

[Home](#) ■ [HUBER Report](#) ■ [Screens](#) ■ [HUBER RoDisc® Rotary Mesh Screen as tertiary filter stage](#)

[HUBER RoDisc® Rotary Mesh Screen as tertiary filter stage](#)

## Tertiary filter stage to upgrade wastewater treatment plants with insufficient effluent quality



*RoDisc® Rotary Mesh Screen for the retention of activated sludge flocks*

The HUBER RoDisc® Rotary Mesh Screen is a quick and efficient solution if you want to upgrade your wastewater treatment plant and ensure to produce a virtually solids-free effluent. Upgrading is especially required if the secondary clarifier does not work effectively and flocks pass into the channel. Our micro screen prevents concentration of suspended material, significantly improves effluent quality and thus substantially contributes to the protection of our waters.

The installation of a filter stage downstream of the secondary clarifier is an efficient and inexpensive option to upgrade a wastewater treatment plant. Insufficient tank depth, high hydraulic loads or the poor settling behaviour of activated sludge are the most frequent reasons why wastewater treatment plants are sometimes unable to reliably meet today's minimum requirements on the concentration of filterable solids in the effluent. The overflow of flocks increases COD, BOD, N and P loads in the effluent and receiving water course with the result of increased discharge fees. A HUBER RoDisc® Rotary Mesh Screen as tertiary filter stage is able to guarantee a virtually solids-free WWTP effluent. Due to the gravity flow through our RoDisc® Rotary Mesh Screen and its low pressure loss the screen can easily be integrated into existing sewage treatment plants. Due to its small space requirements and modular design the RoDisc® Micro Screen can be tailored to suit any specific site requirements and keeps the structural alteration work required to a minimum.

An ineffectively working secondary clarifier is however not the only reason for upgrading a wastewater treatment plant with a downstream micro screen. Especially the accumulation of the nutrients phosphate and nitrate in surface waters can lead to eutrophication, growth of algae and water plants, oxygen depletion, and to fish dying and death of other water animals. Combined with precipitation and flocculation the micro screen can reduce phosphorus to a very low concentration. Precipitants transform the orthophosphate contained within the wastewater to hardly water-soluble materials. Flocculants transform the produced micro flocks to

macro flocks which can be removed by the micro screen.



*28 RoDisc® Rotary Mesh Screen units with 24 discs each treating about 8.5 m<sup>3</sup> wastewater per second*

The HUBER RoDisc® Rotary Mesh Screen meets not only the requirements of today but sets the course for the future. Many of the methods for advanced wastewater treatment which are increasingly used today, such as disinfection and reduction of organic trace substances, require prior micro screening. UV disinfection systems for example need a virtually solids-free flow to work effectively. Frequently, activated carbon powder is used to reduce organic trace substances to release the load in our waters. Reliable removal of the activated carbon powder laden with the removed organics is then required. The HUBER RoDisc® Rotary Mesh Screen ensures that virtually all suspended materials are removed from the wastewater so that additional downstream treatment stages can be operated. Investment and operation costs for micro screenings are usually more than compensated because micro screening saves the money for additional plant components.

Micro screening substantially contributes to the protection of our waters, today and in the future. So, the option of a filtration stage should definitely be considered when planning to expand or upgrade a wastewater treatment plant.

**Related Products:**

- [HUBER Disc Filter RoDisc®](#)

**Related Solutions:**

- [HUBER Solutions for Removal of very fine Solids by Micro-Screening and Filtration](#)
- [HUBER Solutions for Filtration of Biologically Treated Wastewater](#)

Adresse / address: HUBER SE · Industriepark Erasbach A1 · 92334 Berching · Germany · Telefon / phone: + 49 - 84 62 - 201 - 0 · Fax / fax: + 49 - 84 62 - 201 - 810  
e-mail: [info@huber.de](mailto:info@huber.de) · Internet: <http://www.huber.de>

Sitz der Gesellschaft / Headquarters: Berching · AG Nürnberg / Register of companies: HRB 25558  
Vorstand / Board: Georg Huber (Vorsitzender / CEO), Dr.-Ing. Oliver Rong (stellvertretender Vorsitzender / Vice CEO), Dr.-Ing. Johann Grienberger, Rainer Köhler  
Aufsichtsratsvorsitzender / Chairman of the Supervisory Board: Alois Ponnath

USt (VAT)-IdNr.: DE 812353219

Bank: HypoVereinsbank Nürnberg (BLZ 760 200 70) 5 008 409 · SWIFT-BIC: HYVEDEMM460 · IBAN: DE 30 7602 0070 0005 0084 09

