



MM

MMM Group

Duotherm

Doubling performance.

Clean steam for professionals.

Advanced performance.

Powerful steam-to-steam generator.

MMM.
Protecting
human
health.

Duotherm

Doubling performance.

Clean steam for professionals.

Double up on safety and save money at the same time. The new Duotherm steam-to-steam generator will increase your output two-fold. We have done away with our conventional twin boiler in our steam-to-steam generator and replaced it with a single system. For our customers this means considerable space-saving, as the Duotherm will fit into almost every corner.

The enhanced Duotherm developed by MMM has enormous benefits for facilities with in-house heat steam supply. You get high efficiency, perfect sterilizing steam, a fast build-up of the required steam pressure, low maintenance costs and components with a long service life.

And even if your heat steam system delivers a pressure of only 4 bar, the Duotherm is a suitable steam-to-steam generator that will reliably supply clean sterilizing steam.

Advanced performance.

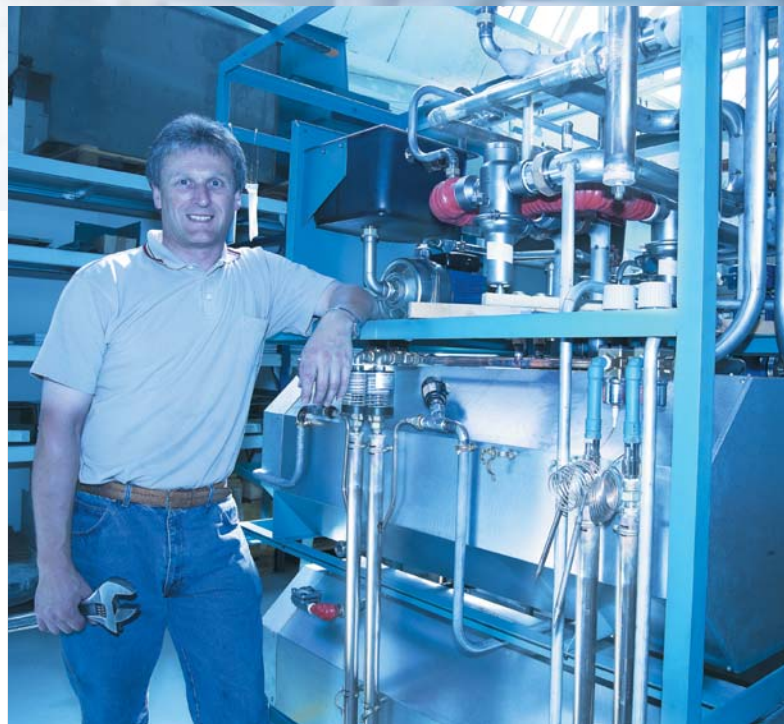
When MMM engineers developed Duotherm, every component was carefully examined for its functionality, cost effectiveness and safety. The result is a powerful and intelligent steam-to-steam generator with valuable features that benefit our customers.

For example:

The amount of non-condensable gas contained in sterilizing steam must be as low as possible. To achieve this, the boiler feed water is thermally degassed, a process, which is controlled and monitored by Pt100 temperature probe.

We have made automatic desalination a standard element in the Duotherm. This process is controlled through electrical conductivity of the boiler water. Water is kept at a constantly high quality level which helps prevent damage caused by deposits and corrosion. In addition, it prolongs the life-time of the boiler and is gentle on instruments during sterilization.

Duotherm steam-to-steam generator needs no additional fresh water connection for the cooling of the desalination water. A heat recovery system allows this energy to be used for warming up feed water.



All steam or feed water pipes and components are made of stainless steel.



No additional fresh water connection is required: heat recovery system in the feed water tank.

Thanks to the new design of the Duotherm heating coils, the power of one boiler is doubled.

Double performance, high level cost-effectiveness.

Heating coils.

The heating coils of the Duotherm have been specially arranged to allow an increase of the heating surface on a much-reduced space and to double the heating performance at a low heat steam pressure. This sophisticated construction guarantees the longevity of all components.

Validation.

The excellent validation results of disinfection and sterilization processes have been given added impetus by the consistently high steam quality delivered by the Duotherm.

Safety.

We have incorporated additional, independently functioning safety equipment to protect the steam generator and its working environment against the risk of overpressure in the boiler and to ensure a high operational reliability. Hard- and software components are monitored by separate control systems.

- Great performance in a very confined space
- Various installation options:
on top or lateral, central or remote
- Conductivity controlled desalination
- Low heat steam pressure (as from 4 bar)
- Reliable safety engineering
- Service-friendly construction
with flange plate

Display.

A small display integrated into the control cabinet delivers useful information about boiler pressure, feed water temperature, operating hours and service messages. The Duotherm can be easily switched on or off through the sterilizer to which it is connected.

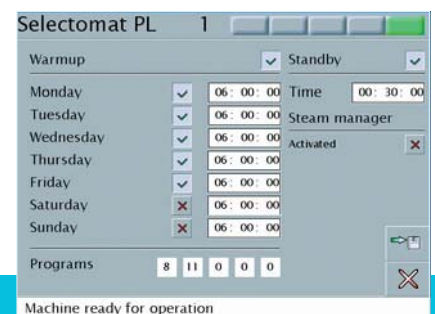


Control system.

The Duotherm is a flexible steam-to-steam generator that adapts to every type of operating condition. Its central control system even allows for individual parameter settings.

Automatic warmup.

If used in combination with a Selectomat PL, the Duotherm will automatically warm up the MMM sterilizer.





MMM Group

As one of the world's leading suppliers of sterile processing systems, MMM has been working actively to promote good health since 1954. With a full range of sterilization and disinfection products and services – that can be found in every branch of health-care from hospitals and scientific institutes, to laboratories and the pharmaceutical industry – MMM, has over the years, consolidated its position as a pioneer of quality and innovation both in the German and international market. In our two production facilities based in Stadlern, Germany, and Brno, in the Czech Republic,

we manufacture products that meet the highest demands of our customers world wide. The depth and precision of production standards at both plants ensure that we accomplish the rigorous quality requirements of medical engineering.

900 competent employees work together as a committed and enthusiastic team, dedicated to achieving the mission of the MMM Group.

Protecting human health.



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