product

Information on industrial burners

Raw power

Weishaupt WK80 industrial burner

8,500 to 60,000 MBH
A highly efficient industrial burner built using the modular principle

Weishaupt WK series industrial burners have been specially designed for industrial processes. The ‘modular design’ principle enables these burners to be matched to numerous special applications. A large capacity range supports the wide application spectrum.

Modular principle
Weishaupt WK industrial burners are built using the modular principle. That means the fan, control panel, pump assembly, preheater station and gas trains are separated from the burner. This concept offers high flexibility to match numerous requirements.

Digital combustion management
Using digital combustion management ensures the simple and safe operation of heating/process plant. All important functions such as fuel and air supply, flame monitoring etc, are controlled with digital precision. Operational functions are optimized, economy is maximized, and emissions are reduced to a minimum.

Increased safety due to nozzle head with solenoid activated shut off device
A shut off device is fitted in the nozzle and shuts off the oil flow directly in the nozzle orifice. No fuel oil can leave the nozzle head, thus increasing safety and life time of the equipment.

Nozzle oil circulation on residual oil burners
During pre-purge on residual oil burners heated oil circulates through the nozzle and oil line system.

Heat recovery by using combustion air
Many industrial processes create high flue gas temperatures due to the high temperature of the medium used (e.g. high temperature boilers).

A high measure of energy can be recovered from these hot flue gases, which return via a heat exchanger in the flue. Efficiency can be increased by up to 9% using this technology. Weishaupt WK industrial burners can be operated with combustion air temperatures of up to 480°F (250°C).

Simple maintenance
Diffuser, nozzle, ignition electrodes and the combustion head are easily accessible when the housing is opened. The flame tube can also be removed through the opening in the casing once the mixing head has been removed. The components for the regulation of oil, gas and air quantities are neatly arranged in the controls assembly and are easily accessible. This simplifies all maintenance work.

Insulated burner housing
The burner housing is lined with heat insulation as standard. Even with combustion temperatures of 480°F (250°C), the surface temperature of the housing is below 212°F (100°C). The lining also provides effective noise reduction, with a noise level below 85 dB(A).

NOx reduced operation
The gas version of the burner operates with reduced NOx emissions.
Increased safety due to nozzle head shut off device with solenoid
A shut off device is fitted in the nozzle and shuts off the oil flow directly in the nozzle orifice.

Simple maintenance
Diffuser, nozzle, ignition electrodes and the combustion head are easily accessible. The flame tube can also be removed through the opening in the casing.

Insulated burner housing
The burner housing is lined with heat insulation as standard and has been designed for using combustion air temperature of up to 480°F (250°C).

Digital combustion management
The use of digital combustion management ensures the simple and safe operation of combustion plant.

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<tr>
<th>Burner model</th>
<th>Fuel</th>
<th>Capacity range MBH</th>
<th>5,000</th>
<th>10,000</th>
<th>15,000</th>
<th>20,000</th>
<th>25,000</th>
<th>30,000</th>
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<tbody>
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<td>WK 80</td>
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<td>8,500 – 60,000</td>
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<td>L</td>
<td>11,000 – 60,000</td>
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<td>MS</td>
<td>11,000 – 48,000</td>
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G = Natural Gas  
L = Light Oil #2  
MS = Heavy Oil #6

68°F (20°C) combustion air temperature  
480°F (250°C) combustion air temperature
WK80 industrial burner
Dimensions, technical data

1. Ball valve
2. Main gas pressure regulator
3. Low gas pressure switch
4. Double main gas valves
4b. Double pilot gas valves
5. High gas pressure switch
6. Pilot ball valve
7. Pilot gas pressure regulator
8. Gas butterfly valve
9. Burner