Passavant®
Grit Chamber Scraper

The Aqseptence Group offers with this Passavant® product an robust and reliable grit chamber scrapers for the removal of grit sediments and floating scum (such as oil and grease) from longitudinal grit and grease chambers.

Automatic and turbulence-free removal of grit sediment and floating scum, which accumulate as a result of solids separation in chambers during grit and grease removal process in wastewater treatment; thereby preventing issues with downstream processes.

The Passavant® Grit Chamber Scraper Bridge spans one or several adjacent longitudinal tanks. The scraper blades push the settled grit against the flow direction into a sand hopper on the bottom of the tank. An alternative arrangement uses a suction scraper to convey the sediment from the bottom of the tank directly into a laterally installed collection trough using a submersible pump or airlift pump. Floating substances are generally moved in the flow direction to the outlet of the grit chamber and discharged via a ramp or a weir penstock into a scum collection hopper.

Benefits

- Reliable scraper technology with high operational safety:
  - low maintenance with no submerged bearings
  - low wear and tear with slow-moving components
  - wear parts easily accessible without basin drainage
  - scraper blades can be lifted to upper edge of basin
- Robust, tried and tested scraper technology with long service life
- Scraper can be provided in stainless steel, galvanized or polyurethane coated
- Single or dual drive options

Product variants

- Blade scraper design
- Suction design with
  - submersible pump with flexible mounting or
  - airlift pump
- Scum and grease removal: the lifting and lowering of the scraper is generally by means of a motorized hoisting unit
**Design Features**

| Bridge construction | · Scraper blade bridge made of U-profile beams with walkway, anti-skid grating and access ladder  
|                     | · Single, twin or triple scraper bridges  
| Bridge drive        | · Two carriages with drive and running wheels as single or double drive  
|                     | · Helical geared motor with torque support as direct drive  
|                     | · Solid rubber or Vulkollan tyres  
|                     | · Rail-free design with horizontal guide rollers  
|                     | · Rail-based design with rack and pinion drive system for high scraping force  
| Accessories         | · Motor cable reel with rubber hose line  
|                     | · Running wheel monitoring  
|                     | · Control unit (relay technology or PLC) with stainless steel control cabinet  

**Materials**

All components are manufactured in high-quality materials:

**Above water level**: galvanized steel, coated or stainless steel  
**Below water level**: coated or stainless steel

**Options**

**Aeration technology**

Coarse bubble aeration, stainless steel or plastic design

**Fields of operation**

The Passavant® Grit Chamber Scraper is not only suitable for new installations but can be easily retrofitted into existing installations:

· Longitudinal grit chambers with or without grease removal  
· Aerated grit chamber with grease removal  
· Municipal and industrial installations, also cases with specific or custom requirements