



Focus: Flow Control, Basin Cleaning and Material Retention At Overflow Structures

The construction of storm water basins is certainly one of the most important measures for water protection. The **futureproof** equipment of a rain basin is always a demanding task. The requirements of the EU Water Framework Directive and the amended laws, regulations and DWA worksheets must be met in order to keep variations, which are primarily caused by heavy rain, under control, maximize water protection and reduce operational costs. Building a **forward-looking** storm water basin requires many specialists working under one roof. When retrofitting an existing basin, this task can be more challenging because existing structural and hydraulic conditions must be addressed – e.g., too small manholes, cross-sections, lack of flushing sumps, etc. And then also 4.0 requirements to ensure **FuturePROOF!**

Choose a partner with a great deal of experience and a complete portfolio in all aspects for a storm water basin!

Storm water basins are used to store peak runoff in the event of precipitation, to intercept the expected impact of dirt, etc. Therefore, the volumes of water flowing into the storm water basins from the sewer to generate backwater must be limited. Today, a selection of electromechanical flow regulators have been established, which continuously measure the water level and/or velocity by means of sensors (ultrasonic/ radar/ magnetic-inductive) and automatically operate valves to the correct position for the target flow, depending on the level of congestion or the flow rate.. When planning the equipment of a storm water basin with discharge controls, the following aspects and criteria must be taken into account:

1. Installation dimensions or required manhole size
2. Measurement and control accuracy
3. Operation and maintenance

In addition, **upgrades for each rain basin to 4.0 equipment through extensions with SCADA.web and IntelliFlow are recommended.** The SCADA.web extension alarms in case of malfunctions, displays the current process status and provides all process data for evaluation. In addition to the measurement, the IntelliFlow extension determines flow data in parallel, compares and checks them for plausibility, and even enables automatic volumetric calibration if the structural conditions are suitable.

[More about Discharge Control](#)

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Achieve maximum cleaning performance at significantly lower costs!

You have the choice! – Flushing systems or flow generators. Which system achieves the best result in your project depends on both the structural and hydraulic conditions. AWS-3D Jet Cleaner was developed for special requirements in large structures with demanding cleaning situations and for high dirt loads. As with the 1D and 2D Jet Cleaner, a powerful pump with an injector set generates a water-air mixture as a propellant and cleaning jet. With the AWS 3D Jet Cleaner, a solution for almost every basin geometry with excellent cleaning results is now offered for the first time. The robotics-based mode of operation can now position the cleaning jet vertically in any direction. **In addition to cleaning the building floor, the machine can now also clean the walls, the ceiling and itself.**

[More about basin cleaning](#)

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Benefit from maximum material retention for water protection!

HST horizontal bar screen with IntelliScreen holds back **solids including microplastics** at the overflow weir thresholds to the receiving water. For this purpose, the screenings are used as a filter. The screen with IntelliScreen use sensors and speed control for dynamic combing speeds. As a result, the retention of even microplastics can be maximized without restriction while ensuring backflow security.

Due to this proactive and condition-based operating regime, energy and maintenance costs are reduced by up to 70%. The product life cycle is extended to the same extent.

[More about Material Retention](#)

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