

# INKA - Road drainage Separates clean and polluted rainwater and prevents overloading of the sewer network and WWTP

The road drainage system controlled by the INKA software enables polluted rainwater to be channelled safely to the WWTP, while unpolluted rainwater is fed directly into the separation system or watercourse. We use an underground storage pipe to manage the first rainwater, which brings with it the so-called «first flush». This stores the water until the combined wastewater system has sufficient hydraulic capacity to safely channel the water volumes to the treatment plant. As soon as the storage pipe is full, the floating flaps in the drainage shafts close to prevent mixing with subsequent

rainwater. As soon as the sewer network and WWTP have sufficient free capacity, the battery-operated gate valve on the outflow side of the road is opened, emptying the system and releasing the temporarily stored polluted rainwater for treatment at the WWTP. The system is connected to the INKA control centre via mobile radio so that operators can keep an eye on measurement data and the drainage status at all times.



Planning support We support you from dimensioning to commissioning



Protects water The INKA road drainage system separates polluted and unpolluted rainwater



**Autonomous road drainage** Autarkic operation with photovoltaics and/or battery operation



Sponge city





Smart networking Autarkic and yet digital



Networked customer service Rapid intervention and expert support - directly via remote access

## STEBATEC AG

٨

Mattenstrasse 6a +41 32 366 95 95 stebatec.ch

- CH-2555 Brügg
- info@stebatec.ch



#### INKA - Road drainage

The intelligently networked INKA road drainage system separates clean and polluted rainwater, enables polluted rainwater to be treated at the WWTP without overloading it and allows unpolluted rainwater to seep away locally.



#### Realisation and dimensioning

The design takes into account the load on the road due to the volume of traffic, the connected road surface, the connection to the combined sewer system and the possibility of discharging the uncontaminated rainwater. The storage pipe is dimensioned for the absorption of approx. 3-5 mm of precipitation. The drainage shafts with the floating flaps are arranged in the same way as systems with integrated sludge collectors - the shafts are available in different heights as standard. When positioning the floating flaps, care should be taken to ensure that they are aligned at the same height so that they close simultaneously when the water level rises.



### Automated. Intelligently controlled.

The INKA-controlled knife gate valve automatically empties the storage pipe when the sewer network and WWTP have sufficient capacity. The great benefit of the system is that contaminated rainwater can be safely transported to the WWTP and clean rainwater can be returned to the environment locally. The system does not require a power connection, while it still has the necessary digital features that enable operation via the central control centre and remote function monitoring. The INKA sewer network management software from STEBATEC is suitable for managing the system.



**Do you have a question about the product?** I am happy to be there for you.



*Kilian Hesse* +41 32 366 95 95 ♦ kilian.hesse@stebatec.ch