BILFINGER WATER TECHNOLOGIES

SOLUTIONS FOR INLET WORKS / HEADWORKS

OUR BRANDS FOR RELIABLE TECHNOLOGIES:
PASSAVANT® – JOHNSON SCREENS® – NOGGERATH® – GEIGER®

A perfect network of expertise.

BILFINGER WATER TECHNOLOGIES

GLOBAL BUSINESS UNITS

- GENERAL INDUSTRIAL
- HYDROCARBON PROCESSING
- INDUSTRIAL FILTRATION
- VACUUM TECHNOLOGY
- WATER INTAKE
- **WATER TREATMENT**
- WATER WELL

IN DETAIL

Global Business Unit Water Treatment
(wastewater / potable water / industrial applications)

Brands
- PASSAVANT®
- JOHNSON SCREENS®
- NOGGERATH®
- GEIGER®

Technologies / range of products
- Coarse screens
- Shut-off devices (penstocks and sluice gates)
- Inlet works / headworks
  (fine screening technology, screenings and grit treatment, spiral conveying systems)
- Fine bubble aeration, Surface Brush Aerator MAMMOTH ROTOR® and biological process efficiency
- Scraping systems
- Sludge thickening and dewatering
  (belt thickeners, belt and chamber filter presses, screw presses)
- Fine and micro-sieving / screening as well as TRITON UNDERDRAINS™ for gravity filters

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ATTENTION TO DETAIL IS OUR KEY TO OPTIMUM EFFICIENCY.

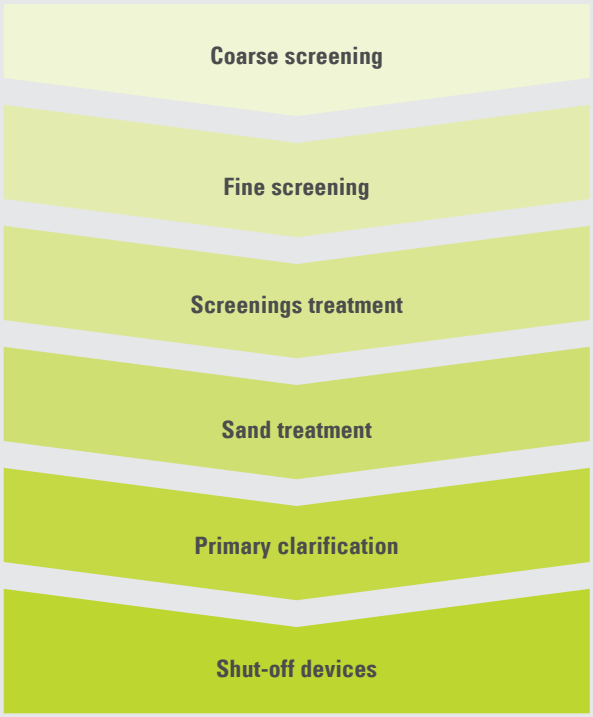
As one of the leading suppliers worldwide, Bilfinger Water Technologies offers components and services in almost every field of water and wastewater technology. The group has a strong global presence with companies located in Europe, North and South America, North Africa, South and East Asia and Australia.

The core expertise of the Global Business Unit Water Treatment lies in the efficient reprocessing of wastewater. Through the products and services of the traditional brands PASSAVANT®, JOHNSON SCREENS®, NOGGERATH® and GEIGER®, the Global Business Unit Water Treatment is able to provide system solutions, with components and machines manufactured within the group, for the clarification of municipal and industrial wastewater, biological treatment, sludge treatment and drinking water purification and to increase the overall efficiency of wastewater treatment plants.

It is particularly important hereby that screen gap widths and hole diameters are optimally coordinated for the coarse and fine screening phases, and that there are efficient wash and press systems for the further processing of substances separated in scraper and sand treatment installations, turbulence-free scraper technologies for the removal of sediments in grit traps and primary clarification tanks and reliable conveying systems and shut-off devices to ensure the input / output and transport of the respective media.

In the development of individual components and specific complete solutions the Global Business Unit Water Treatment unites the expertise and years of experience of traditional brands such as PASSAVANT®, JOHNSON SCREENS®, NOGGERATH® and GEIGER®. With our international production and distribution locations and a strong commitment to service, we support our customers worldwide along the entire route to optimal product solutions: from consultations in the design and planning phase to reliable service, even after many years of operation.

Inlet works / headworks:



COARSE AND FINE SCREENING.

Bilfinger Water Technologies manufactures the full range of coarse and fine screening systems. By ensuring the reliable and complete removal of contaminants, from coarse solids right down to the finest particles such as fibre and floating matter, we are able to optimise downstream processes and to protect the environment.

PASSAVANT® Bar Screen with Grab Cleaner SGR

- Gap width: 10–150 mm
- Throughput capacity: up to 95,000 m^3/h
- Installation angle: 75°–90°
- Channel width: 0.9–6 m
- Channel depth: 2–20 m

PASSAVANT® Cable Operated Bar Screen RmGW

- Gap width: 10–150 mm
- Throughput capacity: up to 95,000 m^3/h
- Installation angle: 75° / 82.5° / 90°
- Channel width: 1–6 m
- Channel depth: 2–50 m

GEIGER®
Climber Screen KRC

- Gap width: 6–100 mm
- Throughput capacity: up to 15,000 m^3/h
- Installation angle: 75°
- Channel width: 0.8–4 m
- Channel depth: 1–15 m

PASSAVANT®
Revolving Chain Screen KUR-C

- Gap width: 6–60 mm
- Throughput capacity: up to 15,000 m^3/h
- Installation angle: 75°–90°
- Channel width: 0.6–3 m
- Channel depth: 0.8–15 m

JOHNSON SCREENS®
Multi Rake Bar Screen DEFENDER

- Gap width: 6–80 mm
- Throughput capacity: up to 10,000 m^3/h
- Installation angle: 75°–90°
- Channel width: 0.4–2 m
- Channel depth: 1–10 m

NOGGERATH®
Revolving Chain Screen KLR

- Gap width: 3–100 mm
- Throughput capacity: up to 10,000 m^3/h
- Installation angle: 70°
- Channel width: 0.5–2 m
- Channel depth: 0.4–4 m

COARSE AND FINE SCREENING.

JOHNSON SCREENS®
Multi Rake Bar Screen
DEFENDER DUO

- Gap width: 6–80 mm
- Throughput capacity: up to 10,000 m^3/h
- Installation angle: 75°–90°
- Channel width: 0.4–2 m
- Channel depth: 1–10 m

NOGGERATH®
Step Screen NST

- Gap width: 2, 3 and 6 mm
- Throughput capacity: up to 10,000 m^3/h
- Installation angle: 50°
- Channel width: 0.45–1.2 m
- Channel depth: 0.5–4 m

NOGGERATH®
Continuous Belt Screen NG

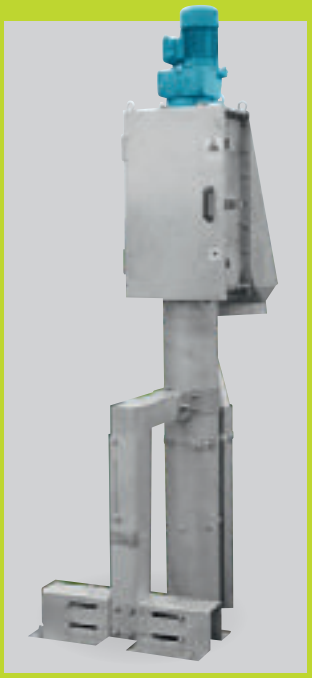
- Mesh width: 1–15 mm
- Throughput capacity: up to 10,000 m^3/h
- Installation angle: 85°
- Channel width: 0.5–2 m
- Channel depth: 0.5–10 m

NOGGERATH®
Spiral Sieve NSI

- Gap width:
  – wedgewire screen: 0.25 – 6 mm
  – perforated plate: 2 – 10 mm
- Throughput capacity: up to 900 m^3/h
- Installation angle: 35° (45°)
- Channel width: 0.3 – 0.6 m
- Channel depth: 0.4 – 4 m

JOHNSON SCREENS®
Spiral Sieve MI/MID

- Gap width:
  – wedgewire screen: 0.25 – 2 mm
  – perforated plate: 2 – 10 mm
- Throughput capacity: up to 1,100 m^3/h
- Installation angle: 35° (45°)
- Channel width: 0.3 – 1 m
- Channel depth: 0.6 – 2 m
- Sieve basket diameter: 200, 300, 400, 500, 600, 700 mm



JOHNSON SCREENS®
Vertical Sieve Screen MID/V

- Gap width:
  – wedgewire screen: 0.25 – 2 mm
  – perforated plate: 2 – 10 mm
- Throughput capacity: up to 1,100 m^3/h
- Installation angle: 90°
- Shaft depth: 0.5 – 10 m
- Inlet flange: DN 150 – DN 500

COARSE AND FINE SCREENING.

JOHNSON SCREENS®
Double-Motor Rotary Drum Screen VERSA

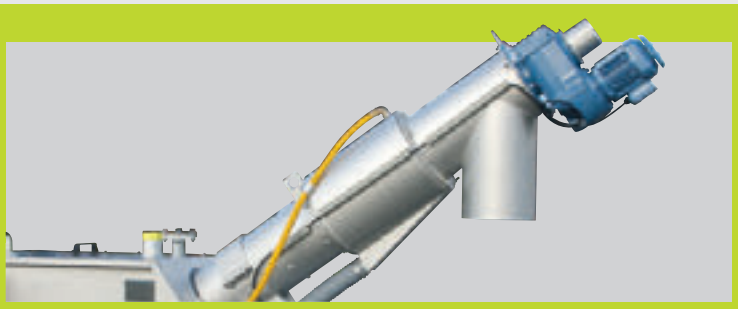
- Gap width:
  – wedgewire screen: 0.25–6 mm
  – perforated plate: 1–10 mm
- Throughput capacity: up to 6,000 m³/h
- Installation angle: 35°
- Channel width: 0.8–2.6 m
- Channel depth: 0.8–2.6 m

NOGGERATH®
Rotary Drum Screen NTS

- Gap width:
  – wedgewire screen: 0.25–5 mm
  – perforated plate: 1–6 mm
  – mesh: 200–1,000 µm
- Throughput capacity: up to 9,000 m³/h
- Installation angle: 35°
- Channel width: 0.9–2.9 m
- Channel depth: 0.5–5 m

JOHNSON SCREENS®
Inclined Shafted MINYSCREEN

- Gap width:
  – perforated plate: 2–6 mm
- Throughput capacity: up to 20 m³/h
- Installation angle: 75°
- Inlet flange: DN 100



NOGGERATH®
Spiral Sieve in tank, NSI-B

- Gap width:
  – wedgewire screen: 0.25–6 mm
  – perforated plate: 2–10 mm
- Throughput capacity: up to 720 m³/h
- Sieve basket diameter: 200, 300, 500 mm

NOGGERATH®
Septic Sludge Recieving Station NSI-FA

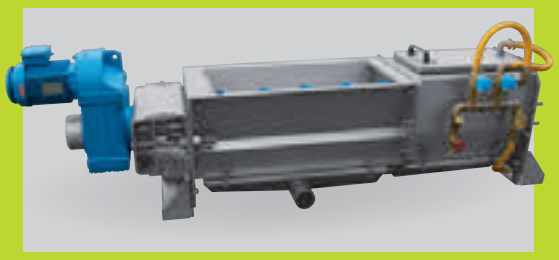
- Gap width:
  – wedgewire screen: 2–6 mm
  – perforated plate: 5–10 mm
- Throughput capacity: up to 100 m³/h with Ø 5 mm
- Sieve basket diameter: 500 mm

JOHNSON SCREENS®
CENTRE-FLO™ Band Screen

- Gap width: 1–6 mm
- Throughput capacity: up to 7,000 m³/h
- Installation angle: 90°
- Channel width: 0.3–2.5 m
- Channel depth: 0.3–8 m

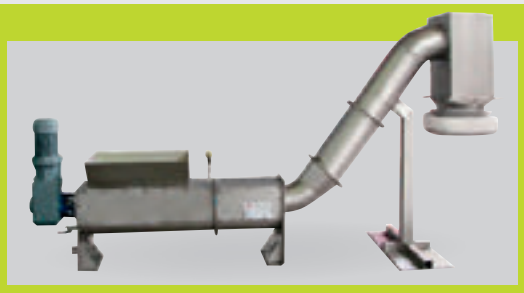
SCREENINGS TREATMENT.

Efficient, ecological and responsible: Bilfinger Water Technologies develops effective and economic solutions for the environmentally-friendly disposal of screenings from municipal and industrial applications, both with and without substrate wash-out.



NOGGERATH®
Screw Press NP & Wash Press NW

- Design sizes: up to 500 mm (spiral diameter)
- Throughput capacity: up to 7.5 m^3/h
- Intake length: up to 2,400 mm
- DS content: up to 50 %
- Weight reduction of screenings: up to 85 %
- Energy and water efficient



JOHNSON SCREENS®
Screenings Wash Press MDX

- Design sizes: up to 400 mm (spiral diameter)
- Throughput capacity: up to 8 m^3/h
- Intake length: up to 3,000 mm
- DS content: up to 50 %
- Weight reduction of screenings: up to 85 %
- Energy and water efficient

NOGGERATH® Spiral Press SPR

- Transport, pressing, dewatering
- Throughput capacity: up to 16 m^3/h
- Installation angle: 1–20 °
- Trough length: up to 10 m
- DS content: up to 35 %

JOHNSON SCREENS® Screenings Screw Compactor MD

- Transport, pressing, dewatering
- Throughput capacity: up to 8 m^3/h
- Installation angle: 1–25 °
- Trough length: up to 10 m
- DS content: up to 35 %

NOGGERATH® Spiral Conveyor SF

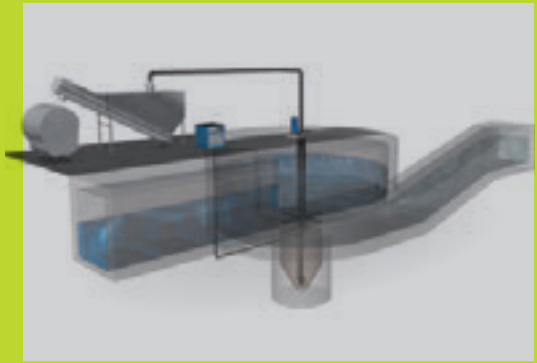
- Blade thickness: 10–25 mm
- Throughput capacity: up to 40 m^3/h
- Installation angle: up to 40 °, 90 ° (vertical)
- Diameter: up to 500 mm
- Blockage-free and low wear
- Modular, individual construction and flexible integration possibilities

JOHNSON SCREENS® Shaftless Screw Conveyor MND

- Blade thickness: 15–25 mm
- Throughput capacity: up to 45 m^3/h
- Installation angle: 0–90 °
- Diameter: up to 500 mm
- Blockage-free and low wear
- Modular, individual construction and flexible integration possibilities

SAND TREATMENT.

Bilfinger Water Technologies Sand Separators and Sand Washers are utilised to reduce the water content and organic content of the grit collected in wastewater treatment plants, and thus contribute to both the cost effectiveness of the processes and the protection of the environment.



NOGGERATH® Circular Grit Chamber RSF

- Throughput capacity: up to 11,400 m^3/h
- Installation in concrete
- Separation performance: up to 95 % ≥ 0.3 mm
- Diameter: 2–7.3 m
- Grit removal by means of dry-installed pump (sump shaft) or air lift pump

JOHNSON SCREENS® Vortex Grit Classifier DP

- Throughput capacity: up to 8,200 m^3/h
- Install. in concrete or tank
- Separation performance: up to 90 % ≥ 0.3 mm
- Diameter: 2–6 m
- Grit removal by means of dry-installed pump (sump shaft) or air lift pump

NOGGERATH® Sand Separator SR

- Throughput capacity: up to 126 m^3/h
- Discharge: up to 3 m^3/h
- Separation performance: up to 95 %
- Industrial version available

JOHNSON SCREENS® Grit Classifier MN

- Throughput capacity: up to 130 m^3/h
- Discharge: up to 1.2 m^3/h
- Separation performance: up to 95 %

NOGGERATH® Compact Combi Unit

- Throughput capacity: up to 1,000 m³/h
- Separation perf.: up to 95 %
- Optionally with integrated Sand Washer
- Aerated or non-aerated grit trap
- With or without grease trap
- On floor or in channel
- Diff. screen types possible

JOHNSON SCREENS® Compact Combi Unit TOP

- Throughput capacity: up to 1,260 m³/h
- Separation perf.: up to 95 %
- Optionally with integrated Sand Washer
- Aerated or non-aerated grit trap
- With or without grease trap
- On floor or in channel
- Diff. screen types possible

NOGGERATH® Compact Combi Unit ECO-Combi

- Throughput capacity: up to 300 m³/h
- Separation performance: up to 95 %
- Non-aerated design, on floor or in channel

JOHNSON SCREENS® Compact Combi Unit MINYTOP

- Throughput capacity: up to 36 m³/h
- Separation performance: up to 85% ≥ 0.2 mm
- Non-aerated design, on floor or in channel

NOGGERATH® Sand Washer SW

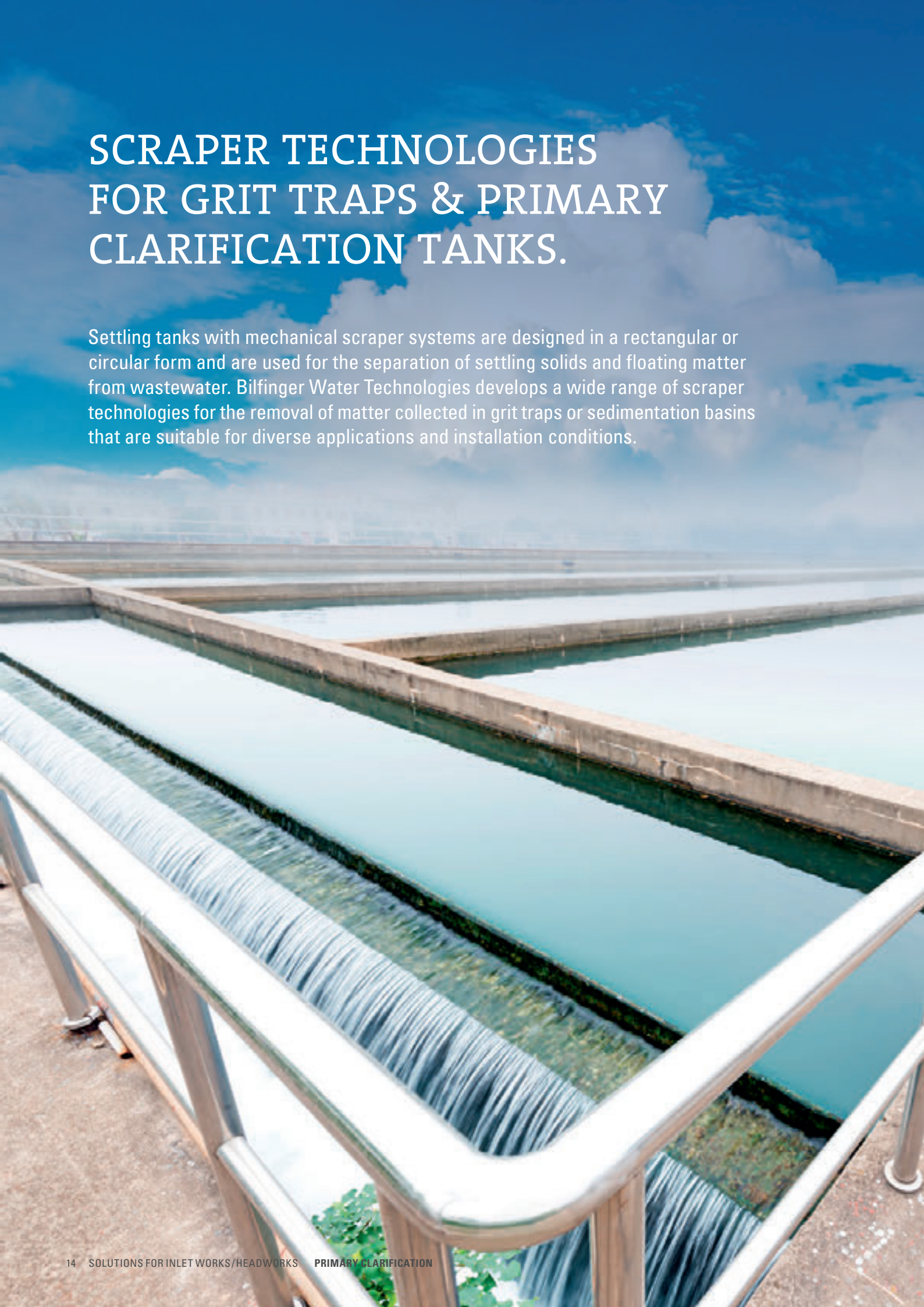
- Throughput capacity: up to 1 m³/h washed sand
- Percentage of organic matter in washed sand: < 3 %
- Dry or wet feeding
- With or without longitudinal grit trap
- Low water consumption, slowly rotating agitator

JOHNSON SCREENS® Grit Washer MN/FW

- Throughput capacity: up to 1 m³/h washed sand
- Percentage of organic matter in washed sand: < 3 %
- Dry or wet feeding
- With or without longitudinal grit trap
- Low water consumption, slowly rotating agitator

SCRAPER TECHNOLOGIES FOR GRIT TRAPS & PRIMARY CLARIFICATION TANKS.

Settling tanks with mechanical scraper systems are designed in a rectangular or circular form and are used for the separation of settling solids and floating matter from wastewater. Bilfinger Water Technologies develops a wide range of scraper technologies for the removal of matter collected in grit traps or sedimentation basins that are suitable for diverse applications and installation conditions.



PASSAVANT®
Grit Chamber Scraper

- Tank width: 2–6,7 m
- Tank length: 30 m
- Grit blade scraper
- Grit suction scraper
- Removable scraper blades with or without scum removal / grease trap

PASSAVANT®
Scraper Technology for Longitudinal Tanks

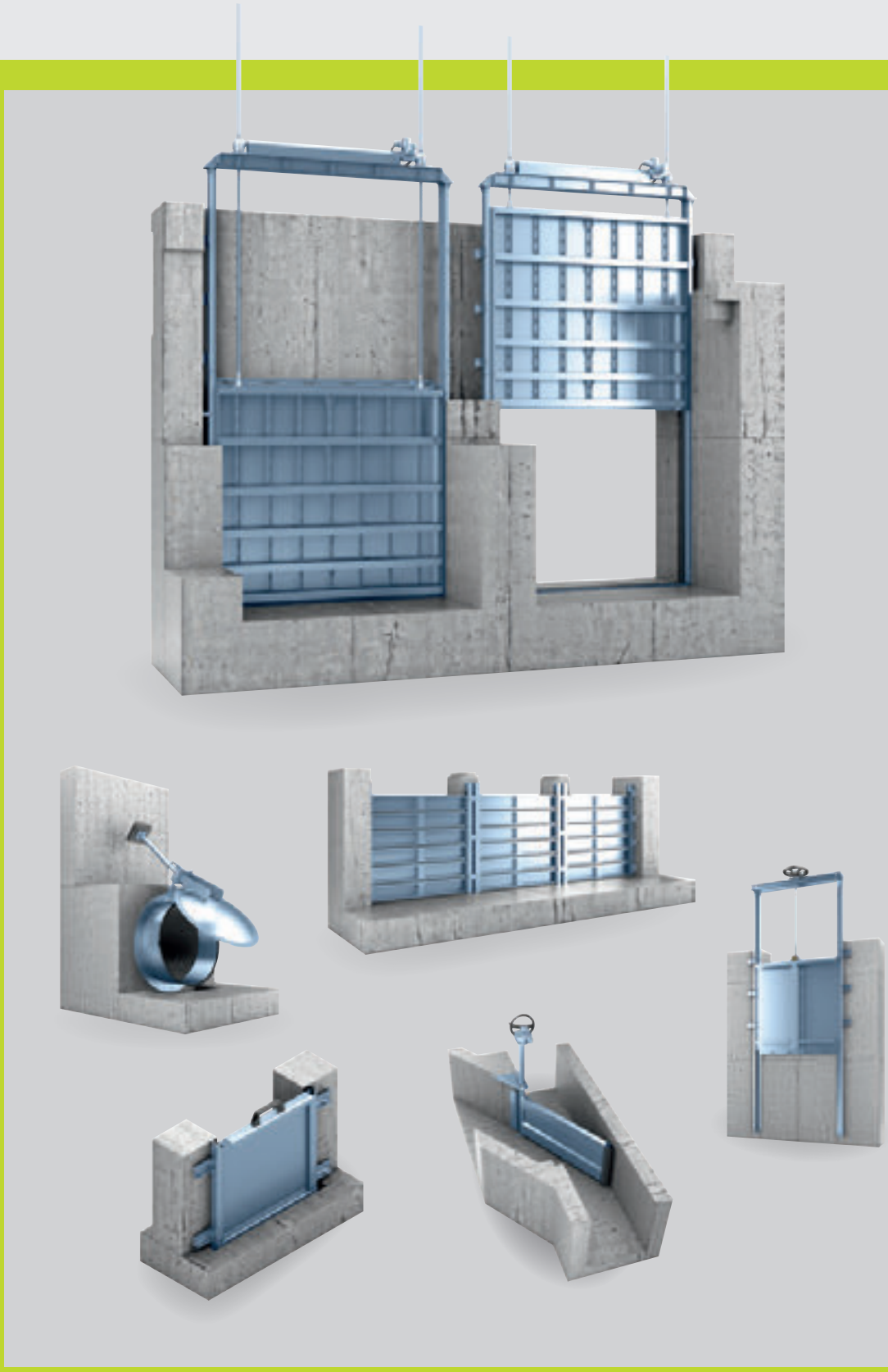
- Tank width: 5–20 m
- Tank length: 50 m
- Blade scraper
- Suction scraper with or without scum removal

PASSAVANT®
Scraper Technology for Circular Tanks

- Tank diameter: 10–60 m
- Peripheral or central drive Blade scraper
- Suction scraper with or without scum removal

SHUT-OFF DEVICES.

Control and transport systems are a crucial part of process-based wastewater treatment: products from Bilfinger Water Technologies make a substantial contribution to the safeguarding of process reliability, by ensuring the regulation of water inlets and outlets, the transport of wastewater and screenings and flood protection.



PASSAVANT® Shut-Off Devices

- Uncased, for various channel / opening profiles
- Design sizes: up to 7 x 7 m
- Operating pressures: up to 5 bar (50 m WS)
- Made of rust-proof materials (various stainless steel qualities)
- Customized to application / customer requirements
- Weld construction optimised for long service life
- Maximum safety due to static and stress calculation
- Low operating costs as widely maintenance-free


BILFINGER

AFTER-MARKET & FIELD SERVICES – SYSTEMATIC, RELIABLE AND GLOBAL.

We, as a multidisciplinary team of specialists, think and act with a direct focus on customer needs. We use direct communication routes to find swift and efficient solutions to each and every problem. We happily take on any challenge in order to constantly provide the high quality standards set out in our service concept and we put them into practise on a day to day basis. We understand the term "full service" as a dynamic task and are open to change and any comments or suggestions you may wish to make.

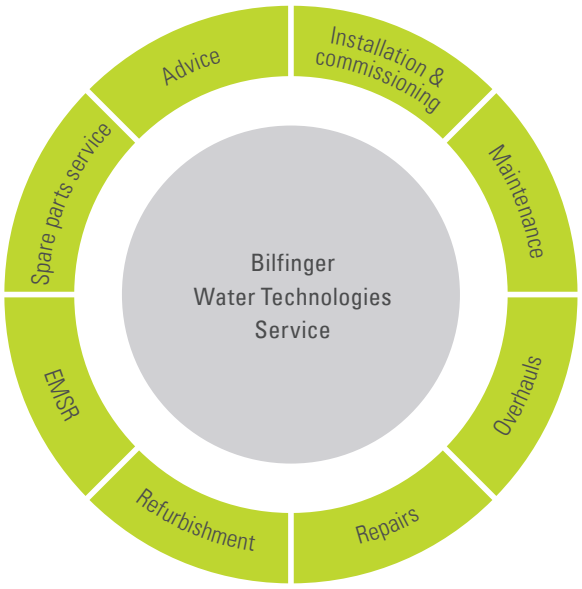
Our constant objective is your satisfaction with us and our products, as we are aware that only top quality in both production and service will enable you to profit from durable machine functionality and efficiency, low operational and investment costs and reliability in all stages of your processes.

Whether it is a question of a new installation, commissioning, maintenance, spare parts, repair or refurbishment, our top priority is to offer you expert advice and effective remedies. Moreover, we have a wide range of special parts and spare parts which are developed and manufactured in our own certified workshops (DIN EN ISO 9001:2008) and which undergo strict controls before dispatch. We are able to develop an effective solution to suit your individual requirements with the help of a comprehensive analysis, a wide network of expertise and compliance with prevailing legal conditions – naturally this also applies to installations and components from other manufacturers.

We realise that breakdowns, production downtimes and machine failures are both extremely annoying and expensive. This is why our dedicated team is at your service with state-of-the-art technology, at all times, both within Germany and abroad. Spare parts or service call-outs can be requested around the clock. You will receive competent support via our service hotline 24 hours a day and 365 days a year.

Strong team – strong service.

Our full service concept



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