oventrop

Automatic hydronic balancing

with Q-Tech

Balance your heating system

Automatically controlled efficiency and living comfort

YOUR BENEFITS AT A GLANCE:

+ ***Optimum room temperatures:*** no overheated or undercooled rooms
+ ***Good system efficiency:*** optimised calorific value
+ ***No flow noise*** at the thermostatic valves
+ ***Ideal controllability*** of the system
+ ***Energy savings***

Optimum distribution

HYDRONICS: THE KEY FACTOR IN BUILDING SERVICES ENGINEERING

Why is a ***functioning hydronic system*** so important for building services engineering? Hydronics deals with the ***flow behaviour*** of fluids. In heating systems, the heat and kinetic energy of water or other fluids is used for energy transfer.
From the hydronic point of view, the entire system can be divided into several ***areas***:
The ***heat generation***, the ***distribution system*** and the ***heating surfaces*** themselves. If the hydronics is not optimally adjusted, this becomes noticeable - especially during the heat-up phase after a break in operation or night setback. Then, for example, these problems can arise:

- The rooms do not get warm at the same time.
- The heating gurgles.
- Radiators do not get warm at all or only partially.
- Other radiators get too hot.
- The energy consumption is too high.

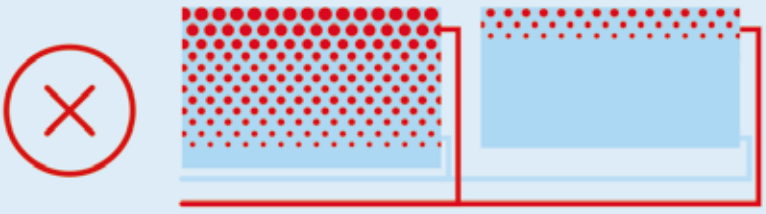
THE SOLUTION: HYDRONIC BALANCING

With ***hydronic balancing,*** the water is ***optimally distributed in the entire system***. Pressure and volume flows are regulated, and all components such as radiators, thermostatic valves, balancing and pipeline valves, pumps and pipes are coordinated and balanced with each other.
The result is an ***optimally adjusted hydronic system***:
All radiators and other consumers are sufficiently supplied and there are ***no performance fluctuations*** in the heating system.

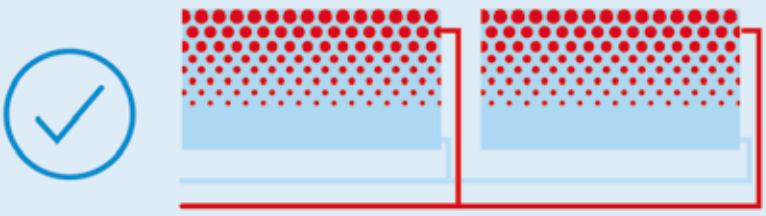
Hydronic balancing enables energy savings of up to 20 %!

HYDRONIC BALANCING BRIEFLY EXPLAINED

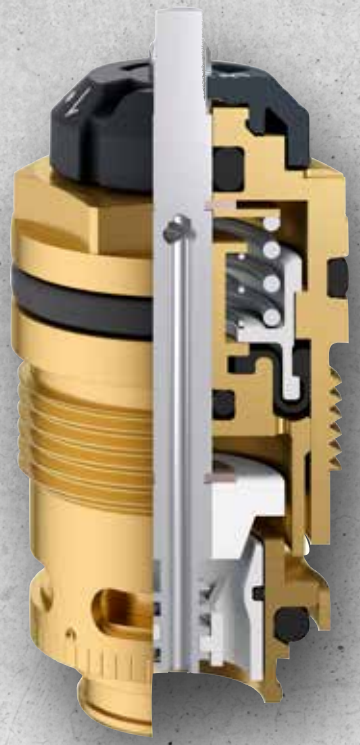
Performance fluctuations
in heating systems
without hydronic balancing



Performance optimisation
in heating systems
with hydronic balancing



Noticeably optimised heating
Q-Tech makes the difference



Q-Tech inside

AUTOMATIC HYDRONIC BALANCING

Conventional heating systems are equipped with thermostatic valves that you have to balance manually. This procedure is not only inconvenient, but also involves time-consuming pipework calculations.
Problematic are heating systems where the routing of the pipework is not known.
Here, a system calculation is hardly feasible.

Our thermostatic valves with Q-Tech *make hydronic balancing easy:*
You want to optimise existing heating systems in terms of volume flow, system efficiency and energy consumption?
Q-Tech is the pioneering solution for this.

YOUR BENEFITS AT A GLANCE

+ ***Automatic adaptation*** to different operating conditions
+ ***Time and cost savings due to reduced calculation, planning and installation effort***
+ ***Commissioning*** of the system possible ***in sections***
+ ***No hydronic influence*** on already balanced system sections in case of system expansions
+ ***Optimised calorific value*** with condensing boilers
+ ***Saving energy and increasing comfort*** through optimal and demand-oriented energy distribution

Energy saving with more comfort

OPTIMUM BALANCING DIRECTLY AT THE VALVE

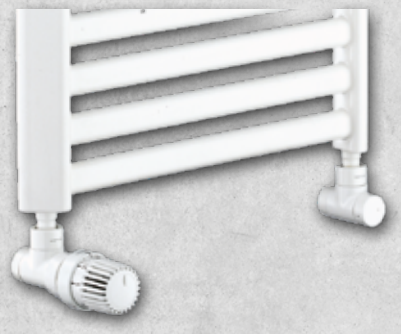
Our thermostatic valves with **Q-Tech** ensure that the ***heat arrives evenly everywhere*** and that the system runs reliably and energy-efficiently. Quiet operation is included.

All this without complex calculations.

You only need to know the respective required volume flows through the consumers. Once set to the correct value, the flow rate is regulated automatically - without the need for a flow regulator. You simply set the radiator output directly at the valve with our ***Q-Tech card***.
Our products with **Q-Tech** technology are also ideal for **retrofitting and refurbishment.**
With our pioneering modular hydronic solutions, you save money and protect the climate.

We are a reliable partner.

Q-Tech inside
Exclusive thermostatic valves



Q-Tech inside

Q-Tech inside

Q-Tech inside

EQ THERMOSTATIC VALVES
M 30 X 1.5 |
Item no. 1163552/62
Angle valve DN 15,
with LH thermostat, white (Fig.)
or chrome plated

Exclusive radiator valves with **Q-Tech**, especially for modern radiators and bathroom radiators. The design combines extraordinary form with outstanding function.

EQ THERMOSTATIC VALVES
M 30 X 1.5 |
Item no. 1163652/62
Straight valve DN 15,
with LH thermostat, white or
chrome plated

MULTIBLOCK TQ
G ½ external thread x G ¾ external thread |
Item no. 1184073/74
Straight/angle version,
brass, nickel plated

Practical connection fitting consisting of a presettable thermostatic valve with **Q-Tech** and a connection fitting for supply and return at the radiator.

Elegant design covers in white, chrome, anthracite or stainless steel finish (see Fig.) create a harmonious transition to modern radiators and bathroom radiators.

MULTIBLOCK TQ-RTL
G ½ external thread x G ¾ external thread |
Item no. 1184076
Angle version,
brass, nickel plated

Connection fitting for the combined use of radiators and surface temperature regulation consisting of a presettable thermostatic valve with **Q-Tech**, a connection fitting and a return temperature limiter (RTL).

Elegant design covers in white or chrome (see Fig.) create a harmonious transition to modern radiators and bathroom radiators.

Q-Tech for surface heating and surface cooling
Unibox und Multidis

Q-Tech inside

Q-Tech inside

Q-Tech inside

UNIBOX TQ-RTL
Dimensions: 155 x 210 x 6 mm |
Item no. 1022780/81

Room temperature control with **Q-Tech** thermostatic valve and return temperature limitation of heating surfaces with return temperature limiter.

The highlight of bathroom design: The **Unibox** with ***genuine glass cover*** in white or black is a ***real eye-catcher.***

UNIBOX TQ-RTL R-TRONIC
Dimensions: 155 x 210 x 6 mm |
Item no. 1022782

Room temperature control with **Q-Tech** thermostatic valve and return temperature limitation of heating surfaces with return temperature limiter, with pre-mounted **Aktor T 2P** electrothermal actuator and **R-Con FBH** wireless receiver.

The ***genuine glass cover*** in white is particularly elegant.

MULTIDIS SFQ
for 2 - 12 heating circuits |
Item no. 1404952/62

New generation of heating circuit distributors/collectors for surface heating with **Q-Tech.** The distributors/collectors are completely pre-assembled with fill and drain cocks.

Further products with **Q-Tech inside** at www.oventrop.com

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Technical modifications reserved.

Raumklima

Hydraulik

Stationen,
Speicher

Trinkwasser

Öl

Smart Home,
Smart Building

Oventrop is the partner for efficient heating, cooling and clean potable water. The modular systems and services offer pioneering solutions which all HVAC experts use to work with – easily and flexibly – from planning to installation, from industry to trade. As a family business, Oventrop accompanies its partners over many years – competently and personally.

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