



ENDO FLEX™ S

Small But Big on Performance

The newest addition to our EndoFlex™ series of endothermic gas generators.

The EndoFlex™ S is the more practical choice for cost-effective and sustainable production of small-volume endothermic gas without compromising any of the performance benefits.

FEATURES

Typically used for annealing and carburizing, the EndoFlex™ S combines technological advancements in process and design to deliver on-demand metered endogas mixture of the highest quality to heat treating operations. This adds up to big savings from increased heating efficiency and lower operation and maintenance costs.



ENDOINJECTOR™ CONTROL SYSTEM

An integral precision gas mixing and control system, the EndoInjector™ consistently provides the ideal gas mixture to generate the highest quality of endothermic gas. The system's patented fuel injection design provides electronic flow measurement and precise ratio control.



REACTIONCORE™ TECHNOLOGY

The breakthrough generator design of the ReactionCore™ technology replaces a single large retort with three smaller centrifugally cast retorts. This eco-innovative solution increases the usable surface area, improves the reaction chamber's heating efficiency, reduces the heating energy required to produce endothermic gas, and provides a fail-safe operation, increasing the reliability and availability of the EndoFlex™.



OPTIMAL CHAMBER DESIGN

The round design of the heating chamber results in a more uniform temperature and heat distribution within the retorts. This enhances heat performance and efficiency while minimizing heat loss to the surrounding surface area.

ENDOFLEX™ S

BENEFITS



EASE OF MAINTENANCE

The EndoFlex™ S design makes it possible to replace the heating system quickly and efficiently, regardless of whether it is electric- or gas-powered. Its easy access design and simple maintenance eliminate weeks of downtime.



SAFETY

The high safety standard of EndoFlex™ S is achieved through the automatic burn-off capability and further enhanced with the optional nitrogen purge. Process safety is also brought to a whole new level with the AtmoSense™ atmosphere analyzer and additional temperature and pressure sensors.



HIGH EFFICIENCY

When it comes to efficiency, EndoFlex™ S comes with a rich set of built-in hardware and software features to maximize system efficiency and equipment uptime: intelligent process monitoring and diagnostic software, automatic endothermic gas quantity control, controlled heating elements, future-proof recuperative burners, preventive maintenance scheduling software (e.g., retort burnout, filter change), and more.



GREEN & SUSTAINABLE

The EndoFlex™ S operates on either natural gas or propane and its flexible design can facilitate a future switchover. For users of natural gas looking to make the switch to propane later down the line, converting is easy. A few minutes to exchange the orifice, and you are ready to go!



Our goal is to deliver a system with a long lifecycle while minimizing the environmental impact through a clean renewable energy source and smarter energy usage.

SPECIFICATIONS

Heating	Gas or electric
Retort technology	ReactionCore™
Cooling	Air Optional water
Maximum endogas capacity	EndoFlex™ S: 50m ³ /h (1,760 CFH) EndoFlex™ L: 300m ³ /h (10,500 CFH)
Chamber design	EndoFlex™ S: Multi-chamber with classic retort change EndoFlex™ L: Multi-chamber with easy side door access for retort change
Gas source	Natural gas or propane

USA

+1 414 462 8200
Sales.na@upc-marathon.com

CANADA

+1 514 335 7191
Sales.na@upc-marathon.com

CHINA

+86 21 3463 0376
Sales@mmichina.cn

FRANCE

+33 3 81 48 37 37
Sales.fr@upc-marathon.com

GERMANY

+49 7161 94888 0
Sales.de@upc-marathon.com

POLAND

+48 32 296 66 30
Sales.pl@upc-marathon.com