

[Home](#) ■ [HUBER Report](#) ■ [VRM® unit for Training Centre for Membrane Technology in Seelscheid](#)

VRM® unit for Training Centre for Membrane Technology in Seelscheid

Membrane bio-reactors (MBR) are one of the most innovative and advanced technologies for municipal and industrial wastewater treatment. Since the late 1990s many MBR plants were built and installed in Europe and North America. This technology is now increasingly used in other regions too. Membrane filters simultaneously replace secondary clarifiers, sand filters and disinfection systems.

The Schulungsinstitut für Membrantechnik Seelscheid e.V. (SIMAS), a training centre for membrane technology in Germany, provides education, training and qualification for professionals who are designing, installing and operating membrane filtration systems. SIMAS is funded by the German State of North Rhine-Westphalia. SIMAS' objective is to teach the theory of membrane technology and train its operation in practice. During three-day workshops participants are taught the following subjects:

- Basic principles of membrane filtration
- Operational features
- Terms and data
- Membrane cleaning and maintenance
- Process control
- Lab testing and analysis

HUBER supplied a Vacuum Rotation Membrane VRM® unit size 20/60 with 180 m² membrane surface. Ancillary mechanical and control equipment (incl. installation and start-up) were also provided by HUBER.

Approximately 2.5 m³/h screened wastewater flow directly into the membrane reactor where it is aerated with fine bubble diffusers and biologically treated. The reactor is dimensioned for a sludge load of below 0.1 kg BOD per kg activated sludge solids. A permeate pump removes biologically treated effluent from the reactor by drawing it with a low vacuum through the VRM® membranes. The effluent is forwarded to a conventional activated sludge plant because, for safety reasons, SIMAS has no permit for direct discharge. The quality of the treated wastewater meets EU bathing water standards, it contains no bacteria and virtually no germs and viruses.

We are glad about the opportunity to support the first central training centre for membrane technology in Germany. The teachers are renowned specialists and experts of membrane technology. The participants learn various methods how to operate membrane plants, to evaluate their performance, recognize critical process conditions and perform trouble shooting. Membrane technology is on the rise – and we should all prepare! Further information is provided at www.simas.de.

By Karsten Schulze, Project Manager Filtration & ReUse



VRM@ 20/60 after installation



VRM@ 20/60 during operation



Aeration by fine bubbles

Related Products:

- [HUBER Membrane Filtration VRM®](#)
- [Membrane Filtration \(MBR\)](#)

Related Solutions:

- [HUBER Solutions for Membrane Bio-Reactors](#)

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 · 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

