

Solutions

for Water, Wastewater and Sludge Treatment

Technologies by PASSAVANT®, GEIGER® and NOGGERATH® – Product Range

PASSAVANT GEIGER

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Passavant-Geiger GmbH • Passavant-Geiger-Strasse 1 • 65326 Aarbergen • Germany

Phone: +49 6120 28-0 • Telefax: +49 6120 28-2119 • www.passavant-geiger.de • info@passavant-geiger.de

PASSAVANT

Business Unit Passavant

Passavant-Geiger-Strasse 1
65326 Aarbergen, Germany
Phone: +49 6120 28-0
Telefax: +49 6120 28-2119

GEIGER

Business Unit Geiger

Hardeckstrasse 3
76185 Karlsruhe, Germany
Phone: +49 721 5001-0
Telefax: +49 721 5001-213

NOGGERATH

Business Unit Noggerath

Feldstrasse 2
31708 Ahnsen, Germany
Phone: +49 5722 882-0
Telefax: +49 5722 882-282

Solutions by Passavant-Geiger

Quality and Reliability

Our Competence Centers guarantee the development of products, tailor-made to your requirements.

Using the best up to-date construction and engineering tools, we manufacture products meeting the state of the art. In our own production facilities we fulfil worldwide approved standards at a demanding, international high level quality.

Passavant-Geiger's intensive support after installation and commissioning relies on a worldwide CRM-supported service network.

Competence Center »Inlet Works« Pages 2, 4, 5

- Screening Technology
- Screenings Washers, Screenings Presses and Sand Washers
- Spiral Conveyors

Competence Center »Fine Sieving« Page 3

- Sieving upstream Membrane Bioreactors
- Micro Sieving

Competence Center »Aeration Technology« Page 6

- Surface Aeration
- Improvement of efficiency and capacity of biological reactors / wastewater treatment plants

Competence Center »Pump Technology« Page 6

Competence Center »Shut-off Devices/Valves« Page 7

Competence Center »Sludge Treatment« Pages 8, 9

- Static Sludge Thickener and Central Drives
- Belt Thickener and Belt Filter Presses
- Membrane Filter Presses / Chamber Filter Presses
- Solar Sludge Drying

Liquid / Solid Separation



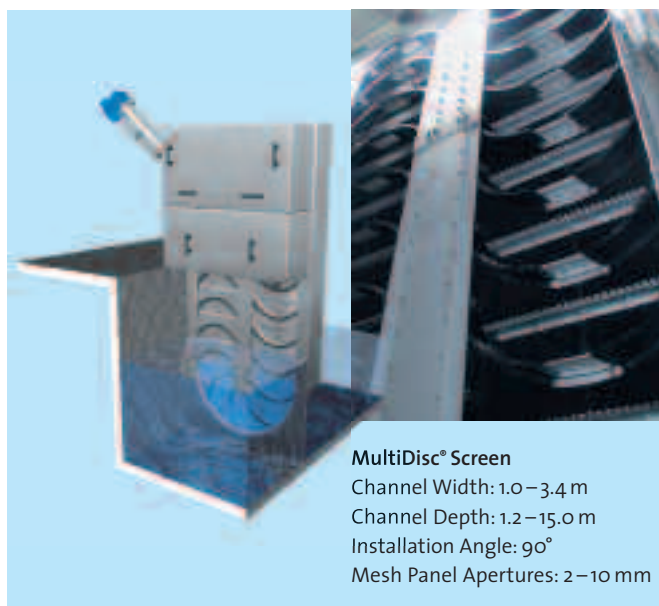
SGR Bar Screen with Grab Cleaner
Channel Width: 0.9–6.0 m
Channel Depth: 2–20 m
Installation Angle: 75–90°
Bar Spacing: 10–100 mm



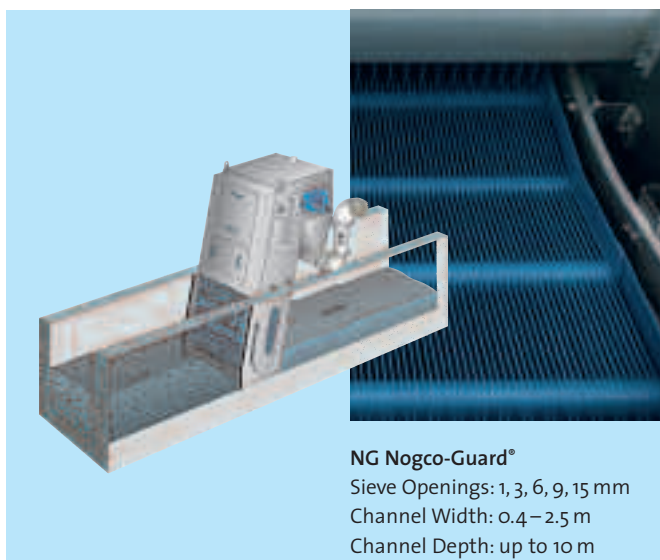
KRC Climber Screen
Channel Width: 0.8–3.0 m
Channel Depth: 1–15 m
Installation Angle: 75°
Bar Spacing: 6–100 mm



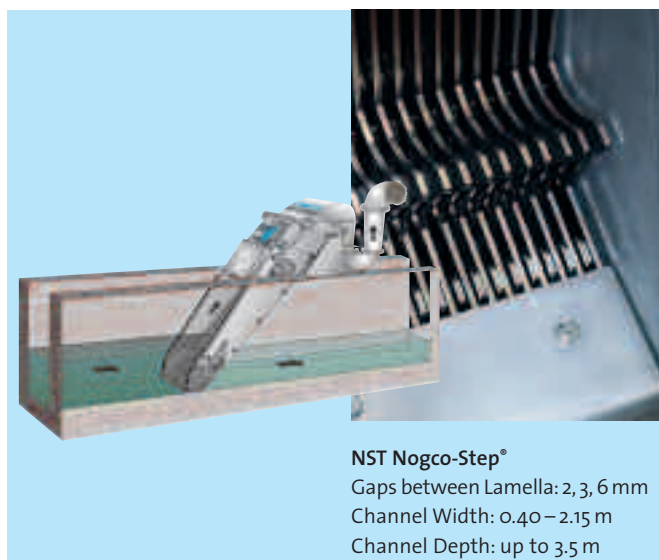
KLR Revolving Chain Screen
Channel Width: 0.4–2.0 m
Channel Depth: 0.4–4.0 m
Installation Angle: 70°
Bar Spacing: 6–100 mm



MultiDisc® Screen
Channel Width: 1.0–3.4 m
Channel Depth: 1.2–15.0 m
Installation Angle: 90°
Mesh Panel Apertures: 2–10 mm



NG Nogco-Guard®
Sieve Openings: 1, 3, 6, 9, 15 mm
Channel Width: 0.4–2.5 m
Channel Depth: up to 10 m



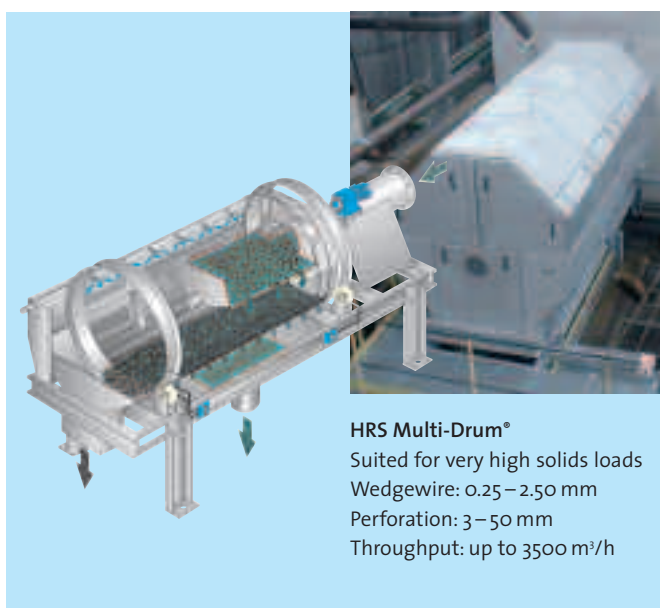
NST Nogco-Step®
Gaps between Lamella: 2, 3, 6 mm
Channel Width: 0.40–2.15 m
Channel Depth: up to 3.5 m



Spiral Sieve NSI and NSI-B
 Perforation: 3, 5, 6 mm
 Wedgewire: 0.25 – 6.00 mm
 Channel Depth: up to 7.0 m
 Channel Width: 0.25 – 0.75 m



ROTOPASS® and ROTOPASSPlus
 Wedgewire: 0.25 – 2.50 mm
 Throughput: up to 1500 m³/h
 • Continuous operation



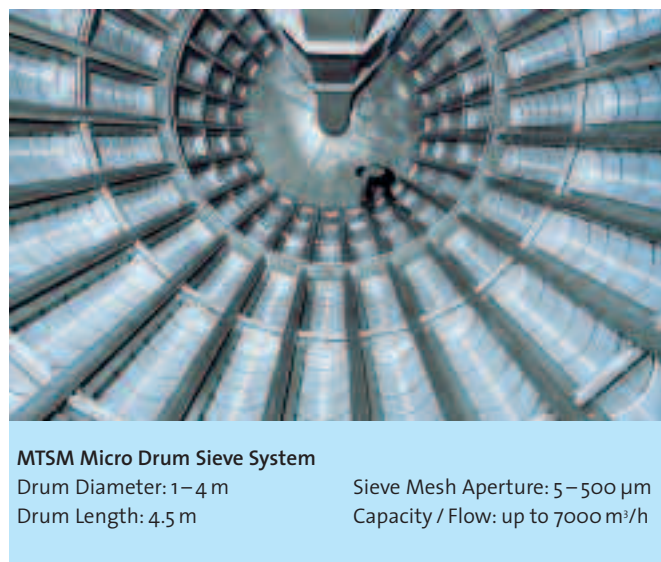
HRS Multi-Drum®
 Suited for very high solids loads
 Wedgewire: 0.25 – 2.50 mm
 Perforation: 3 – 50 mm
 Throughput: up to 3500 m³/h



MS Microshear®
 Stainless Steel Mesh: 33 – 1000 µm
 • Atmospheric functioning
 • Filtering without flocculants
 • Integrated solids discharge



HS Hydroscreen
 Wedgewire: 0.25 – 2.50 mm
 Throughput: up to 600 m³/h



MTSM Micro Drum Sieve System
 Drum Diameter: 1 – 4 m
 Drum Length: 4.5 m

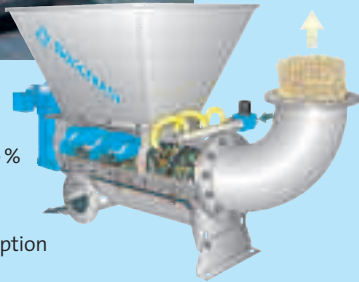
Sieve Mesh Aperture: 5 – 500 µm
 Capacity / Flow: up to 7000 m³/h

Recovery of Recyclable Materials and Treatment of Residuals



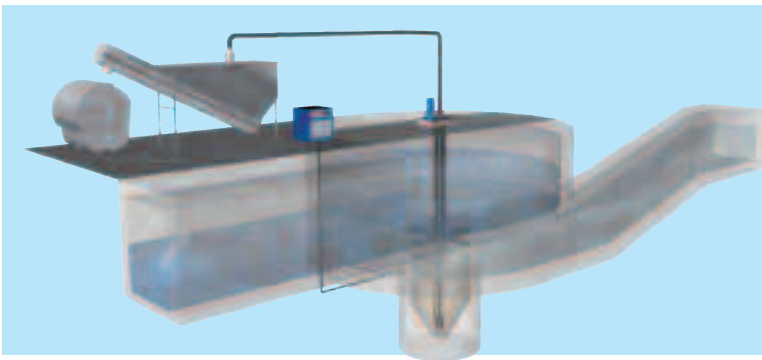
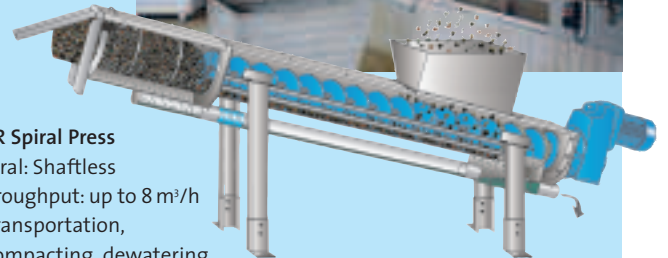
Nogwash-Nogpress

Dry Substance Content of Discharged Screenings: up to 50 %
Weight Reduction: up to 85 %
Throughput: up to 4 m³/h
• Low water and energy consumption



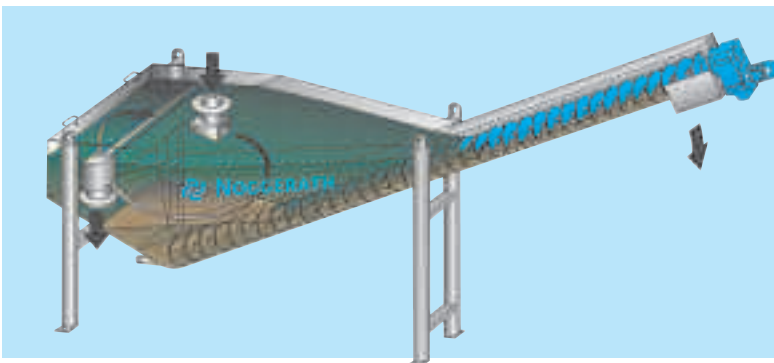
SPR Spiral Press

Spiral: Shaftless
Throughput: up to 8 m³/h
• Transportation, compacting, dewatering



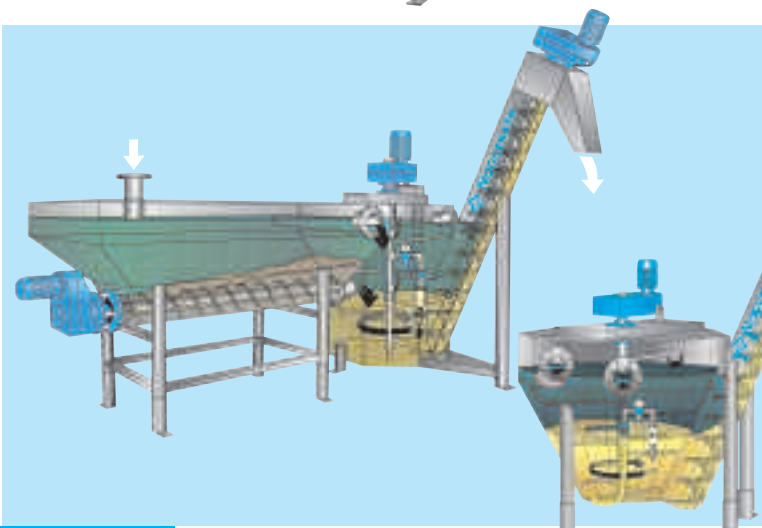
Circular Grit Chamber

Diameter: 2.0 – 7.3 m
Throughput: 240 – 11400 m³/h
Fitted in concrete or for smaller installations fitted in steel container.



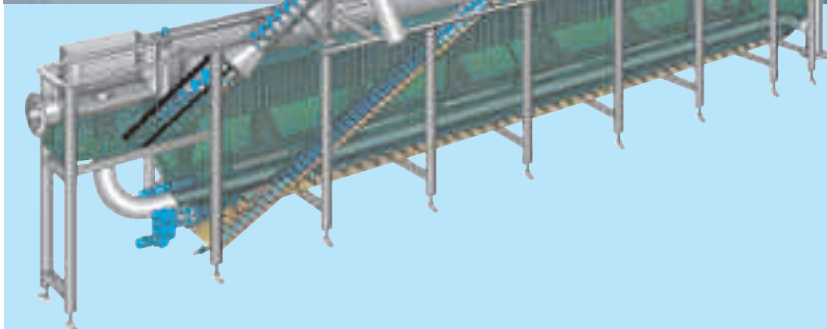
SR Sand Separator

Sediment Discharge Capacity: up to 3 m³/h
Throughput: up to 35 l/s



SW/SSW Sand Washer

Soluble Organic Material Contents of Washed Sand: < 3 %
Dry Solid Contents of Washed Sand: ≥ 90 %
Discharge Capacity of Washed Sand: up to 1.0 m³/h



NSI Compact Units

The NSI Compact Unit represents the complete wastewater treatment plant inlet stage consisting of:

- Wastewater fine screening
- Screenings dewatering
- Grit chamber with aeration system
- Grit classifier and grease trap
- Sand washing



Sewer Grit and Street Rubble Treatment

Complete system for treatment of sand trap settings, sewer grit and street waste.

Receiving Capacity: up to 30 m³/h

- Separation and sieving
- Washing and dewatering

Spiral Technology



Conveying Spirals

Conveying: 10–25 mm thickness

Dosing: 2–4 mm thickness

Diameter: up to 700 mm



SF Spiral Conveyor

- Blockage-free
- Smooth running
- Low wear
- Horizontal and vertical conveying
- Own spiral manufacturing



Bunker Systems

Bunkers and bunker systems in different sizes and types.

Surface Aeration



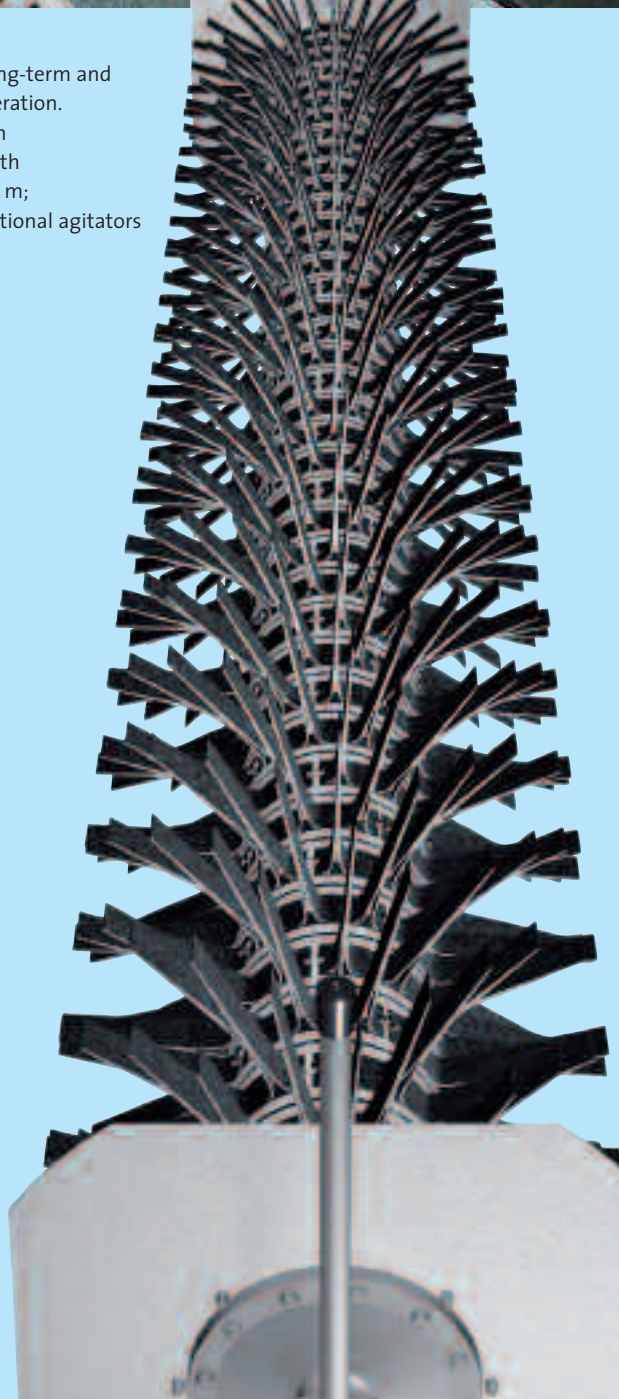
Mammoth Rotor®

Surface aerator for long-term and low-maintenance operation.

MR 700: 1–6 m length

MR 1000: 3–9 m length

Basin Depth: up to 3.5 m;
up to 8.0 m with additional agitators



Pump Technology



Pumps

- RD Slurry Pumps (submersible pumps)
- RW Vortex Pumps (submersible pumps)
- RT Turbotex Pumps (long-fibrous materials)
- Self-priming Centrifugal Pumps and Dry Installed Pumps (pumping of solids)

Nogco-Whirl Agitator

Sewage and stormwater treatment in larger pump sumps.



Self-priming Centrifugal Pumps

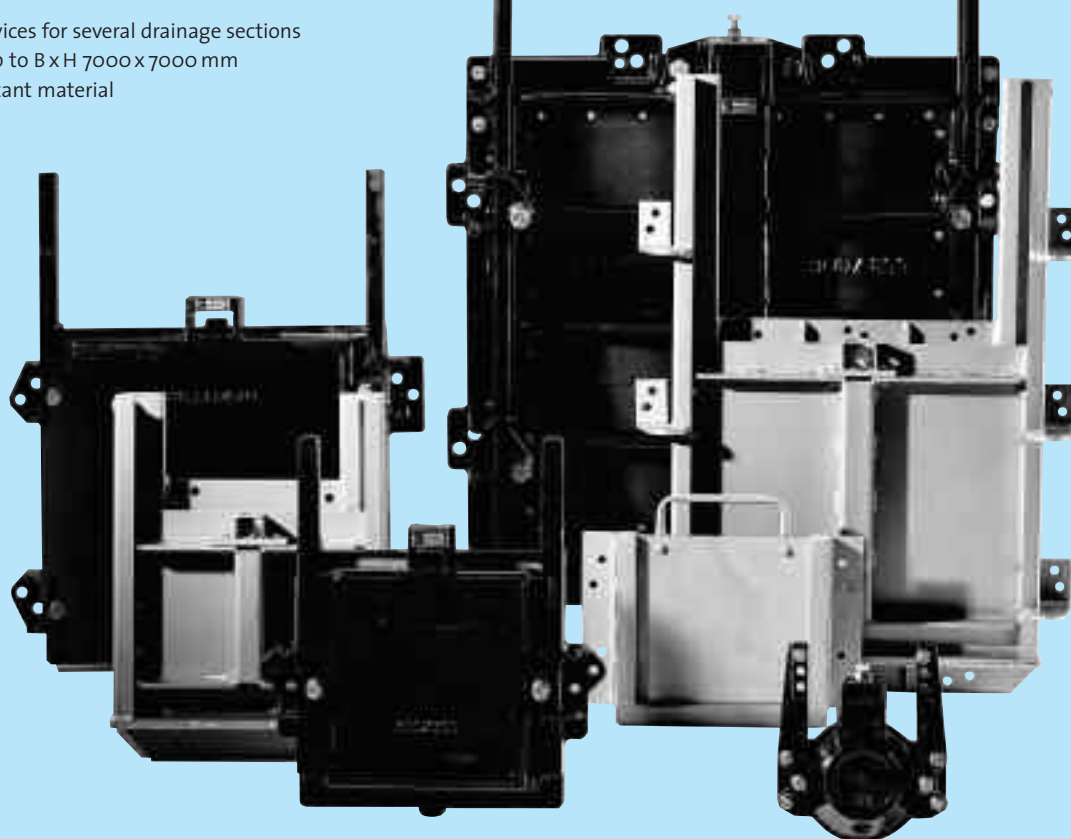
Pumps with wide and free passages to convey process and wastewater as well as sludge.

Shut-off Devices



Shut-off Devices

- Body-less Shut-off Devices for several drainage sections
- Dimensions DN 150 up to B x H 7000 x 7000 mm
- Out of corrosion-resistant material



Materials for Shut-off Devices

- Several qualities of stainless steel (DIN 1.4301–1.4404–1.4571–1.4462)
- Cast Iron as well as Mild Steel coated



Sludge Treatment



Gravity Thickener

Blade loading designed for a solids content up to 8 % DS according DIN 19569 part 2, blade loading class 3.

Sizes: Ø 5–30 m
Drives: 3 Z–50 Z–Capacity
• Hydraulic lifting unit



Drum Thickener ROEFILT

Throughput: 30–100 m³/h
Thickening: 0.5–2.0 % up to 5–12 % DS



Belt Thickener FluX-Drain

Throughput: 25–180 m³/h
Thickening: 0.5–2.0 % up to 5–10 % DS



Belt Filter Press FluX-Press

Throughput: 4–42 m³/h
Dewatering: from 3–5 % up to 20–34 % DS





Chamber and Membrane Filter Presses

Sidebar or bridge design

Inlet Dry Solid

Content: 3–8 % DS

Dry Cake Solid

Content: 30–75 % DS

Plate Sizes: up to 2.5 x 2.5 m

Throughput:

up to 34 t DS/Charge



Side Bar Press



Dry Sludge Chamber Filter Press



Dry Sludge Membrane Filter Press



Passavant-Geiger GmbH
Passavant-Geiger-Strasse 1
65326 Aarbergen, Germany
www.passavant-geiger.de
info@passavant-geiger.de

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