Boilerless technology

Better Coffee, Smart Heating, Higher Efficiency

The Boilerless Technology is an innovative, reliable alternative to conventional boiler-based coffee machines. Its advanced on-demand heating system delivers perfect temperature control for every beverage, improving drink quality and machine availability while significantly reducing energy consumption and maintenance needs.





Operational Efficiency

Fast heating & minimal heat-up time: Perfect water temperature from the first service, even in low ambient conditions.

Low energy consumption: Up to 75% energy savings

Up to 75% energy savings compared to conventional boilers.

Compact & lightweight:

Easier to transport, install, and handle, with lower emissions during transport.

Reduced operating costs:

No need to drain air breaks or boilers when relocating the machine.



Beverage Quality

Advanced temperature control: Guarantees thermal stability and perfect temperature in every service and water cycle.

Customizable for recipes/ products: Adjustable temperature for coffee, tea, and soluble drinks.

Consistent first-to-last cup quality: Ensures ideal taste and extraction every time.

High water quality: Tubular circuits prevent stagnation and avoid negative taste effects from mineral deposits.



Sustainability

Sustainable operation: Lower energy and raw material use than

conventional boiler systems.

No water wastage:

Water is re-circulated during heating, eliminating drainage.



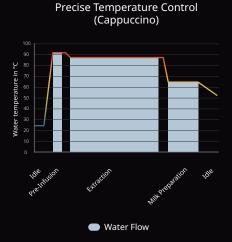
Hygiene & Reliability

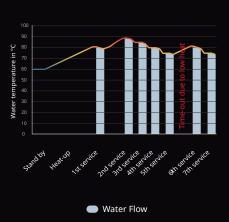
Added hygiene: Tubular water circuit reduces the risk of bacterial or microbial contamination.

Anti-limescale system:

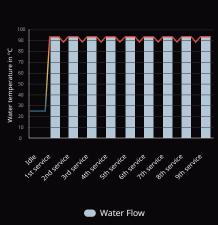
Protects heaters, solenoid valves, and tubing, prolonging machine life and reducing descaling frequency by up to 50%.

Reliable under heavy use: Maintains consistent performance and thermal stability even in highvolume environments.





Boiler System



Boilerless System

Temperatures can be adjusted precisely to each ingredient, including a different temperature in pre-infusion and percolation phase for optimal aroma extraction.

Boiler systems need long times to heat-up: Additionally, they often have limited capacity to sustain optimal temperature and require a recovery phase when falling below a certain threshold

The boilerless, on-demand heating system provides rapid heat-up and maintains optimum temperature independent of the number of services.

VITRO X1

ESPRESSO

Capacity		
Recommended average daily consumption of		100
Coffee bean hopper		1.2kg
Bean hopper extended to 2.2 kg		•
Soluble hoppers		2x 1.6l
Internal waste capacity	Coffee ground cakes	up to 50
	Liquid tray	1.2l
Heating system and Brewing unit		
Azk V10 / 6-8g fixed volume		•
Azk V20 / 12-14g fixed volume		•
Azk V30 / 7-14g variable volume		9
Boilerless, on-demand heating system		3.200W
User interface		
Selection		Capacitive touch
No of selections		12
Foldable cup stand		9
Independent hot water spout		S
Illuminated dispensing area		9
Technical features		
Voltage (V) / Frequency (Hz)		230 / 50
Maximum power (W)		3.200
Dimensions (mm)	Width / Height / Depth	337 x 672 x 505
Weight (kg)		34kg

S Standard Optional

Azkoyen Group

Coffee & Vending Systems Division

