

POWERPACK

FIRE TUBE BOILERS



STEAM SOLUTION WITH POWERPACK SERIE STEAM PRODUCTION FROM 10 000 KG/H TO 34 000 KG/H

The PowerPack boiler from Babcock Wanson combines the best available technology in boiler design with very high efficiency resulting in low operating costs and reduced emissions.

The PowerPack boiler is designed to meet the latest European environmental legislation in terms of pollutant emission and can even exceed regulations requirements when fitted with Babcock Wanson combustion equipment.

HIGH PERFORMANCE

Perfect boiler - burner combinations

The perfect match between the boiler shell and burner ensures reliable and efficient operation. Efficiencies over 98% (R-Eco) and 105% (condensation) can be achieved with the relevant fitted Babcock Wanson economiser and heat recovery system.

High performance across the power range

Steady performance is a key feature of Babcok Wanson equipment. Dedicated burner combustion head design linked to very high turndown ratios provide accurate control of excess air and minimum start/stop cycles. This ensures best possible performance across a wide process operating range.

Low electrical consumption

The very low gas side pressure drop reduces massively the electrical consumption of fans, which is further enhanced by the variable speed combustion air and feedwater drives.









WHY CHOOSE THE POWERPACK BOILER FROM BABCOCK WANSON?

- Very high efficiency and low emissions
- High burner turndown ratios
- Micromodulation as standard
- Simple and easy maintenance
- Robust design for very long life
- Economisers
- Condensing economiser option

- Connectivity with our navinergy system
- Combustion air pre-heater
- Dual and mixed fuel firing options
- 0, and CO trim options
- A fully integrated steam solution

PowerPack - Firetube Boilers

ROBUST CONSTRUCTION FOR LONG LIFE

PowerPack boilers are three-pass design with a flue gas tubular reversing chamber offering a high efficiency and remarkable reliability. Welded outside the pressure part body, this proven feature, does not require any furnace tie rods or reinforcement of the reversing chamber and gives an exceptional flexibility to the shell and furnace expansion allowing important steam load changes with minimal operational stress. Being continuously cooled by water circulation, the flue gas reversing chamber requires a very low maintenance and does not need any refractories.

B

EASY ACCESS

The PowerPack design includes full access to front smoke and furnace tubes via large easy use doors. Rear tubeplate and furnace tube access is simple and complete due to the unique tubular reversal chamber which minimises refractory requirements and complex tie rod requirements.

SteamPack standard construction includes an integrated up-level access platform for simple, safe access and to ease the maintenance and operation.

REDUCED OPERATING COST

The Powerpack series offers a high standard of instrumentation and control, enabling monitored or without human presence operation, according to Babcock Wanson's exclusive operating modes, and meeting the constraints of all industrial processes, in compliance with CE regulations and European standard EN12953. Regardless of the intervention mode, from BW Permanent Presence, BW3 days, BW7 days to BW720 hours, the boilers operate continuously within the authorised limits and stop and lock automatically when the limits are exceeded.





| PowerPack | Model | 10.0 | 12.0 | 15.0 | 17.0 | 21.0 | 25.0 | 27.0 | 30.0 | 34.0 |
|------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Steam Output (1) | kg/h | 10 000 | 12 000 | 15 000 | 17 000 | 21 000 | 25 000 | 27 000 | 30 000 | 34 000 |
| Power Output | kW | 7340 | 8875 | 11 122 | 12 465 | 15 365 | 18 282 | 19 702 | 22 117 | 24 905 |
| Width A ⁽²⁾ | mm | 3410 | 3485 | 3605 | 3865 | 3940 | 4030 | 4290 | 4480 | 4795 |
| Lenght B ⁽²⁾ | mm | 8770 | 10 460 | 10 600 | 11 300 | 12 430 | 13 880 | 14 130 | 14 000 | 16 100 |
| Height C (economiser included) (2) | mm | 3940 | 4050 | 4250 | 4330 | 4530 | 4900 | 5100 | 5560 | 6060 |
| Weight-fully flooded | kg | 40 200 | 41 500 | 46 500 | 51 500 | 75 000 | 80 500 | 91 200 | 100 800 | 108 200 |

(1) At 15 barg and feedwater at 105°C

(2) Overall dimensions include fitted burner and boiler mountings.

For lower or higher steam output requirements please see our full range of steam boilers on our website

