A secure and future-proof transition within Axel-Zangenberg! All our specialists under one roof.

HST Systemtechnik and Axel Zangenberg (AZ) join forces to form the new technical office HST-Zangenberg in Schliengen, Baden-Württemberg. For AZ customers, continuity in service is ensured thanks to a smooth transition and integration. The same access to AZ know-how is available with the added bonus of your existing installations now being upgradable! - This means an inherent increase in product value, as the AZ products can now be integrated into various network management structures using HST's Intelli-Systems. Some benefits that can be taken advantage of, thanks to digitalisation, are the improved convenience of managing networked products, their increased operational safety and the resulting time saved.

Thanks to Mr Axel Zangenberg accompanying us in the transition to a digital future, HST is able to further connect with customers, both in the Baden-Württemberg region and in Switzerland. The new HST-Zangenberg technical office in Schliengen, headed by Dipl. Ing. Martin Penka, is now officially the competence centre for „Flow, Discharge and Overflow". The variety of products available presents a comprehensive range for the measurement of fully and partially-filled pipes, as well as for the measurement of overflow, according to the customer's requirements. Thanks to our extraordinary testing facilities on-site, the location is especially attractive for hosting HST Academy events such as specialist seminars, user-training seminars and workshops where real-time testing can be experienced. More to be found at: **en.hst.de/hst_products**

Technisches Büro HST-Zangenberg | Gutedelstraße 33 | 79418 Schliengen | GERMANY | Phone +49 7635 824 47 0

NETWORK MANAGEMENT FOR ENVIRONMENTAL PROTECTION

IntelliNet – Environmental protection through intelligent network management

Reducing the effects of heavy rainfall events without having to make structural changes to existing reservoirs? Intelligent management of sewer networks with HST IntelliNet means that the stress on storage capacity through heavy rainfall events can be significantly reduced.

AI-supported algorithms ensure that the available storage space in the entire sewer network is always optimally utilised at all times. By incorporating meteorological forecasts into our network management system, the network is optimally prepared for any anticipated surge in water volume.

In individual case studies, it has been proven, that when using HST's IntelliNet solution, discharges that would usually occur perhaps every 5 years during extreme weather events are reduced to meanely once every 25 years. And so, the utilisation of IntelliNet not only makes for a safer environment, but also for safer investments. In the water supply sector, IntelliNet prevents the over-use of individual wells through intelligent well management, thus ensuring their continued operation over the long-term as well as an improved reliability of the fresh water supply.

More to be found at: **en.hst.de/hst_products/intellinet/**

DIGITALISATION FOR THE PROTECTION OF OUR WATERS

Focus: Micro-plastic Pollution – Preventing the introduction of plastics into our surface waters

The five Great Garbage Patches in our oceans are continuously growing, but only approximately 20% of plastic waste in our oceans is visible and to be found down to a depth of 30 meters beneath the ocean's surface. The concentration of plastic waste in inland surface waters and coastal waters is significantly higher than out on the high seas, and so the logical step is to prevent the introduction of plastics into our inland waters !

The main source of plastics from industrialised nations originates from infrastructure and traffic. These particles are mostly smaller than 5mm, and for their optimum retention 4.0 technology is necessary. For this purpose, HST's HSR-Screens (Horizontal Rod Screens) coupled with HST's IntelliScreen software make a substantial contribution to the reduction of micro-plastic pollution at discharge thresholds, so that only a fraction of micro-plastics are discharged.

More to be found at: **en.hst.de/hst_products/HSR-Screen**

MUNICIPAL 4.0 – DIGITISATION AND NETWORKING

MUNICIPAL 4.0 – Digitisation and networking of municipal infrastructures

In order to promote digitalisation in the municipal economy, the Bundesverband MUNICIPAL 4.0 was initiated as an independent support organisation for digitalisation issues. MUNICIPAL 4.0 emerged from the BMWi funding project of the same name, in which HST implemented practical digitisation projects in the water industry as a consortium leader.

Its members can take advantage of discounted services, events and funding participation. Digitisation is also promoted in upcoming „anyway" projects. The federal association is a community of interest for those interested in subsidies and guarantees the standard-compliant implementation of subsidy projects.

Become a member of the MUNICIPAL 4.0

1. Qualify your existing staff through certificate courses and overcome the digitalisation gap in your team!
2. Obtain clear orientation through application standards!
3. Use the funding community of interest in the Federal Association MUNICIPAL 4.0 for lighthouse or anyway projects!

More to be found at: **bvk4-0.de**

MAKE A NOTE NOW

Certification courses for *MUNICIPAL 4.0 specialist engineer for digitalised water management*

Digitalisation Summit of the MUNICIPAL 4.0 *„Application standards and practical experience for a future-proof water management"* on 07.09.2022 in Osnabrück

HST-ACADEMY

Find your experts the easy way!

Many communal organisations have concerns regarding vacant positions that are to be filled. In some cases, the gap between existing, traditional jobs and modern, digitalised structures has become too large. Therefore, both experienced colleagues in their professional prime as well as apprentices will require further training to ensure that these new demands are met.

HST-ACADEMY supports you to find the experts needed by

- Inter-corporate training
- Further training for existing staff
- Training for all HST software products

Our inter-corporate training provides the opportunity to take part in on-site training sessions at HST. Through further certified training, technicians and engineers have the opportunity to become digitalisation experts. In addition we provide training for our software products where even users with long experience learn new features which help to save time for other tasks..

HST-ACADEMY contact:
Christina Fafoutis | Phone: +49 291 9929 200 | E-Mail: akademie@hst.de

For more: **akademie.hst.de**

HST SERVICE FOR PLANNERS

For machinery + metrology + IT + automation

For questions regarding technical equipment, your engineering partners can contact HST Service for planners where our in-house and in-the-field experts can advise. For urgent cases, our new HST tools and service team can support you. Send us your documents and you will receive a solution proposal for:

- Dimensions and layout of technical and manufacturing equipment
- Concrete planning support regarding machines, metrology, IT and automation
- Support regarding investment and determining operating costs

Contact HST Service Team for planners:
Phone: +49 291 9929 0 | E-Mail: planerservice@hst.de

For more: **en.hst.de**

GET YOUR ANNIVERSARY RAIN GAUGE!

**Request your personal anniversary rain gauge at www.hst.de/ifat.
Get it at IFAT hall A1, booth 441 at our expo stall in Munich.
Or have it brought along at IFAT@büro.**

Visit us at: **en.hst.de**

NEWS

FuturePROOF!

Digitalisation, Universal- and 4.0-Equipment for Water Resources Management

HST is Member of KOMMUNAL 4.0

Future-PROOF! –
A history of success over more than 40 years

Nowadays, the benefits of digitalisation are successfully utilised by many organisations in water resources management. Regardless of whether it is by improving operating safety, by enhancing working comfort or by mitigating the effects of the skilled worker shortage by offering attractive jobs, HST's 40 years of experience in creating digital networks has positioned us at the forefront of the industry and as a leader in 4.0 technology.

For more: **en.hst.de**

WaterSUPPLY! –
New competenceCENTRE built

For more than 30 years, HST employees have committed themselves to increasing the efficiency in water supply management. Leakage detection, operational management software and intelligent well management is being implemented in international projects, amongst other services. Based on exclusive expertise, services and technologies, the HST certified competence centre for water supply has been established in Hohnstätten.

For more: **en.hst.de**

Digitalised industrial infrastructure with HST

4.0 technology from HST is tailored to the special requirements of the industry. NiRA.web® precipitation management addresses flood prevention; sewage reduction 4.0-drainage; energy cost reduction 4.0-heat exchanger. 4.0-maintenance software KANiO® allows for diligent and customised maintenance, repair and improvement.

For more: **en.hst.de**

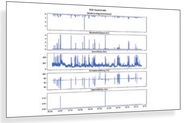
HST Systemtechnik GmbH & Co. KG | Heinrichsthaler Straße 8 | 59872 Meschede | GERMANY | **en.hst.de**

HST-Energy –
Cost-efficient and self-reliant water resources management

Cost pressures, the need for CO_2 reduction, the need for energy autonomy and the need to ensure uninterrupted power supply requires an improved energy balance in water management facilities. Heat exchange technologies can contribute to significant energy cost savings. The use of PV systems is highly effective for producing electrical energy. Excess production of electricity can be fed into GREA® battery storage system, thus compensating for fluctuations in energy supply. An energy analysis of the facility in accordance with DWAA216 is always the first step.

For more: **en.hst.de**

HST-Digital – evaluation and analyses of process data in centralised or special purpose water resources management facilities/structures



Centralised and special purpose structures are usually equipped with measurement technology which continually generates a large amount of process data which is centrally archived. By applying the most state-of-the-art methods, specialised experts from HST conduct plausibility checks to identify potential anomalies at any given structure. The data record is used for resource optimisation purposes and to maximise operational safety.

For more: **en.hst.de**

HST-Service –
Service efforts to maximise transparency

The HST service for machines and IT will maintain the maximum capability of all products in the long term with substantial packages. HST systematic services include a 24-hour service, 365 days a year with short response times, centralised data access – historic and current data and a support forum with a comprehensive knowledge-base. The entire service process can be carried out from a single source.

For more: **en.hst.de/service**

HEAVY RAIN AND FLOOD PREVENTION

The ongoing process of global warming changes the frequency, intensity and spatial distribution of intense rain. Over and over again, human and economic tragedies have been the result. Compared to river and coastal floods, short but intense rain events resulting in floods can occur anywhere, according to the German Meteorological Service.

In 2014, the IPCC assumed that extreme precipitation events would further increase in Europe towards the end of the century. Therefore, each and everyone has to make adjustments and where possible, take at least stated-the-art preventive action. "By characterising flood prevention as a communal task, the communities and local, political decision makers have the overall responsibility for the required actions (mayors, local government)" (DWA M-119, 42). Each community has to provide flood prevention measures in accordance with risk assessments and the resulting hazard level.

HST equips structures in various aspects of water resources management: dams and river level monitoring, polder systems, flood retention basins and canals, from single structures to entire canal systems. By combining these solutions at the local level with 4.0 network management, flood prevention will be ramped up significantly.

For more: **en.hst.de/hst_products/niraweb**

NiRA.web® precipitation portal –
IoT precipitation data for machine and process control

The precipitation portal NiRA.web® provides high quality historical, current and forecast data. Thanks to the OPC UA interface, measurement data can be used for automation purposes in a targeted way to control actuators. Through the integration of water level data with additional measurement methods such as "Nowcasts" and rain intensity sensors, even more highly accurate data can now be collected and measured to maximise flood prevention.

For more: **en.hst.de/hst_products/niraweb**

STRUCTURE AND ORDER IN OPERATIONAL PROCESSES

SCADA.web process data portal –
Monitoring and operating decentralised systems and networks

The process control system SCADA.web is the safest and most comfortable solution for water resources management monitoring. Operating in a German computing centre, it ensures safe and high-availability facility monitoring. Experts permanently take care of an up-to-date virus protection, required security updates and system backups. The package includes all abovementioned features.

For more: **en.hst.de/hst_products/SCADAweb**

SCADA V10 process control technology for water resources management – Facility control with IoT process variables

The dedicated emphasis on the water industry in collaboration with highly experienced operators has made SCADA V10 the tailored solution for water resources management. With standard technologies, SCADA V10 is open to various systems and can be combined with a host of applications. Integration of TeleCam video systems allows for simultaneous analysis of hydrographs and camera images: a unique feature for process analysis!

For more: **en.hst.de/hst_products/SCADA**

KANiO® – Operational management software –
Overview, organisation and order during operation

The standardised operational management system KANiO® can be adjusted to any particular requirements. Maximum flexibility is achieved with the task assistant. With KANiO® mobile for smartphones and tablets, all pending tasks are carried out and documented efficiently and on site.

For more: **en.hst.de/hst_products/KANiO**

STRONG SOLUTIONS FOR FLOW, DISCHARGE, OVERFLOW

SensoMatic-EMA –
Legal conformity for the measurement of overflow events

SensoMatic-EMA allows for a highly accurate measurement and documentation of the smallest accumulation and overflow events through the automatic calibration feature. Data evaluation based on original raw data means transparency, traceability and highly accurate detail. Therefore, legal requirements and regulations are fulfilled, active protection of bodies of water is ensured and legal certainty is achieved.

For more: **en.hst.de/SensoMatic-EMA**

Expansion of the HST product portfolio and new HST competence centre: "Flow, discharge, overflow"

Complete offer: Besides field-proven HST products for flow/discharge measurement and management the "Alligator", "Anaconda", "Peligan" and other devices are equipped with our "Intelli" systems. Service and upgrade packages are offered for all Zangenberg products. With the acquisition of the branch in Schlierigen, Baden-Württemberg, a new centre of competence has been established! A significant feature here is a test centre for the calibration of flow rate measurement and discharge control devices.

For more: **en.hst.de/hst_products**

HydroKlar-SLIDE clear water withdrawal –
The best option for water supply and SBR wastewater treatment ants

HydroKlar-SLIDE clearwater withdrawal systems can be used in a variety of ways in both water supply and wastewater treatment plants. The special discharge unit via piano key weir allows for the drainage of large amounts of water, also with small and compact designs. The drain rates can therefore be adjusted flexibly and in a process-oriented fashion.

For more: **en.hst.de/hst_products/HydroKlar-SLIDE**

EQUIPMENT 4.0

HSR-Screen with IntelliScreen and IoT connection –
More protection for bodies of water and for backwater protection

The HSR-Screen can be controlled via IntelliScreen with variable combing speeds for an improved protection of bodies of water. The screen can be monitored to enhance operational safety with information from the SCADA.web and KANiO® portals. At its highest configuration level, precipitation data from the precipitation portal NiRA.web® can be included in the management process to achieve maximum material retention.

For more: **en.hst.de/hst_products/HSR-Screen**

ASA-Weir
Automatic damming, flushing and discharge

The ASA-VerticalLiftWeir is conceived for exact water level control, storage-level management and for canal flushing. Automation and IT provides the option of cascading control and autonomous network management. During flushing operation, flushing waves are generated to clean the canal. ASA-Weirs are intrinsically safe and can release the entire Pipe/canal cross-section.

For more: **en.hst.de/hst_products/ASA-Weir**

AWS-3D Jet with IntelliGrid 3D –
Choreography in three dimensions

The new generation of the AWS-Jet extends the working area of the already proven IntelliGrid system from the bottom of the basin to the third dimension, thus making the cleaning of walls, ceilings and machines easy. The effective range is significantly greater thanks to the highly accurate aiming system of the steel pipe, therefore also making the cleaning of problem areas much more effective.

For more: **en.hst.de/hst_products/Jet-Cleaner**

Planner service: E-Mail planerservice@hst.de | Phone + 49 291 9929 12 | **en.hst.de**