



BOILTE PILLAR

**VERTICAL POWER WITHOUT COMPROMISE – STEAM
WHERE YOU NEED IT, SAVINGS WHERE IT MATTERS**

CAPACITY: 100–500 kg/h
STEAM TEMPERATURE: up to 165°C
PRESSURE: 8 bar



Boilte Pillar

FUEL: GAS / DIESEL / HEAVY FUEL OIL / HEATING OIL / WASTE OIL

Vertical steam boiler for low-capacity applications

Boilte Pillar is a vertical steam boiler for low-capacity applications, designed for businesses requiring a reliable and compact source of saturated steam for process needs, heating, and hot water supply. The Pillar model range covers steam outputs from 100 to 500 kg of steam per hour at operating pressures up to 8 bar. This is the optimal solution for small production facilities, laundries, food processing plants, agricultural complexes, and municipal facilities.

The key advantage of Pillar is its vertical configuration. The boiler occupies 40–50% less floor space compared to horizontal alternatives, which is particularly important when upgrading existing boiler rooms with limited dimensions or when installing in confined spaces. At the same time, the vertical design does not reduce performance – intensive heat transfer in a limited space is achieved through optimal geometry of the combustion chamber and the fire-tube bundle.

The Pillar boiler is designed for operation on natural gas and diesel fuel. It can be equipped with a combination burner for quick switching between fuel types. Start-up to operating mode takes no more than 10 minutes, minimising start-up losses and reducing fuel consumption during cyclic operation.

Design features

The Pillar boiler design includes the following key elements:

- Vertical shell made of boiler steel 09G2S (high strength, impact toughness, corrosion resistance, excellent weldability)
- Combustion chamber with vertical convective tube bundle, manufactured from heat-resistant steel using automatic welding in a shielding gas atmosphere
- Vertical turbulators, creating controlled turbulence in the flue gas flow, increasing contact time with the heating surface and improving efficiency
- Gas-tight shell, ensuring pressurised operation from the burner, complete and controlled fuel combustion
- Steam collector with integrated separator for producing dry saturated steam of high quality

All welded joints are made by robotic welding systems with subsequent non-destructive testing (ultrasonic testing or radiography). Hydraulic tests are performed at 1.5 times the working pressure. Each boiler is supplied with factory test reports.

Enhanced steam quality for sensitive processes

The integrated steam separator and optimised steam space geometry ensure exceptionally dry saturated steam with minimal moisture carryover. This is critical for applications where wet steam would compromise product quality, such as food processing, pharmaceutical sterilisation, and textile finishing. Consistent steam quality also extends the service life of downstream equipment, including steam traps and heat exchangers.

Standard scope of supply

Basic package (included in the boiler price):

- Vertical shell made of boiler steel 09G2S
- Combustion chamber made of heat-resistant steel
- Vertical turbulators for fire tubes
- Steam collector with integrated separator
- Front door with hermetic seal
- Flame inspection port
- Safety valve
- Water gauge glass (column)
- Pressure gauge
- Feed water pump
- Burner mounting plate
- Electrical control panel (basic)
- Passport and instruction manual
- Certificates of conformity

Optional extras (on request):

- Combination burner (gas/diesel)
- Advanced automation (PLC, remote monitoring)
- Water treatment system (deaerator, filters)
- Economiser for efficiency improvement
- Heavy fuel oil firing kit

Each boiler is supplied with a complete documentation package: passport, instruction manual, certificates of conformity, and warranty card. Upon request, our engineers provide site supervision, commissioning, and staff training.

Optimised for tight spaces and retrofits

The vertical design of Pillar makes it particularly suitable for installations where floor space is at a premium. Unlike horizontal boilers that require extended floor length, Pillar's compact footprint allows it to be installed in existing boiler rooms without structural modifications. This makes it an ideal choice for retrofit projects where building expansion is impractical or cost-prohibitive.

Simplified maintenance access

The Pillar design features a front access door and a removable rear gas collector, providing full access to the tube bundle and combustion chamber for inspection and cleaning. This eliminates the need for extensive dismantling during routine maintenance, reducing downtime and labour costs. All service points are positioned for easy access without special tools.

Fields of application

- Laundries and dry cleaners – steam for ironing equipment, drying drums
- Food industry – sterilisation, pasteurisation, cooking
- Agriculture – greenhouse heating, grain drying, feed mills

- Municipal facilities – heating of schools, kindergartens, administrative buildings
- Car services and workshops – space heating, steam cleaning
- Light industry – ironing shops, finishing production

Why choose Boilte Pillar?

- Lifetime warranty on the boiler heat exchanger and main load-bearing components – an unconditional manufacturer's obligation, legally confirmed.
- Full certification package (GOST, TR EAEU, EN, optionally ASME, PED) – for trouble-free commissioning and inspection by any regulatory authority.
- Engineering support at every stage – selection, site supervision, commissioning, start-up, staff training, and ongoing service.
- Factory-direct pricing – optimised logistics, no intermediaries, no hidden markups.
- Proven reliability for 24/7 operation – designed for continuous duty with minimal operator attention.
- Complete traceability – every welded joint is documented with NDT reports.

Technical specifications

Model, Pillar	Power, kW**	Efficiency, %	Boiler resistance, mbar	Water volume, L	Steam space volume, L	Flue gas flow, m³/h	H, mm	B, mm	L, mm	Dry weight, kg
100	65	91,3	0,3	210	0,8	151	1984	983	1168	632
150	98	91,3	0,4	440	0,95	172	1984	983	1238	664
200	130	91,7	1,2	520	110	257	1984	983	1353	725
300	195	91,7	2,5	710	125	341	1984	983	1468	781
400	260	91,2	4,6	760	158	427	1984	983	1718	906
500	325	90,2	3,1	800	245	513	2232	1158	1724	1271

****Power:** The values shown correspond to operation on methane (natural gas). When using diesel fuel or heavy fuel oil (mazut), a power adjustment (reduction) may be required in accordance with design standards and fuel-specific calculations.

Boilte reserves the right to modify dimensions and design without prior notice.

Dimensional tolerance: ±0.1–0.2% for all Boilte equipment.

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engineered trust

