FRÄNKISCHE

Technical information

Treatment systems



Requirements according to DWA-A 102-2/BWK-A 3-2

THE BEST POSSIBLE TECHNOLOGY FOR STORMWATER TREATMENT HAS BEEN RE-DEFINED: THE NEW DWA-A 102/BWK-A 3 REGULATIONS REPLACE THE DWA-M 153 BULLETIN WITH REGARD TO DISCHARGING STORMWATER INTO SURFACE WATERBODIES.

The DWA-A 102-2 describes

SPECIAL FORMS

Factory-made so-called special forms of treatment systems have been considered explicitly in the regulations for the first time. Therefore, FRÄNKISCHE SediPipe and SediSubstrator sedimentation systems are now officially defined as treatment systems according to generally accepted technical rules.

The proven SediPipe product line by FRÄNKISCHE consists of stretched pipes with a permanent water level and longitudinal flow serving as sedimentation reactors, which additionally feature a specifically developed flow separator that reliably prevents remobilisation of the sediment depot even during massive inflows.



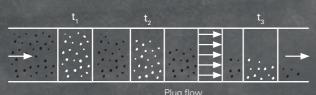
The DWA-A 102-2 requires

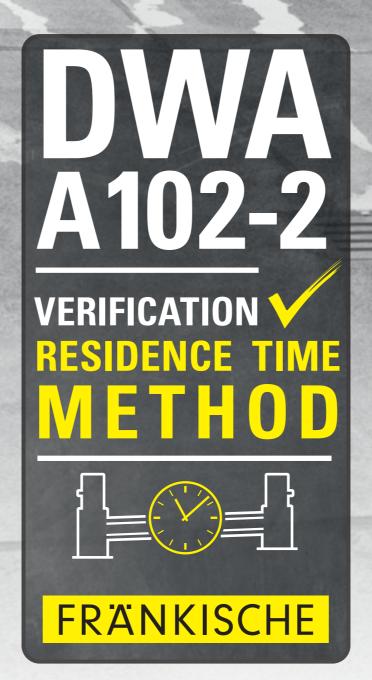
VERIFICATION METHOD FOR SPECIAL FORMS

THE RESIDENCE TIME METHOD

The residence time method has exclusively been developed for SediPipe sedimentation systems by FRÄNKISCHE. Characteristics of the model are the residence time calculation of the water overflowing at a point in time t instead of a stationary flow rate, and the approach of using the sedimentation process depending on this residence time, as well as a long-term simulation. This model fundamentally considers the special flow separator technology by FRÄNKISCHE, which enables optimum design of the system to create the essentially required plug flow as well as batch behaviour.

- Development in direct cooperation with Dr.-Ing. G. Weiß (UFT)
- Verification method to identify the separation performance of suspended solids AFS63
- Performance verification according to the state of the art with regard to the requirements of DWA-A 102-2/BWK-A 3-2
- Method validated by means of in-situ examinations
- Verification method already known, recognised and published in professional circles





The DWA-A 102-2 requires

HIGH-PERFORMANCE AND EFFICIENT TREATMENT SYSTEMS



FRÄNKISCHE has been doing long-term and sound development work for its treatment systems – together with recognised institutes. Our flow separator technology is a proven efficient operating principle and is the key to success of our systems. It guarantees high and efficient separation performance of suspended solids AFS63.

- Institut für Unterirdische Infrastruktur (IKT), Gelsenkirchen
- Ingenieurgesellschaft fur Stadthydrologie (ifs), Hanover
- Technische Universität (TU), Delft
- Hochschule für Technik, Wirtschaft und Kultur (HTWK), Leipzig
- Technische Universität (TU), Munich
- Fachhochschule (FH), Münster
- Landesgewerbeanstalt (LGA) Bayern, Würzburg



The DWA-A 102-2 requires

EFFICIENT TREATMENT SYSTEMS

Due to the very versatile SediPipe product range, our treatment systems can be adjusted exactly to on-site requirements. Due to their very high efficiency, SediSubstrator systems with DIBt approval can be used for very critical contaminations, e.g., dissolved materials. Decentralised individual systems or centralised multiple systems can be easily implemented in various sizes with our compact and modular designs. The flexibility of planning guarantees individually adjusted solutions with maximum effectiveness and efficiency.

More information on stormwater treatment

- Treatment systems overview
- Dimensioning tool DWA-A 102-2/BWK-A 3-2
- Stormwater treatment project questionnaire

www.fraenkische.com/102-2-infos

OPTIMISED SEDIMEN-TATION PROCESS SUBSOIL INSTALLATION

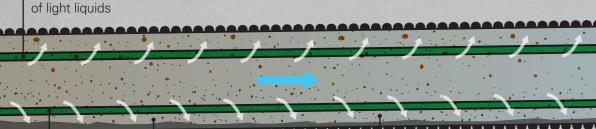
NO SPACE ON THE SURFACE REQUIRED

MAINTENANCE-FRIENDLY EASY AND QUICK INSTALLATION

HIGHEST FLEXI<u>BILIT</u>Y SPACE-SAVING INSTALLATION

FOR SMALL TO VERY LARGE COLLECTION AREAS

Flow separator for the separation of light liquids



Flow separator

Area with little water movement

No remobilisation of deposited sediments



Long-term verification by means of residence time method



Proven treatment performance



DIMA A102-2 compliant

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