Digitalisation produces motivated technical personnel

Even in the age of digitalisation it is still important that the operators know exactly what their networks are doing. In future, they will be supported in their planning, construction and operation by **digitally available data and information** as well as **digital products** so that they can continue to guarantee a high degree of supply and disposal reliability into the future.

Smart water meter

Using the App to read the meter

The **digitalisation of the water industry** offers new possibilities and challenges, particularly for the younger generation, the socalled digital natives, of getting involved in a working process which tends to be based on technical operations. In the light of the skills shortage which is already recognisable today, businesses engaged in the water industry should therefore start **digitising their processes** and thus gain a decisive advantage when it comes to recruiting motivated employees.

DATA + FACTS publications

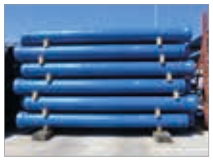
- Stormwater management with ductile iron pipes
- Resource efficiency of ductile iron pipe systems
- Root resistance of ductile iron pipe joints
- Digitalisation of the water industry
- Trench shoring systems
- Ductile iron pipe systems: products and applications
- Standards, guidelines and technical rules

All folders in the DATA + FACTS series as well as other publications by EADIPS FGR can be downloaded at eadips.org.

Targets and tasks of EADIPS FGR

Information, training and tutoring of specialists and students, promotion of ductile iron pipe systems in planning, installation and operation, standardisation of cast iron pipe systems, presentation of technical and commercial advantages

Products and applications



Ductile iron pipes, fittings and valves

Drinking water and wastewater pressure pipelines, sewers and drains, pipelines for extinguishing water, turbines, cooling water and snow-making equipment

EADIPS® FGR®
European Association for Ductile Iron Pipe Systems
Fachgemeinschaft Guss-Rohrsysteme

Digitalisation of the water industry

Designing processes more effectively · From the electronic system to the digital application · Digitalisation for Standardisation working group · Software for operational management, maintenance and service

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Digitalisation of the water industry

When it comes to drinking water quality and security of supply, German water supply companies are absolutely top class. Global warming, pollution, the effects of heavy rainfall and the need to design processes more effectively therefore require an **offensive on the subject of digitalisation** for the future.

From electronic systems to digital applications

Electronic applications are basically nothing new for the water industry here. **Remote-reading meters** have been around for around 20 years. Initially they counted pulses which were read off via cable links. Later, systems were established in which meter reading was possible, at first by cable and then also via short-range radio systems. In this way it was possible to drastically reduce the considerable effort and expense, as well as possible sources of error, involved in reading the meters in the shaft by eye.

These days there are water flow meters which offer **outstanding measuring characteristics** no matter where they are installed. This means that forward and backward volumes can be accurately assessed and leaks in home installations can be detected. The equipment has an internal power supply which ensures that the metering and communication tasks are carried out across at least two calibration periods. The installation of **cryptographic chips** in these metering devices meets the BSI standard, meaning that data transmission has the best possible safeguards against misuse.

Classic and smart meters for various applications (left to right): water, heat, power and gas

EADIPS FGR Digitalisation working group

The **cross-linking of autonomous structures** in the water industry does mean that some of its processes need to be adapted. Therefore, with its **Digitalisation working group**, EADIPS FGR is campaigning for the standardisation of all necessary components. Among other things, experts are tackling techniques which are capable of clearly identifying underground components in ductile cast iron by means of a **wireless-readable code**. And which can do this over a long working life. This will ensure the **traceability of all components**: from production to logistics and installation and finally to operation.

Together, standards are being developed which can be **used by all manufacturers** throughout the entire supply chain, resulting in process simplifications and thus forming the basis of comprehensive **digitalisation in the water industry.** The Internet of Things is also the Internet of Water. There are already software applications today which can engage directly in business management and with the support of which it is possible to manage the maintenance and servicing of all pipeline components. Their analysis provides the decision-makers with important on-the-spot information about possible leaks, water temperature, pressure and other parameters which are above or below limit values.

You can find comprehensive information on the subject as well as on products and applications in our specialist articles at eadips.org