

EUROWATER

A GROUP OF CO-OPERATING EUROPEAN WATER TREATMENT SPECIALISTS

IRON REMOVAL/ACIDITY CORRECTION

PRESSURE FILTERS, TYPES NS/NSB

- REMOVES IRON AND MANGANESE
- NEUTRALIZES ACIDITY
- REDUCES AMMONIUM
- REMOVES SUSPENDED MATTER
- USED FOR DOMESTIC AND SMALL INDUSTRIAL WELL PUMP INSTALLATIONS
- EASY TO INSTALL AND MAINTAIN
- IDEAL FOR SMALL AND MEDIUM DRINKING WATER SUPPLIES
- AUTOMATIC OR MANUAL OPERATION



NS-PLANT

PRINCIPLE

APPLICATION

A pressure filter is designed to treat raw water from a boring or a well so that the quality complies with the standards of drinking water. The plant is dimensioned according to the actual raw water type.

WORKING PRINCIPLE

The working principle of a Eurowater pressure filter is based on aeration and filtration. When the raw water is aerated iron, manganese and mechanical impurities precipitate as small particles of a filterable size. This suspended matter is removed by filtration in the pressure filter. At regular intervals dependent on raw water impurity and water consumption the filter is backwashed. Following backwash the filter is again ready for use.

COMPRESSOR UNIT

The compressor and a possible aeration and control air system inject air into the raw water. The water needs aeration, regardless of the filtration job.

BACKWASH

The small pressure filters, types NS/NSB 20-60, are backwashed with air and water at the same time to loosen the collected impurities.

The large pressure filters, types NS/NSB 80-200, need an air blower for the backwash with air. This air blow is necessary to loosen the collected impurities efficiently before the backwash with water.

IRON REMOVAL, AMMONIUM REDUCTION AND FILTRATION WITH NEVTRACO

Iron forms a reddish discoloration of water, plumbing fixtures, and laundry and clogs the pipes. Under uncontrolled conditions ammonium converts into nitrite. Nevtraco filter media has a unique ability to remove suspended matter due to irregular surfaces. The filter media will last for years, if backwashed properly.

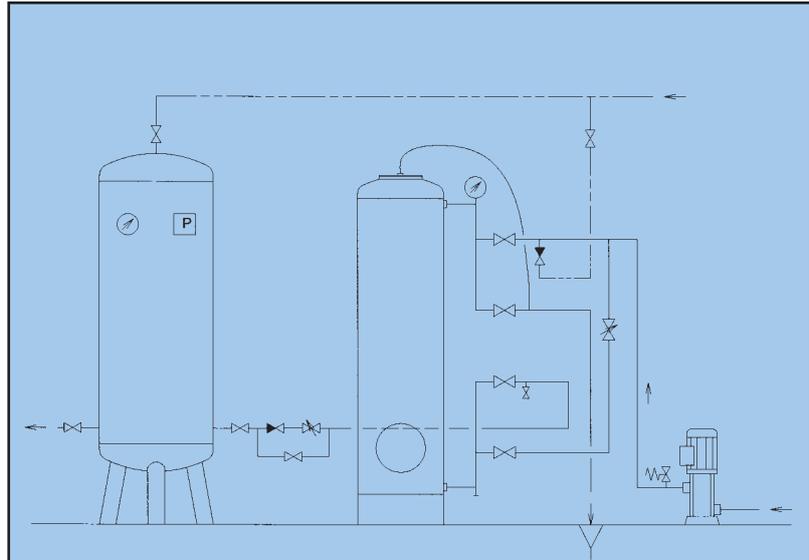
MANGANESE REMOVAL WITH HYDROLIT

Manganese forms black deposits and produces yellow stains on laundry. Hydrolit-Mn is a manganese-treated filter media with the ability to absorb manganese ions. It is mainly used on water having a large manganese content. Hydrolit-Mn grows more effective during use.

ACIDITY CORRECTION WITH MAGNO-DOL AND NEVTRACO

Both Magno-Dol and Nevtraco neutralize acidity thereby greatly reducing the corrosive quality of water with low pH and high carbon dioxide content. Nevtraco is suitable as a filtering material for acidity correction of water with low bicarbonate content. Concurrently with acidity correction, Magno-Dol establish a protective layer on the inner surface of the plumbing system. This protects against further corrosion. Both filter media slowly dissolve when reacting on acid water.

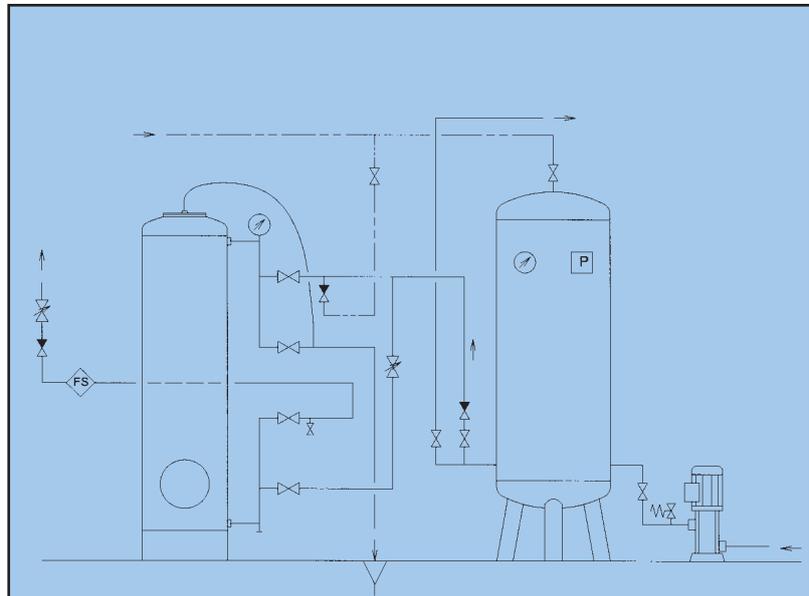
INSTALLATION METHODS



INSTALLATION DIAGRAM A
(applies to 20, 40 and 60)

INSTALLATION BEFORE PRESSURE TANK

If the entire water supply is to be treated, install the pressure filter between pump and pressure tank. The pressure filter is sized in accordance with the capacity of the well pump. The compressor unit is controlled from a pressure switch on the pressure tank.



INSTALLATION DIAGRAM B
(applies to 20, 40 and 60)

INSTALLATION AFTER PRESSURE TANK

If only part of the water supply is to be treated, install the filter after the pressure tank. The filter is sized in accordance with the demand for treated water. The the well pump. The compressor unit is controlled from a pressure switch on the pressure tank.

MANUAL PRESSURE FILTER, TYPE NS

APPLICATION

A manual pressure filter is highly suitable for small and medium drinking water supplies where a certain maintenance of the plant is acceptable. Especially suitable for houses and farms situated outside the range of the public water supplies.

PIPE SYSTEM

The pipe system is equipped with four valves making an easy and inexpensive future automation possible.

MAINTENANCE OF THE PLANT

Maintenance is limited to backwash at regular intervals which is effected by a simple regulation of the operating valves. The backwash intervals vary with the raw water quality, but will typically be once or twice a week. A backwash lasts about 30 Minutes.

PRESSURE FILTER

Consists of a filter tank with valve system, pressure gauge, and test cock. At the inside the filter is equipped with an automatic air vent and a heavy steel distributor plate with corrosion resistant nozzles, which secures uniform distribution.

The filter tank is supplied in various versions, ie,

- Steel outside coated with plastic enamel
- Hot galvanized steel

AUTOMATIC PRESSURE FILTER, TYPE NSB

APPLICATION

An automatic pressure filter is used in large water supplies and when manual backwash is undesirable.

PRESSURE FILTER

Consists of a filter tank with valve system, pressure gauge, and test cock. At the inside the filter is equipped with an automatic air vent and a heavy steel distributor plate with corrosion resistant nozzles, which secures uniform distribution.

The filter tank is supplied in various versions, ie,

- Steel outside coated with plastic enamel
- Hot galvanized steel

PIPE SYSTEM

The pipe system is equipped with four valves which are automatically regulated by a pneumatic actuator.

CONTROL PANEL

The control panel of the system is a fully electronic, 12 V, semi-enclosed control unit (see back page).

The control panel of the system may be adjusted at days and times at which it is desirable for the filter to backwash. In case of increased water consumption or increased raw water pollution, the plant is easily reprogrammed without the application of tools.



NSB PLANT



NSB CONTROL PANEL

A simple, reliable, and low-cost control panel. Designed to control NSB 20-60. The panel performs backwash with the raw water pump and the compressor. The panel can control one or two filter tanks.



TF 5 CONTROL PANEL

An advanced control panel with a large number of built-in control functions. Designed to control NSB 80-200. Among other things the panel has adjustable programs for both air and water rinse. The panel can control up to four filter tanks.

SPECIFICATIONS

	Unit	NS/NSB 20	NS/NSB 40	NS/NSB 60	NS/NSB 80	NS/NSB 130	NS/NSB 170	NS/NSB 200
Flow capacity	l/min	20	40	60	80	130	170	200
Tank diameter	mm	300	400	480	650	800	900	1000
Including valve system	app. mm	500	600	680	900	1050	1130	1230
Depth	app. mm	375	475	555	740	890	1010	1110
Height of ceiling necessary	app. mm	1700	2000	2380	2500	2550	2610	2650
Valve system	DN"	20 ^{3/4}	25/1	25/1	40/1 1/2	50/2	50/2	50/2
Operating pressure max.	bar	6,0	6,0	5,9	6,0	6,0	6,0	6,0
Weight incl. filter media and water	app. kg	170	350	670	1000	1600	2500	3100