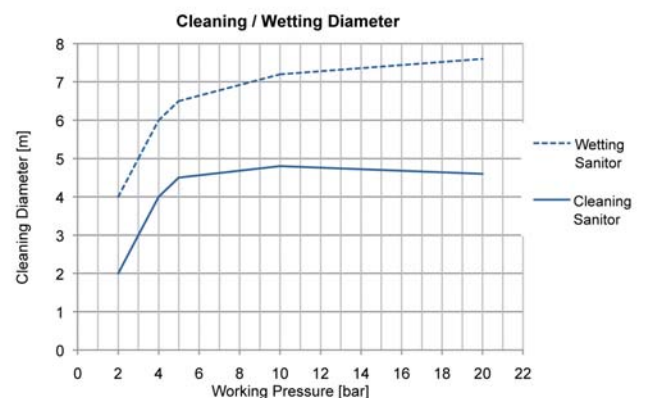
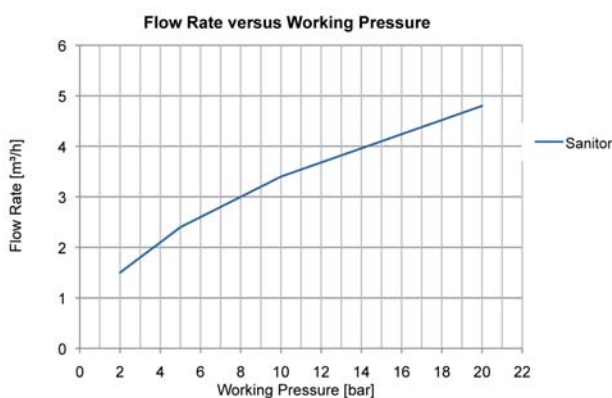
ATEX and FDA certification is possible for almost all cleaners.

The field of application thus extends to use our cleaners in hygienic and potentially explosive areas in all industries. The cleaners are driven entirely by the cleaning fluid without external energy.

A special sensor system developed by GEA Tuchenhagen is integrated in the tank when orbital cleaning heads are used to verify the cleaning process. In this system the medium jet hits the sensor at regular intervals. The signals issued by the sensor can be used to monitor the function of the cleaner electronically and to document the successful cleaning process.

Sanitor ... compact, ultra-hygienic

- Slow, constant rotation
 - Ball bearing free-increased service life
 - Large operating pressure range
 - Hydrodynamic bearing
 - FDA conform and ATEX exempt
 - Maintenance-free and durable
 - SIP through the nozzle possible
 - Preferred mounting position:
vertical down
-
- Working pressure 2 - 20 bar
 - Cleaning diameter up to 4.8 m
 - Flow rate 1.5 - 4.8 m³/h
 - Spray pattern 360°
 - Operating temperature 95 °C max.
 - Ambient temperature / SIP 140 °C max., 30 min
 - Insertion Ø 32 mm min.
 - Materials: Stainless steel 316L (1.4404)
 - Pipe connection: 3/8" BSP / Female



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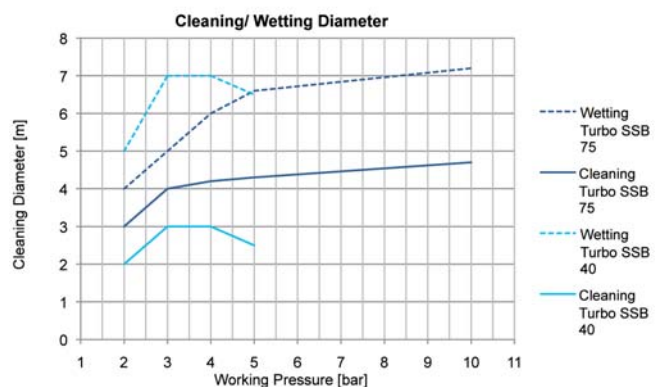
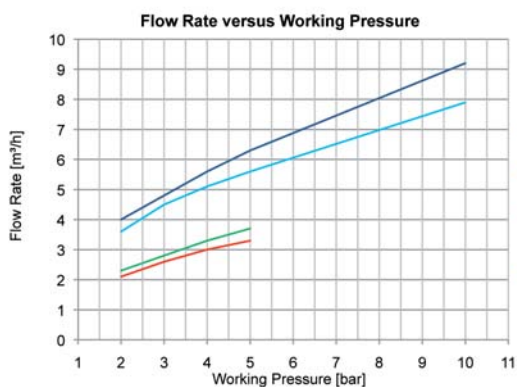


Turbo SSB 40 / 75 ... constant rotation speed at different pressure



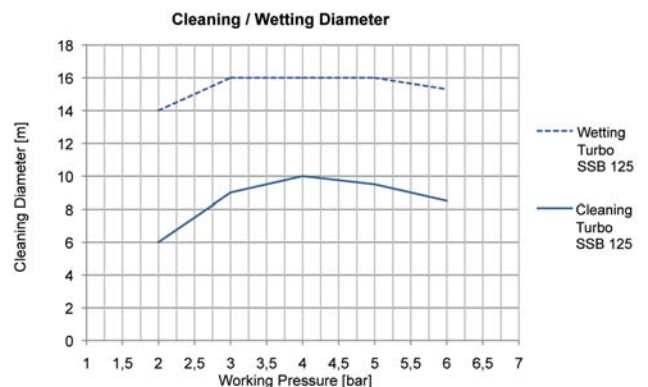
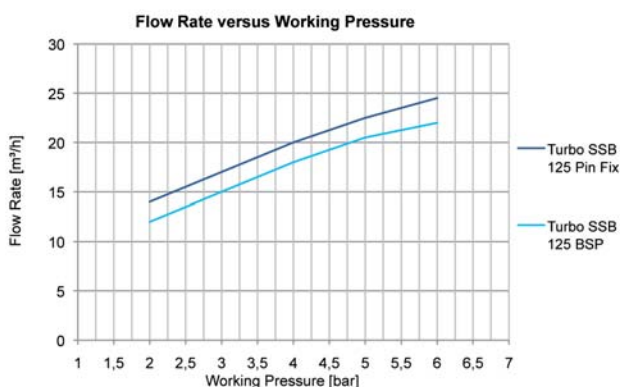
- Slow, constant rotation
- Ball bearing free-increased service life
- Economic flow rates
- High efficiency fan jets
- FDA conform or ATEX exempt
- SIP through the nozzle possible
- Preferred mounting position: vertical down

- Working pressure 2 – 10 bar
- Cleaning diameter up to 4.7 m
- Flow rate 2.1 – 9.2 m³/h
- Spray pattern 360°
- Operating temperature 95 °C max.
- Ambient temperature / SIP 140 °C max., 30 min
- Insertion Ø 38 / 50 mm min.
- Materials: Stainless steel 316L (1.4404), P-PTFE or C-PTFE
- Pipe connection: 3/4" / 3/4" BSP / Female, optional Pin Fix for 3/4" / 1" OD tube



TURBO SSB 125 ... constant, slow rotation at high flow rate

- Slow, constant rotation
 - Ball bearing free-increased service life
 - High efficiency fan jets
 - FDA conform or ATEX exempt
 - SIP through the nozzle possible
 - Preferred mounting position: vertical down
- Working pressure 2 – 6 bar
 - Cleaning diameter up to 8,5 m
 - Flow rate 12,0 – 24,5 m³/h
 - Spray pattern 360°
 - Operating temperature 95 °C max.
 - Ambient temperature / SIP 140 °C max., 30 min
 - Insertion Ø 70 mm min.
 - Materials: Stainless steel 316L (1.4404), PTFE or C-PTFE (ATEX)
 - Pipe connection: 1¹/₄" BSP / Female, optional Pin Fix for 1¹/₂" OD tube



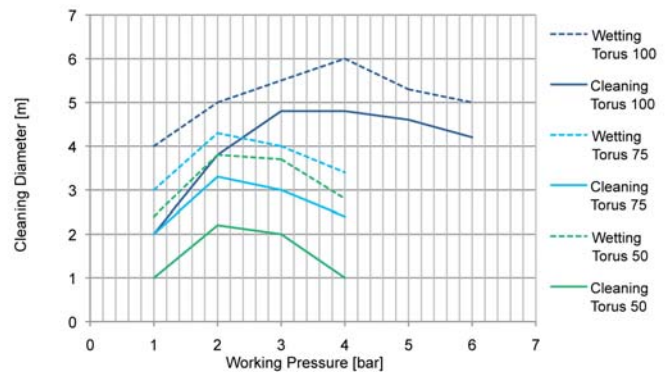
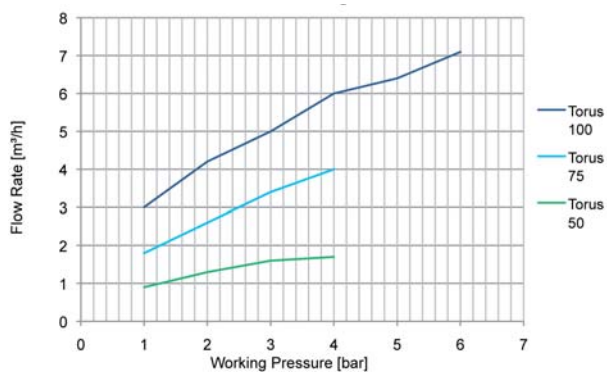
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Torus 50 / 75 / 100 ... ideal for low pressure applications with small amounts of cleaning agents



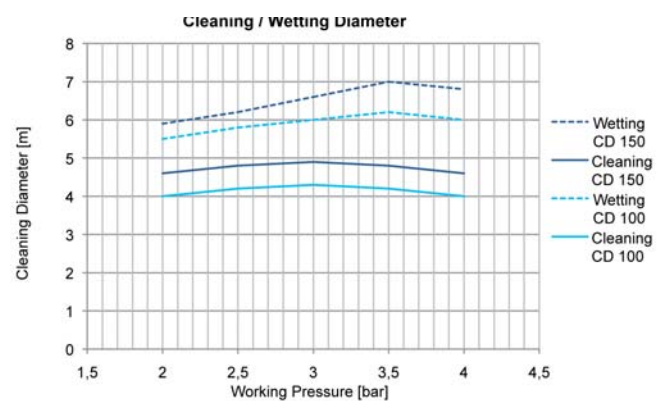
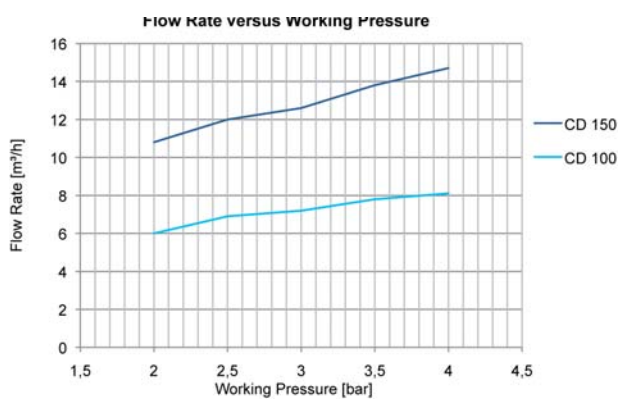
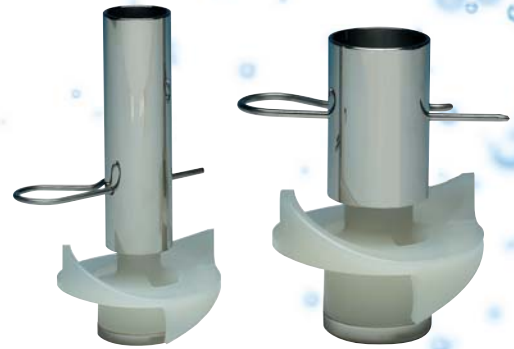
- Hygienic design
 - Economic flow rates
 - Ball bearing free-increased service life
 - Low operating pressure
 - FDA conform or ATEX exempt
 - Versatile range of applications
 - SIP through the nozzle possible
 - Preferred mounting position: any
- Pressure 1 – 4 bar
 - Cleaning diameter up to 4.8 m
 - Flow rate 0.9 – 7.1 m³/h
 - Spray pattern 360°
 - Operating temperature 95 °C max.
 - Ambient temperature / SIP 140 °C max., 30 min.
 - Insertion Ø 42 / 52 / 70 mm min.
 - Materials: Stainless steel 316L (1.4404) with P-PTFE or C-PTFE (ATEX), optional Hastelloy
 - Option: CHEMITORUS complete P-PTFE or C-PTFE
 - Pipe connection:
 Torus 50/75: Standard 3/8" resp. 1/2" BSP / Female, optional Pin Fix for 1/2" OD tube / 3/4" OD tube
 Torus 100: Standard PinFix for 1" OD tube



VARIPURE Rotating Cleaner

Clipdisc 100 / 150 ... ideal for applications where product purity and elimination of contamination problems are essential

- Ultra Hygienif Design
 - Ball Bearing Free-Increased Service Life
 - Low Maintenance
 - Quick effective wash
 - FDA / 3A conform
 - SIP through the nozzle possible
 - Preferred mounting position: any
- Working pressure 2 – 4 bar
 - Cleaning diameter up to 5 m
 - Flow rate 6 – 14.7 m³/h
 - Spray pattern 360°
 - Operating temperature 95 °C max.
 - Ambient temperature / SIP 140 °C max., 30 min
 - Insertion Ø 70 / 85 mm min.
 - Materials: Stainless steel 316 (1.4401), 316L (1.4404), PVDF
 - Pipe connection:
Clipdisc 100, Pin Fix for 1" OD tube (25.4x1.6)
Clipdisc 150, Pin Fix for 1½" OD tube (38.1x1.6)



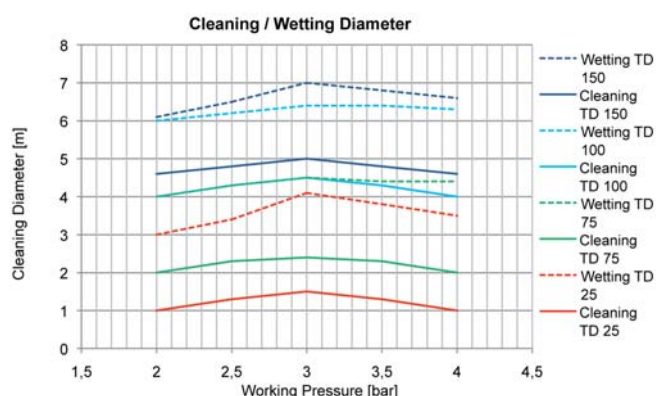
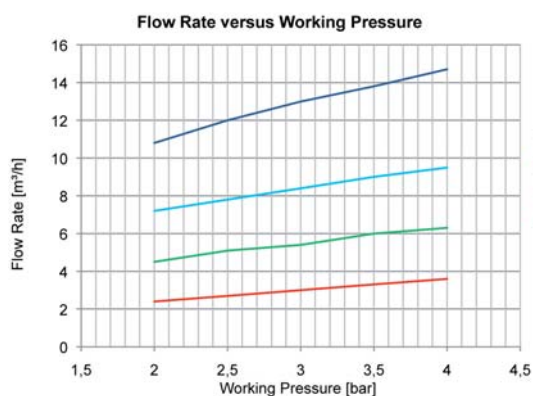
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Turbodisc TD25 / TD75 / TD100 / TD150 ... one of the strongest in its class



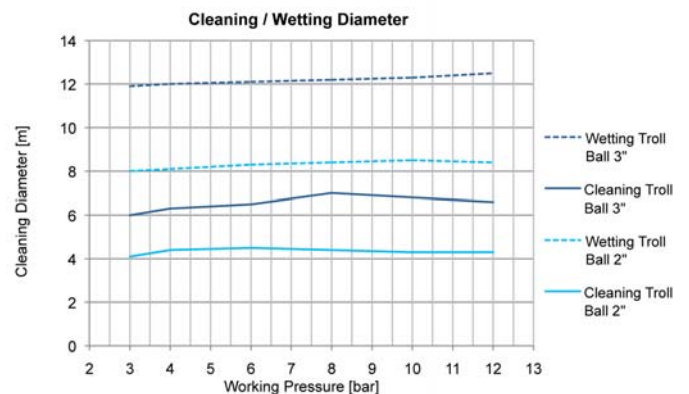
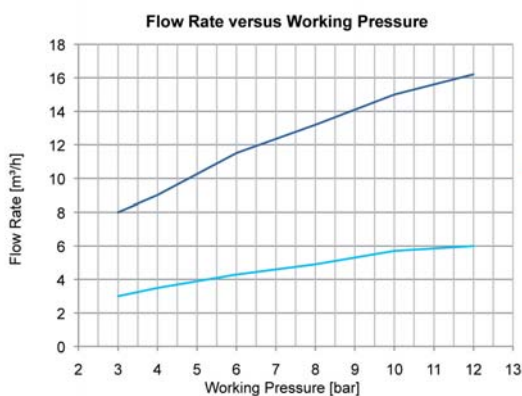
- Economic flow rates
 - Ball bearing free-increased service life
 - Maintenance free
 - Hydrodynamic bearing
 - Insensitive to blockage
 - FDA conform or ATEX exempt
 - SIP through the nozzle possible
 - Preferred mounting position: any
- Working pressure 2 – 4 bar
 - Cleaning diameter up to 4.8 m
 - Flow rate 2.4 – 14.7 m³/h
 - Spray pattern 360°, optional 180°
 - Operating temperature 95 °C max.
 - Ambient temperature / SIP 140 °C max., 30 min
 - Insertion Ø 31 mm, 41 mm, 55 mm, 75 mm min.
 - Materials: Stainless steel 316L (1.4404), PTFE or C-PTFE (ATEX), optional Hastelloy
 - Pipe connection: 1/4" BSP / Male
3/4", 1", 1 1/2" BSP / Female



Troll Ball 2" / 3" ... the economic alternative to the spray ball

- Economic flow rates
- Ball bearing free-increased service life
- Slow, constant rotation
- Powerful round jets
- FDA conform or ATEX exempt
- Hygienic and self-cleaning
- SIP through the nozzle possible
- Preferred mounting position: vertical down

- Working pressure 3 – 12 bar
- Cleaning diameter up to 7 m
- Flow rate 3 – 16.2 m³/h
- Spray pattern 360°, optional 180°
- Operating temperature 120 °C max.
- Ambient temperature 140 °C max.
- Insertion Ø 60 mm min.
- Materials: Stainless steel 316L (1.4404), P-PTFE, optional C-PTFE (ATEX)
- Pipe connection: 3/4" / 1 1/2" BSPT / Female
- Weight 1 kg / 2.3 kg



VARIPURE Rotating Cleaner



Rotating Jet Cleaner Type 2E for hanging in tanks ... in levels circulating fan jets



- Interval flushing by slowly rotating fan jets
- Multiple increased swell compared with a spray ball
- Various spray pattern by different nozzle arrangements
- Driven by liquid flow gear
- Rotation Monitoring by Proximity Switch (optional)
- Various opportunities for pressure tank connection
- Preferred mounting position: vertical down

- Working pressure 2.3 – 4.3 bar
- Flow rate 7 – 29 m³/h
- Cleaning diameter 2 – 10 m
- Operating temperature 80 °C max, optional 100 °C
- Ambient temperature 130 °C max. (with PTFE design)
- Insertion Ø 100 mm min.
- Materials:
Stainless steel 1.4571 / PP at 80 °C
Stainless steel 1.4571 / PTFE at 100 °C

Type	No. of nozzles	Flow rate m ³ /h	Pressure bar	1/min	Spraying circle Ø m
A	1	13 – 14	2.7	8 – 12	4
B	2	23 – 24	3.7	4 – 6	7
B1	2	18 – 19	3.0	3 – 4	6
C1	2	23 – 24	3.7	4 – 6	10
C2	3	28 – 29	4.3	5 – 8	10
C4	3	24 – 25	3.9	5 – 7	6
D1	2	24 – 25	3.8	4 – 6	4.2
D2	2	14 – 15	2.8	3 – 4	3.8
D3	2	19 – 20	3.4	4 – 5	4
E	2	22 – 23	3.6	4 – 6	8
E1	2	23 – 24	3.7	4 – 6	8.5
F2	3	17 – 18	2.8	3 – 5	3.5
F3	3	20 – 21	3.2	3 – 5	4
F4	3	20 – 21	3.2	4 – 6	4
F5	3	11 – 12	2.6	6 – 10	3
F6	3	7 – 8	2.3	4 – 6	2
F8	3	11 – 12	2.6	6 – 10	3

Rotating Jet Cleaner, Type 2B ... to be placed into the tank

- Interval flushing by slowly rotating fan jets
- Multiple increased swell compared with a spray ball
- Various spray pattern by different nozzle arrangements
- Driven by liquid flow gear
- Rotation Monitoring by Proximity Switch (optional)
- Various opportunities for pressure tank connection
- Preferred mounting position: vertical up

- Working pressure 2.3 – 3.2 bar
- Flow rate 6 – 6 m³/h
- Cleaning diameter 2 – 10 m
- Operating temperature 80 °C max, optional 100 °C
- Ambient temperature 130 °C max. (with PTFE design)
- Installation sleeve 440 mm suitable for oval manholes 330/440mm
- Materials:
Stainless steel 1.4571 / PP at 80 °C
Stainless steel 1.4571 / PTFE at 100 °C



Type	No. of nozzles	Flow rate m ³ /h	Pressure bar	1/min	Spraying circle Ø m
A	1	13 – 14	2.7	8 – 12	4
G	1	10 – 11	2.3	7 – 10	3
H	2	21 – 22	3.2	4 – 6	3
M	1	11 – 12	2.4	7 – 10	3 – 4
N1	2	21 – 22	3.2	4 – 6	6
N2	2	21 – 22	3.2	4 – 6	6



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