The compact hot water boiler control CWC is available for all Bosch single-flame-tube boilers for hot and warm water. It is characterised by intuitive handling, comprehensive functions and simple installation due to a plug and play solution.

- Modular complete solution with cost advantage, for all single-flame-tube hot water and heating boilers
- Integrated sequence control for up to four boilers
- Intuitive operation via colour touch display and function keys for quick access
- Pre-configured and completely wired for quick commissioning
- Integrated power supply in the compact control cabinet, e.g. for pumps, valves and burner
- Compatible with all common control technology protocols
- Optional remote access via MEC Remote for maximum availability and alarming function in case of any incident via SMS or e-mail on request
Perfectly combined: The optimal control

Each of our Bosch controls is suitable for different applications – so how do I find the best control for my boiler? Some examples state the advantages of our controls for heating and hot water applications as well as some use cases.

<table>
<thead>
<tr>
<th>Heating boiler and hot water boiler controls</th>
<th>Control 8000</th>
<th>CWC</th>
<th>BCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>Comprehensive features for smaller heating applications up to 100 °C. Plug-in modules allow different additional functions</td>
<td>Compact control for all Bosch single-flame-tube hot water and heating boilers</td>
<td>Customised control cabinet with project-specific software</td>
</tr>
<tr>
<td>Features</td>
<td>Equipped for one boiler circuit or a mixed heating circuit and a domestic hot water (DHW) heating system as standard. The control can be enhanced to meet the plant requirements by up to four plug-in modules</td>
<td>Boiler control with integrated sequence control for up to four boilers. The control is equipped with power supply parts and optional remote connection MEC Remote</td>
<td>Customised software and features for full flexibility. The efficiency assistant MEC Optimize enables minimised energy costs and maximised reliability</td>
</tr>
<tr>
<td>System integration</td>
<td>Pre-configured Modbus-interface for connection to control technology</td>
<td>Compatible with all common control technology protocols, e.g. Modbus TCP, Profinet DP, Profinet IO</td>
<td>Common control technology protocols pre-configured, customised protocols can be configured</td>
</tr>
<tr>
<td>Power supply, e.g. for pumps, valves etc.</td>
<td>Supply and installation on site</td>
<td>Included</td>
<td>Included</td>
</tr>
</tbody>
</table>

**District heating supply with two UT-HZ hot water boilers and related components**

High complexity and enormous size of district heating systems demand for a project-specific control. Let’s take a district heating supply with two 25 MW UT-HZ boilers and related components as example. Both hot water boilers are controlled by the customised boiler control BCO. The higher-level system control SCO unites the information of the connected boiler controls and components. With a dynamic, automatic change between the boilers it ensures highest possible longevity and efficiency. Individual programming allows adaptation of the control to project-specific requirements. Further, the SCO delivers the collected data to the control technology on site via common protocols. The remote connection MEC Remote makes visualisation of the plant possible anytime and anywhere, whereas the plant efficiency is steadily optimised by the intelligent solution MEC Optimize.
**Three UT-M hot water boilers for process heat in production and to heat the associated buildings**

A lot of production facilities need hot water for process applications and heating of the production halls. Often the produced heat is also used to heat the associated office buildings and warehouses. In the use case with three UT-M hot water boilers – each of which delivers 16 MW heat – the compact CWC not only controls each boiler but is also used for sequence control. The boilers are regulated depending on the heat demand of the consumers and run therefore in optimum operation. Additionally the CWC makes sure that the economizers are protected and controls the ideal inlet temperature for each economizer based on the boiler. Pre-configured, common protocols allow the connection to centralised control and automation technology. Operators, and upon request also Bosch service engineers, can visualise the system data anytime with the remote connection MEC Remote. Further advantages are the optional alarming function with a notification via e-mail or SMS in case of faults and operation without permanent supervision up to 72 hours within rules and regulations.

---

**Apartment building with two Bosch Condens 7000 F heating boilers in a centralised heating system**

Apartment buildings often have only one central heating system that provides the residents with heat and domestic hot water (DHW). Different heating circuits optimise the supply of the individual apartments. As the heat demand varies widely and is especially high in the morning and evening two Bosch Condens 7000 F heating boilers were installed. Operated as a cascade system they offer an enormous control range and cover every demand from low loads to extrem peaks. The installed Control 8000 regulates the boilers automatically up and down. Simple installation directly on the boiler body reduces space requirements in the boiler room and the intuitive light signal (traffic light model) shows the current operation status at the first glance when entering the room. Further, the operator, and upon request the Bosch service engineer, can access the system from afar by using the remote connection MEC Remote.
Advantages of the compact control CWC at a glance

**Remote maintenance and control technology connection**
- Visualisation of the CWC user interface from afar via secure VPN connection with MEC Remote upon request
- Optional alarm notification via e-mail or SMS and remote support from the Bosch service
- Compatible with common control technology protocols, such as e.g. Modbus TCP, Profinet DP, Profinet IO

**Quick commissioning and simple installation**
- Pre-wired control cabinet as plug and play solution
- Control cabinet can be mounted on the boiler up to approx. 9 MW boiler output
- Only one control cabinet necessary: Power supply parts for all actuators and sensors included in the control cabinet

**Intuitive operation**
- Modern colour touch display for simple operation and clear visualisation of operating conditions
- Four additional function keys allow quick access to frequently used menu items

**Compact overall solution**
- Integrated boiler sequence control for up to four boilers
- Power supply for all actuators and sensors included in the CWC, e.g. for burners and pumps
- Attractive price-performance ratio

**Comprehensive functionality**
- Control of a complete boiler system including components with only one control unit
- Numerous features included, such as e.g. combustion, return flow temperature protection, speed control, heat maintenance system and control of the boiler circuit pump

**Remote maintenance and control technology connection**
- Visualisation of the CWC user interface from afar via secure VPN connection with MEC Remote upon request
- Optional alarm notification via e-mail or SMS and remote support from the Bosch service
- Compatible with common control technology protocols, such as e.g. Modbus TCP, Profinet DP, Profinet IO

**Compact overall solution**
- Integrated boiler sequence control for up to four boilers
- Power supply for all actuators and sensors included in the CWC, e.g. for burners and pumps
- Attractive price-performance ratio

**Comprehensive functionality**
- Control of a complete boiler system including components with only one control unit
- Numerous features included, such as e.g. combustion, return flow temperature protection, speed control, heat maintenance system and control of the boiler circuit pump

© Bosch Industriekessel GmbH | Figures only exemplary | Subject to technical modifications | 05/2020 | TT-CH/MKT_en_CWC_01