

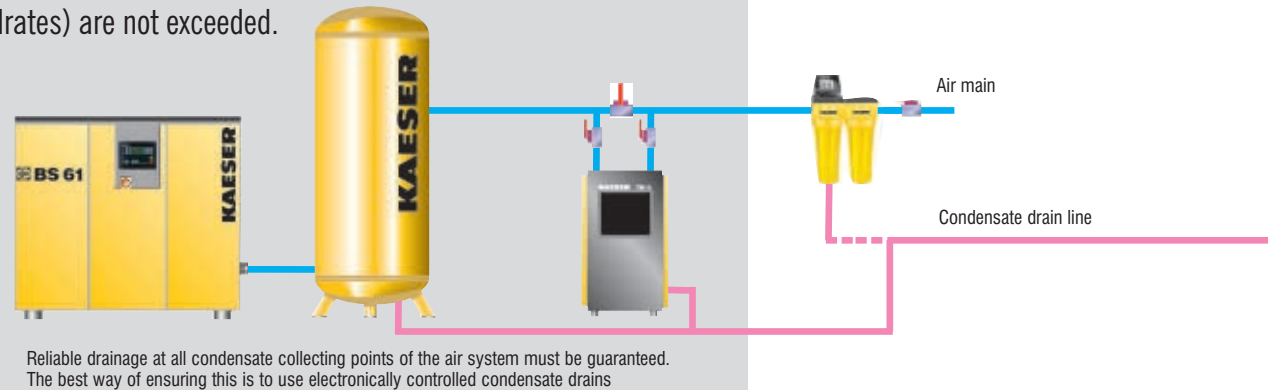
## **AQUAMAT Series** for compressors of 1 to 300 m<sup>3</sup>/min



# AQUAMAT - saves money

## Why treat condensate?

The condensate generated as a by-product of all compressors is contaminated with dirt and oil to a degree depending on ambient and operational conditions. The pollutants and mineral oils in condensate are extremely difficult to decompose biologically, they negatively affect waste water treatment in sewage plants and endanger the environment. Contaminated water must be treated under generally accepted technical control procedures to ensure the official limits for contaminants are not exceeded. This function is fulfilled by the economic treatment system AQUAMAT from KAESER, which reliably ensures that regulation limits for contaminants (20 mg/litre for example, in the case of carbohydrates) are not exceeded.

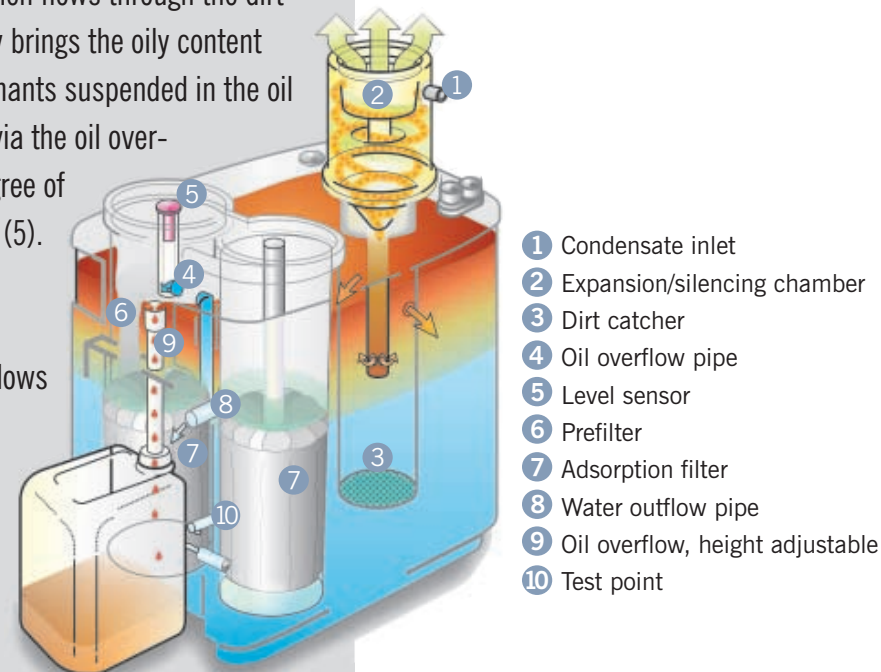


## Cost-saving treatment

With the AQUAMAT, the compressor user can easily carry out his own treatment and thereby greatly reduce the overall cost of treating hazardous waste. Treating condensate with the AQUAMAT system achieves cost-savings of around 90% compared with disposal of the condensate by a specialised company. These inexpensive separators are quickly amortised.

## Function

The condensate is fed under pressure directly to the inlet (1) and expansion/silencing chamber (2). Condensate is separated out of the air, which is allowed to escape. The condensate then flows through the dirt catcher (3) into the settling tank where gravity brings the oily content to the surface. The separated oil and contaminants suspended in the oil float to the surface of the fluid and then flow via the oil overflow pipe (4) through a prefilter (6) whose degree of contamination is registered by the level sensor (5). The condensate then flows into the adsorption filter (7) where the remaining oil content is removed and the now clean water flows out of the unit via the outflow pipe (8). The separated oil flows into a special collecting canister via the overflow pipe (9). Samples of the water quality can be drawn from a test point (10).



## Tested and certified condensate treatment

The Institute of Building Techniques in Berlin has tested and certified the AQUAMAT as meeting the most modern standards of treatment plant. This means utmost reliability and confidence for the user. The AQUAMAT not only reduced waste treatment costs but also contributes to the protection of the environment.

## Test set



With this simple set, the quality of the cleaned water can be tested at any time. The set is conveniently stored in the unit cover.

## Automatic maintenance indicator



The level sensor clearly indicates the degree of filter contamination so that timely preventive maintenance can be initiated to keep the unit in top functioning condition and save further costs.

## Quicker filter changing



The large maintenance cover allows rapid and easy filter changing.

## Multiple inlets



Standard equipment allows inlet of up to four condensate lines (from AQUAMAT 2 upwards). Unused connections are blocked off by plastic plugs.

## Technical Specification

### AQUAMAT series, condensate treatment units.

In choosing the right AQUAMAT treatment unit, the factors of compressor type and oil used must be considered.

#### Suitable for max. compressor capacities (m³/min) for:

##### • Screw and rotary compressors with oil injection

SIGMA FLUID PLUS, turbine oil

SIGMA FLUID MOL, specific screw compressor and VCL oils

VDL oil

Synthetic oils and others

##### • Reciprocating single and two-stage compressors

Turbine oil

VDL or synthetic oil

Container capacity

Filter capacity

Condensate inlet connections

Water outlet (hose)

Oil outlet DN

Weight empty

Width

Depth

Height

#### Thermostatic heating

Capacity

Weight

Power requirement

	AQUAMAT 1	AQUAMAT 2	AQUAMAT 4	AQUAMAT 5R	AQUAMAT 6	AQUAMAT 8	AQUAMAT 9
Screw and rotary compressors with oil injection							
SIGMA FLUID PLUS, turbine oil	1.5	3.0	7.5	15	30	90	300
SIGMA FLUID MOL, specific screw compressor and VCL oils	1.0	2.0	5.0	10	20	60	180
VDL oil	1.3	2.5	6.3	12.5	25	75	300
Synthetic oils and others	0.3-1.0	1.0-2.0	2.0-5.0	5-10	10-20	20-60	90-180
Reciprocating single and two-stage compressors							
Turbine oil	0.8	1.5	3.8	7.5	20	60	—
VDL or synthetic oil	0.3-0.6	0.6-1.3	1.3-3.1	3.1-6.3	6.3-16.7	16.7-50	—
Container capacity	10	55	180	200	335	720	1070
Filter capacity	1x2 / 1x3	1x2 / 1x3	1x4.5 / 1x8	1x9 / 1x17	1x9 / 2x17	1x30 / 2x45	1x2 / 1x3
Condensate inlet connections	2x G1/2	3x G1/2 / 1x G1	3x G1/2 / 1x G1	3x G1/2 / 1x G1	3x G1/2 / 1x G1	3x G1/2 / 1x G1	2x G1/2
Water outlet (hose)	10	10	10	10	25	30	30
Oil outlet DN	—	DN 20	DN 32	DN 32	DN 32	30	30
Weight empty	4	10	24	30	40	90	180
Width	200	360	540	590	670	1000	1040
Depth	200	445	565	680	915	1200	1485
Height	525	755	1000	1150	1245	1615	1594
Thermostatic heating							
Capacity	-	0.4	1	1	3	3	on request
Weight	-	0.9	2.3	2.3	3	3	
Power requirement							

230 V - 50-60 Hz - 1- Ph

**Attention!** Fresh-oil lubricated compressors and multi-stage reciprocating compressors have a strong emulsifying tendency. - Please inform KAESER about the technical specification of your compressors to obtain an individual AQUAMAT recommendation.

The performance details refer to the compression of air in Central Europe and to the relative moisture experienced there. If the AQUAMAT is used in warmer climates the quantity of condensate increases and the values must be correspondingly decreased. If stable condensate emulsion occurs consult KAESER immediately.

## Dimensions

