



**Protect your
infrastructure**
from flooding and other
weather extremes



Plan ahead

Protecting critical infrastructure from extreme weather events, especially flooding, is vital to ensure the functionality, safety and resilience of these systems.

The importance of protecting critical infrastructures

- ▶ **Maintaining functionality:**
Power grids, water and wastewater systems, communication networks and transport routes must remain continuously functional in order to meet the basic needs of society.
- ▶ **Avoiding outages:**
Serious damage can lead to long outages. This can jeopardise public safety and cause economic losses.
- ▶ **Protection of public health:**
Flooding can flush contaminated water into supply systems, increasing health risks.
- ▶ **Financial savings:**
Preventive measures are often more cost-effective than repairing damage after a disaster.

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This is what you should look out for if you need flood-proof manhole covers and security doors

- ▶ **Choice of material:** Stainless steel is corrosion-resistant and durable, making it ideal for use in damp and aggressive environments.
- ▶ **Tightness and resistance to water pressure:** The design must ensure that as little water as possible penetrates, even under high pressure.
- ▶ **Mechanical strength:** Covers and doors must not only be watertight, but also mechanically resilient to withstand daily demands.
- ▶ **Easy access and maintenance:** They should be easy to open and maintain for quick and efficient inspection and repair.

HUBER Safe Access Solutions offer you safety, protection against water ingress and low maintenance.

The **manhole covers SD5, SD6 and SD7** are particularly suitable for flood protection.

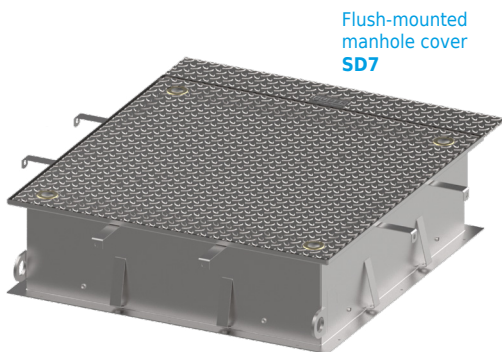
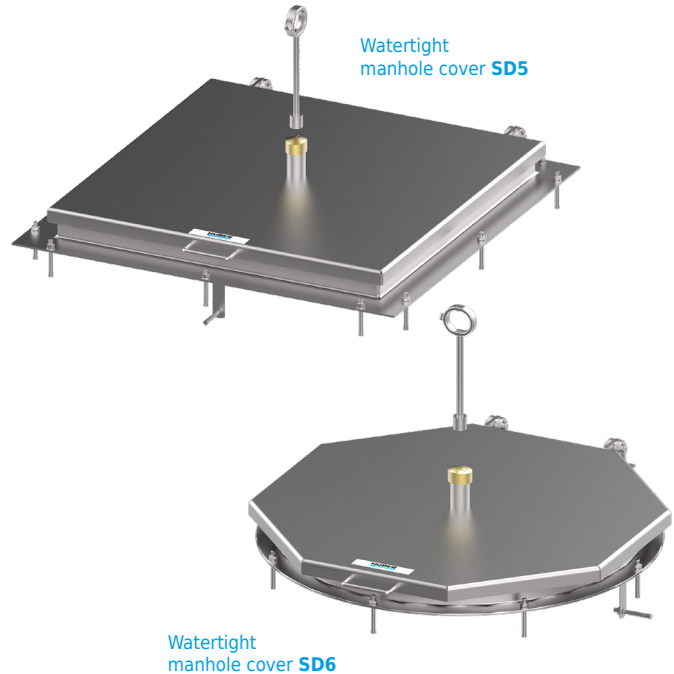
SD5 and SD6 Manhole Covers

Flood-proof up to 1 m WC, optionally also possible up to 5 m WC

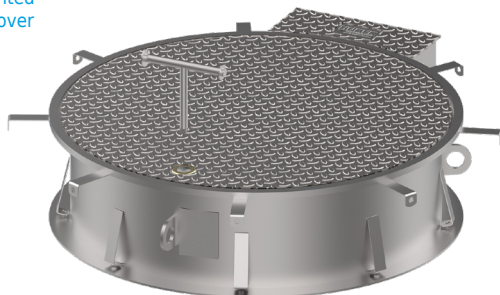
- ▶ **High-quality material:** Manufactured from stainless steel, which offers high corrosion resistance and durability.
- ▶ **Tightness:** Designed to be watertight and resist flooding.
- ▶ **Load capacity:** Construction ensures high mechanical resilience, suitable for use in high traffic areas.



More information on our watertight manhole covers at: www.huber.de



Flush-mounted manhole cover SD7.R



SD7-RC3/RC4 Manhole Covers

Level manhole covers offer further advantages in addition to flood protection up to 1 m WC – optionally also possible up to 5 m WC:

- ▶ **Safe and convenient for vehicles:** Makes it easier to drive over and avoids damage.
- ▶ **No risk of tripping:** Flush with the surface, increases pedestrian safety.
- ▶ **Resistant to high mechanical loads:** Suitable for high-traffic areas with pedestrians and heavy vehicles.
- ▶ **Ease of maintenance:** Design allows easy opening, simplifies regular inspections and repairs.



More information on our flush-mounted manhole covers at: www.huber.de

HUBER Technical Doors offer optimum protection for your property and facilities.

HUBER Technical Doors **TT2.F** and **TT6** are particularly suitable for areas at risk of flooding.



Security door
TT2.F

Security Door **TT2.F**

Based on RC3 certification, the TT2.F security door offers further security aspects in addition to flood protection up to 1.2 m WC:

- ▶ **Watertightness:**
Protects against flooding and prevents water from entering critical infrastructures.
- ▶ **Mechanical strength:**
Designed for high mechanical loads, ideal for high-traffic areas.



More information on our security doors at:
www.huber.de

Flood-Proof
Exterior Door **TT6**

Flood-Proof Exterior Door **TT6**

Watertight up to 2 m WC

- ▶ **Safety features:**
Specially designed to be water and pressure tight, making it ideal for flood protection.
- ▶ **Robustness:**
Manufactured from stainless steel, they offer high stability and corrosion resistance.
- ▶ **Easy access and maintenance:**
Despite high safety requirements, these doors are designed to be easy to operate and maintain.



More information on our flood-proof exterior doors at: www.huber.de





HUBER Coarse Screen for protection of pumps for sewage water lifting.



Example of clogged pump as a result of inadequate screenings removal.

Prevent flooding during storms – Properly equipped with HUBER solutions

There are numerous important aspects to consider in order to effectively prevent damage to pumping stations and overflow structures.

A particular focus is on protecting the pumps from foreign matter and solids in the wastewater.

The following points should be observed:

- ▶ **Maintaining functionality:**
Ensuring the operational safety of pumping stations during extreme weather events.
- ▶ **Avoiding outages:**
Protection against blockages and clogging in the pumping station.
- ▶ **Protection of public health:**
Avoidance of contamination through the release of wastewater.
- ▶ **Financial savings:**
Long-term cost savings by avoiding costly repairs or replacements of the units.

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Screenings removal machines in pumping stations make a significant contribution to operational safety and thus to preventing additional damage during a flood disaster.

- ▶ **High operational safety of structures:**
Efficient and automatic removal of solids and screenings from wastewater in the pump inlet.
- ▶ **Machine selection:**
Proven and durable HUBER machine technology in stainless steel for use under extreme operating conditions.
- ▶ **Protection of the environment:**
Screenings removal machines help to safely separate and dispose of accumulating contaminated materials.

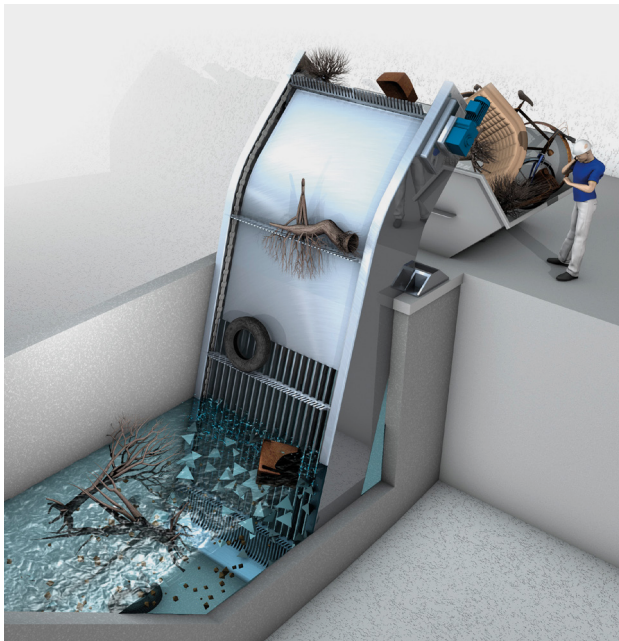
Effective protection of pumping stations – HUBER machines for the removal of foreign matter and solids from wastewater

HUBER Grab Screen TrashLift – Coarse screen system for pumping stations, hydropower plants and large waste-water treatment plants

- ▶ **90° installation:** Minimised plant cross-section enables flexible installation in confined areas.
- ▶ **High operational reliability:** Reliable removal of bulky material reduces blockages and damage.
- ▶ **High intake and discharge capacity:** Efficient grab design with replaceable rake teeth.
- ▶ **Removal close to the sewer bottom:** Direct removal of channel deposits for thorough cleaning.
- ▶ **Optimised cleaning speed:** Efficient cleaning cycles thanks to adapted travel speeds in the discharge area and screen rack as well as over the chute plates.



More information on our
HUBER Grab Screen TrashLift
www.huber.de



More information on our
HUBER Coarse Screen TrashMax®
www.huber.de

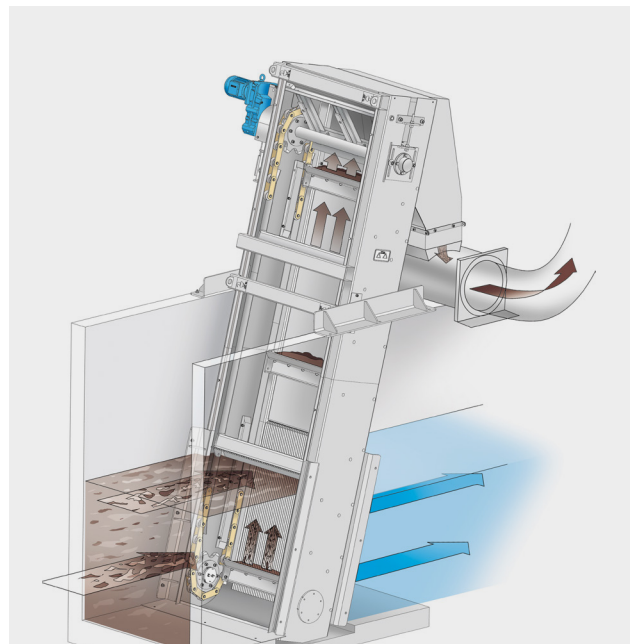
HUBER Coarse Screen TrashMax® –
Sturdy screen for coarse material removal

- ▶ **High intake capacity:** Enables large quantities of screenings and waste to be collected in a single pass.
- ▶ **High operational safety:** due to efficient and reliable screen rack cleaning Constant performance even under the most difficult conditions.
- ▶ **No risk of blockages:** Reliable cleaning of the bar rack prevents blockages and breakdowns.
- ▶ **Safe collection and discharge:** Robust screen rakes and the powerful mechanics enable large and bulky coarse material to be handled safely.

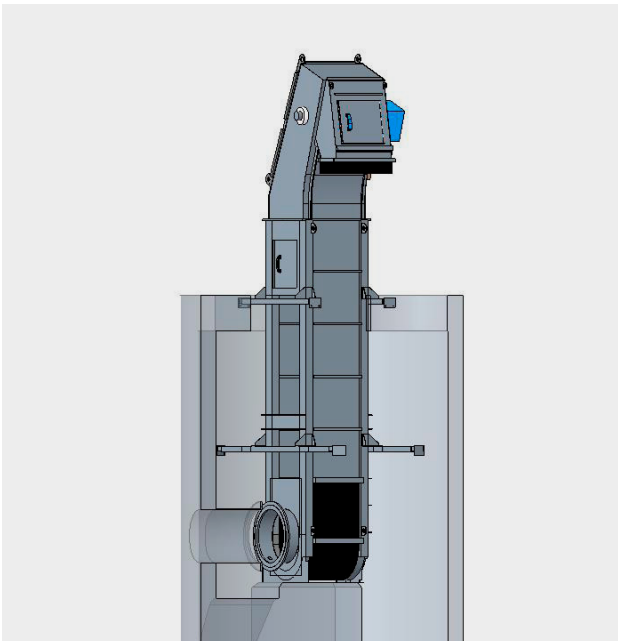
Reliable protection for pumping stations – HUBER Multi Rake Bar Screen

HUBER Multi-Rake Bar Screen RakeMax® – Reliable, sturdy travelling screen

- ▶ **Universally applicable screen**, for big channel widths and big discharge heights.
- ▶ **Very wide range of applications** thanks to variable design options.
- ▶ Very low headloss – **high separation efficiency**.
- ▶ **Compact design** with a low installation height above ground level.
- ▶ The pin gear construction ensures high operational reliability due **defined meshing of the rake** into the bar rack.
- ▶ **Not hindered by gravel or grit**.



More information on our **HUBER Multi-Rake Bar Screen RakeMax®**
www.huber.de



More information on our **HUBER Multi-Rake Bar Screen RakeMax® CF PS**
www.huber.de

HUBER Multi-Rake Bar Screen RakeMax® CF PS – the centre flow version for pumping stations and manholes

- ▶ **The innovative variant** of the well-proven HUBER Multi-Rake Bar Screen RakeMax®.
- ▶ The PS version is **connected directly to the sewer pipe** in the manhole structure via a flange connection.
- ▶ **Increased separation efficiency** due to flow deflection in the bar rack in a very confined space.
- ▶ **Integrated emergency overflow**.
- ▶ **Robust and powerful machine** for the removal of debris and other solids.
- ▶ **Optimal hydraulic utilisation** of existing channels.



Headquarter Sharjah, United Arab Emirates.



Headquarter HUBER, Germany.

High Quality Equipment for Water & Environment

MENA-Water is an engineering and manufacturing company flourishing in the field of water and wastewater treatment.

Our main objective is conserving the environment through innovative technical solutions and services.

Therefore we focus on the supply of high quality, robust and advanced technology to provide our clients worldwide with efficient and cost-effective systems.

MENA-Water specialises in:

- ▶ Municipal wastewater
- ▶ Industrial wastewater
- ▶ Drinking water
- ▶ Package solutions
- ▶ Sludge treatment
- ▶ Renewable energy
- ▶ Primary treatment
- ▶ Secondary treatment
- ▶ Advanced wastewater treatment
- ▶ Control & instrumentation equipment
- ▶ Pumps and shut-off valves

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TECHNOLOGY
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