

REFERENCE – heating State government St. Pölten, Austria



wasser ●●●●●
niederösterreich

products: 17 pieces EWO VITAL 2" (custom-made with measuring device)

Building services equipped all heating circuits with EWO VITAL after the successful test operation

The elaborate water treatment is now no longer necessary and the state government thus saves enormous costs.

2007:

Installation of an EWO Classic unit into the heating system in building 16

definition of task:

- no heating water treatment or addition of chemicals was desired. Water softening (treatment) as required in ÖNORM was renounced deliberately.
- heating water is turbid to black, should become clear and pure again through natural water treatment alone. The most important values must be in the normal range.
- compliance with the criteria for EMAS certification, no chemical additives in drinking water and heating water. Compliance also requires annual control of the heating water.

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2009:

During the review of all heating systems in the spring, turbid or black heating water was detected in 17 systems, with the exception of building 16, where EWO had already been installed.

After this visible and measurable proof of the effectiveness of EWO (heating water is completely clear and odorless, values in the standard range), all remaining heating systems, at least 17 units, were equipped with EWO Vital devices (07-09_2009). These devices have been specially adapted to the needs of these installations and manufactured with welding flange and fixtures for measuring instruments.

2010:

After the first inspection (06_2010) by our technical department together with the house technicians the following was found:

All heating waters in all plants are clear and clean, no sediment is present in the samples and the values are in the range specified by the Austrian Standard ÖNORM.

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type of heat generation: district heating supply
total amount of water: see table
heating power: see table
transfer station: High-grade steel heat exchanger, steel pipework

building no.:	plant system rating	system volume, approx.	total hardness	total hardness	conductivity	Redox-value	pH-value	temperature	odor	color	sediment
unit	KW	m ³	°dH	mmol /L	µS/cm	mV	pH	°C			
1A-1 Süd 1B-11	2450	31,8	4,0	0,716	148	151	8,84	21,7	neutral	clear	none
2	397	5,2	3,0	0,537	147	240	7,21	21,3	neutral	clear	none
3	502	6,5	3,5	0,626	151	244	7,12	21,3	neutral	clear	none
4	363	4,7	4,0	0,716	135	166	9,14	21,2	neutral	clear	none
5	398	5,2	4,0	0,716	118	135	9,06	21,2	neutral	clear	none
6	393	5,1	4,0	0,716	123	135	8,91	21,1	neutral	clear	none
7	460	5,9	4,0	0,716	149	140	8,74	20,8	neutral	clear	none
7A	278	3,7	4,0	0,716	97	121	9,04	20,7	neutral	clear	none
8	425	5,5	4,0	0,716	109	120	9,20	21,1	neutral	clear	none
9	590	7,6	0,0	0,000	546	105	9,58	21,1	neutral	clear	little
12	471	6,1	4,0	0,716	130	125	9,20	21,2	neutral	clear	none
13	556	7,2	4,0	0,716	161	121	9,06	21,2	neutral	clear	none
14	485	6,3	4,0	0,716	143	125	9,14	21,2	neutral	clear	none
15 15A	524	6,8	4,0	0,716	134	136	8,94	21,0	neutral	clear	none
15B	400	5,2	4,0	0,716	126	131	9,08	21,1	neutral	clear	none
16 16A	600	7,8	4,0	0,716	158		8,61		neutral	clear	none
17 17A	577	7,5	4,0	0,716	135	135	9,06	21,2	neutral	clear	none
archive library	593	7,7	4,0	0,716	118	112	9,31	21,2	neutral	clear	none

"In conclusion, it can be said that the building management and building services are very satisfied with the effect of natural EWO water treatment."

Franz Geistberger, management building services

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