



STEAM GENERATORS for the industry

STEAM GENERATION **ONA** NEW LEVEL



FRANK steam generators are characterised by their strength and performance and are suitable for continuous use. They are more compact, more efficient, faster and stand for consistent steam quality.

What are steam generators?

Steam generators are devices that heat water and convert it into steam. They are used in many areas, including the food industry, pharmaceutical industry, chemical industry and many other sectors. The excellent properties of steam make it very versatile and ideal for heating, humidifying, sterilising or cleaning, for example.

The advantages of FRANK steam generators

Our steam generators are compact, efficient and very powerful despite their small size. We exclusively use our innovative continuous flow heating system, which is significantly more efficient than a boiler system and therefore achieves faster steam generation with less waste heat.

By using a continuous flow heating system instead of a conventional pressurised tank, we also ensure significantly increased operational reliability. The compact design of the individual components enables integration in a very small space and with very low installation costs.

Areas of use and applications of steam generators

Thanks to the versatile and special properties of steam, there is virtually no industry that does not benefit from the use of steam generators.

Our FRANK steam generators can be perfectly customised to your individual needs.

Heating

Steam is a versatile energy source that is used in many industries to heat processes and products. In food factories, for example, steam is used to pasteurise milk, to boil the mash in beer production or to heat animal feed.





Cleaning

Hot steam cleans and disinfects surfaces gently, quickly and without chemical cleaning agents. It is therefore ideal for cleaning in the food industry, catering, textile cleaning and other areas where cleanliness and hygiene are important.







Sterilisation

Steam sterilisation is one of the safest methods for removing microorganisms from materials. This is why steam generators are used in many areas such as medicine, the food industry and research to sterilise surgical instruments, petri dishes, medical devices and foodstuffs such as canned food.

Humidification

In the food industry, steam is used, for example, in baking processes or to produce pellets from animal feed. The product is heated and moistened at the same time. This prevents microscopic cracks or damage. Steam generators are also used to humidify the air in other areas such as the storage of books or in hospitals.



We create innovative solutions

Sustainability is a core concept of our corporate and development philosophy. With this in mind, we develop systems and technologies that are both more efficient and more sustainable than conventional solutions. This ambition is also reflected in our innovative continuous flow heating system, which is used in our steam generators.

Boiler vs. continuous flow heater

The conventional boiler principle heats a large amount of water at once and keeps it at the right temperature to produce steam. A lot of unused energy is lost in the process. We rely exclusively on the continuous flow heater principle to generate steam. This allows the steam to be generated much faster. As a result, we can greatly increase efficiency. We achieve a very high level of efficiency through the targeted use of energy at the moment the steam is generated. This eliminates the need to heat and store the water in advance, which significantly reduces the generation of waste heat. Continuous steam generation at a constant temperature and constant water supply ensures consistent steam quality without any drop in output.

Expansion of the steam output through series connection



Water boiler system



Heating elements in the water cause it to vaporise under pressure. The vapour is directed upwards to the consumer.

Continuous flow heater



Illustration shows electrically heated continuous flow heater.

The water flows through the heating coil and is heated by the heating wire. Before leaving the coil, the water turns to steam and can be pumped to the consumer.

Advantages of FRANK steam generators at a glance

- Ideal for continuous operation
- Very high energy efficiency
- Consistent steam quality
- Very fast steam generation
- Very dry steam setting possible
- All water-bearing parts made of stainless steel
- External housing available in stainless steel

If the maximum demand for steam cannot be covered by a single steam generator or if a disruption-free steam supply is to be ensured through redundancy, the system capacity can be expanded as required. In this case, several steam generators are arranged in parallel and brought together at the steam outlet.

- Infinitely variable steam quality
- Very compact design
- Extremely low installation costs
- Low maintenance
- Siemens PLC control Can be integrated into existing systems via existing interface



Electrically heated steam generators

Steam generation without emissions

The electrically heated steam generators from FRANK are the ideal solution for continuous use in industry. They offer high performance, are reliable and produce steam without emissions. The innovative continuous heating system has a significantly higher output than boiler systems and achieves faster steam generation. Thanks to the Siemens PLC control system, our electrically heated steam generators can also be integrated into existing systems.



	iS 18 CIP	iS 36 CIP	iS 54 CIP	iS 72 CIP	iS 144 CIP
Heating type	Electrically heated				
Operating pressure max.	up to 10 bar				
Steam output max.	23 - 48 kg/h	37,5 - 75 kg/h	72 - 150 kg/h	96 - 192 kg/h	200 - 390 kg/h
Heating capacity	18 kW	36 kW	54 kW	72 kW	144 kW
Dimensions LxWxH (mm)	2400×400×2000				

Technical changes and errors excepted.





Oil or gas heated steam generators

Compact and powerful

FRANK's oil or gas heated steam generators are perfectly suited for use in various industrial sectors. They are used in particular where the operation of electrically heated steam generators is not possible. They offer a very high level of efficiency, work reliably and are ideal for continuous operation.

Technical data for individual systems

	iS 80 Gas CIP	iS 80 Oil CIP	
Heating type	gas heated	oil heated	
Operating pressure max.	up to 10 bar		
Steam output max.	78 - 168 kg/h		
Heating capacity	80 kW		
Dimensions LxWxH (mm)	1350×700×1850		

Technical changes and errors excepted.

Note:

The steam output can be increased by operating several systems in parallel. Available in all international standards.



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Notes



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Contact us for more information and arrange a personalised consultation.

Together we will find the perfect solution for you.

FRANK Hochdruck- & Dampftechnologie GmbH

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Contact us now:



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