



Technical Case Study

Interaction between Pumps with Pressure Control and Frese Automatic Circuit Balancing Valves

To keep pace with consumers' requirement for better and energy saving heating systems a number of self regulating valves and pumps have been developed. Today importance is not only attached to energy saving but also to the comfort and flexibility of heating and cooling systems.

If necessary, the adjustment of pumps and valves should be carried out easily and moreover without affecting the other consumers in the same system. Professional planning makes it possible to take these requirements into consideration by using pumps with pressure control together with automatic circuit balancing valves. Frese has developed a range of automatic circuit balancing valves for this purpose. Frese S1 and Frese S2 are the preferred choice for heating systems.

Frese S1 is an automatic circuit balancing valve that controls the flow regardless of pressure fluctuations in a system. Frese S2 is an automatic circuit balancing valve that controls the differential pressure across, as well as the flow within, a system.

The pump can be adjusted to exactly the minimum pressure required by the balancing valve (min. DP). Thus noise is eliminated and the most energy saving operation ensured.

Now the challenge is to combine the options in such a way that a good and functional interaction between pump and balancing valve is established.



AUTOMATIC FLOW CONTROL - EASY COMMISSIONING