



**BILFINGER**

**WATER  
TECHNOLOGIES**

BILFINGER WATER TECHNOLOGIES

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# SOLUTIONS FOR FINE AND MICRO-SIEVING / SCREENING

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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

### Headquarters

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# THE FINAL STEP TOWARDS CLEAN WATER.

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.

Fine and micro-sieving / screening is based on mechanical processes. Various screening technologies form the basis for the separation of liquids and solids and are decisive to the success of practical applications. Screening is carried out either statically or dynamically, whereby both processes can be effected in a continuous or discontinuous mode. Rotary drum, micro and underdrain screens are employed for fine and micro-sieving / screening in gravity filter systems.

Micro screen systems with rotating drums are an effective and cost effective alternative to conventional rakes and screens in municipal wastewater technology applications. Our underdrain screening components are suitable for use in the purification of drinking or process water and also as a third clarification stage or for complex filtration applications.

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.

## Fine and micro-sieving / screening:

**Rotary drum and sieve systems**

**Underdrain screening systems**

# FINE & MICRO-SIEVING / SCREENING.

Rotary drum screens separate, filter and sieve floating matter and particles from liquids, process water and wastewater. Each rotary drum screen is specifically designed for the respective application. A differentiation is, therefore, made between screen types which are loaded internally or externally. When ultra fine particles have to be filtered out of flows of water and wastewater, micro screening technologies come into play.



## NOGGERATH® Rotary Drum Screen HRS

- Gap widths: 0.25–2.5 mm
- Perforation: 3–50 mm
- Throughput capacity: up to 3,500 m³/h
- Drum diameter: ca. 900, 1,200, 1,500, 2,000 mm
- Suitable for high solid loads



## NOGGERATH® Rotary Drum Screen NSA

- Gap widths: 0.25–2.5 mm
- Throughput capacity: up to 1,000 m³/h
- Drum diameter: 600–1,000 mm
- NSA-Plus version with integrated spiral press



## NOGGERATH® Rotary Drum Screens MTSM & MG

- Screen mesh widths: 5–250 µm (MTSM) and 200 up to 1,000 µm (MG)
- Throughput capacity: up to 7,500 m³/h
- Drum diameter: 1–4 m
- Installation: in channel or tank

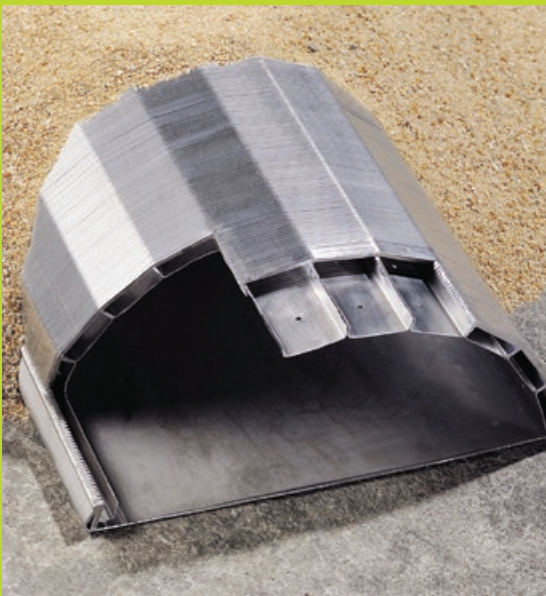


## JOHNSON SCREENS® Contra-Shear™ Suboscreen™

- Gap widths: 0.5–6 mm
- Perforation: 2–6 mm
- Throughput capacity: up to 14,400 m³/h
- Drum diameter: 0.9–3 m
- Installation: in channel

# UNDERDRAIN SCREENING.

Bilfinger Water Technologies offers underdrain screening systems for filter installations as an optimal and cost-effective solution for the purification of drinking water, additional filter processing, industrial pre-treatment and desalination. TRITON UNDERDRAINS™ are utilised in gravity filters as operationally reliable and efficient bottom screening systems for filtering, for the centralisation of discharge water and to optimise the distribution of air and water in backwash operations.



## JOHNSON SCREENS® TRITON UNDERDRAINS™

- Standard slot width: 0.3 mm
- Dimensions: approx. 127 mm height x 260 mm width
- Standard tank dimensions up to 6.5 x 20 m (other dimensions on request)
- Pressure drop across the underdrain:  
during backwash:  $(37 \text{ m}^3/\text{h}/\text{m}^2) \pm 0.5 \text{ m}$   
during filtration:  $(12.5 \text{ m}^3/\text{h}/\text{m}^2) \pm 0.05 \text{ m}$
- Available in stainless steel and PVC
- Either center or end feed connections can be supported
- Air can be fed from the bottom or the top



# 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



