

Extract of VDI 2035

As the VDI 2035, section 8.1.1 and .2 have been newly revised these directives have to be observed.

According to this VDI 2035 the heating water has to be analysed and the nominal values have to be complied.

In short form we would like to draw your attention to the following points:

1. The water used for the filling of the heating plant has to be analysed previously in order to check its suitability for the materials used in the heating.
2. The rinsing fittings to be installed must have the same dimensions as the pipes connected to the heat source (flow and return).
3. Each plant must be rinsed – a corresponding rinsing protocol has to be maintained.
4. The rinsing and filling of the heating plant has to be carried out with a strainer $\leq 25 \mu\text{m}$ and a water meter.
5. In case of a boiler replacement or extension of the heating plant, the existing old plant has to be cleaned with chemicals, afterwards rinsed with water and treated with a protective agent.
6. When inserting the protective agents the plant has to be operated at least during 24 hours in order to grant the total mixing.
7. If aluminium materials are used the ph-value must not exceed 8,5. If no aluminium materials are used the ph-value shall be between 8 and 9,5.
8. Concerning the heating water, a plant journal has to be kept (according to appendix A, which has to be integrated in the plant journal and the instruction handbook), in order to document the maintenance and check-ups.
9. Subject to the total capacity of the boiler the following reference values concerning the total hardness of the filling water must not be exceeded:
up to 100 kW 17° dH (German hardness degree)
over 100 kW up to 1000 kW 3° dH (German hardness degree)
over 1000 kW 0,5° dH (German hardness degree)
10. The content of chlorides in the filling water must not exceed 30 mg/l and the content of ammonium salts must not exceed 0,1 mg/l.
11. The operator of a heating plant with a water content of up to 1.500 litres must arrange a check-up of the heating water once every two years, for heating plants with a water content of over 1.500 litres the check-up has to be arranged at least once a year.
12. The water content of the heating plant has to be recorded in the plant journal.
13. In case of works on the heating plant causing water loss or a change of the water content, the operator must arrange a check-up of the heating water within 4-6 weeks.
14. The reviser is obliged to inform the operator or the client within 4 weeks whether the existing heating water is corrosive or shows microbiological reproductions. The results of the check-up have to be recorded in the plant journal.