



Process filters for coarse, fine and finest industrial filtration

## HYDAC AutoFilt® self-cleaning filters for industrial water and waste water treatment

### General

In the context of increasing legal regulation and an increasing focus resource-conserving production processes, industrial water and waste water management is becoming more and more important. There is a trend towards modern recirculation systems that provide the potential for savings in production processes and that ensure sustainability. Industrial water and waste water treatment is often processed by globally active service providers, who are specialists in professional water and waste water management.



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### Application and Challenge

Due to its specific level of contamination and according to the application, industrial water has high requirements with regards to post-treatment or reprocessing. For most production processes, process water must meet a specific degree of cleanliness and have particular properties (eg. water that has been demanganised, softened and desalinated), in order to be able to ensure the smooth functioning of production processes and consistent quality of production goods. However, industrial waste water treatment is also a key consideration of efficient water management. Lots of industrial waste water contains high amounts of pollution and must be post-treated, e.g. by external service providers, or disposed of as hazardous waste. The cost of disposal is thereby heavily determined by the volume of waste water and thus the water content. If the water is to be completely disposed of, this results in huge costs for the owner for its disposal and removal. At the same time, the chance to recycle valuable waste materials or additives contained in the water is lost.

### The HYDAC Solution

Industrial water and waste water treatment is usually a multi-stage process consisting of pre-treatment as well as main and post-treatment. It is possible to reduce costs in particular during the pre-treatment of the untreated water. By retaining solid particles in solution or in suspension with HYDAC coarse and fine filters during pre-treatment, a system owner can benefit from:

- ✓ Extended service lives of fine filters and membranes further downstream
- ✓ Reduced maintenance costs as a result of longer service intervals
- ✓ Reduction of energy consumption
- ✓ Increased process reliability
- ✓ Reduced operating costs
- ✓ Consistent product quality

### Application Examples

HYDAC process filters are always useful when it is a primary concern to effectively protect valuable system components. We offer the appropriate filter solution (coarse, fine and very fine filtration) for any application. You can also benefit from our extensive expertise in process engineering.

#### Filtration of:

- Cooling water
- Boiler feed water
- Well water
- Surface water
- Treatment of backwash water from sand filter systems
- and many more

#### Protection of:

- Membrane processes (microfiltration, ultrafiltration, nanofiltration, reverse osmosis)
- Thermal separation process, e.g. Multi Stage Flash Evaporation
- UV systems
- Ozonation systems
- Iron and manganese removal phase
- and many more



HYDAC AutoFilt® RF3 for coarse and fine filtration

HYDAC PLF1 for finest filtration