

OMNIMAT

Boiler with reverse flame technology



A Thermax Group Company



OMNIMAT

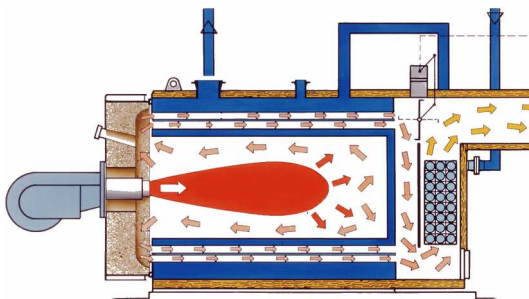
Boiler with reverse flame technology



The Omnimat is a boiler with a reversal combustion chamber, able to offer an excellent efficiency at an economically optimized size. Compared to conventional boilers, the Omnimat boiler can be installed in limited space because of its optimal design. Worldwide there are more than 25.000 Omnimat boilers in operation.

Design features

The Omnimat is suitably designed to produce hot water or steam, putting great emphasis on simple operation while maintaining the functionality and quality.



A well designed corrugated furnace and controlled flame geometry with regulated gas flow paths in the combustion chamber of this compact two pass boiler do not allow any compromise on efficiency and robustness of the equipment. This design feature which enables complete combustion ensure practically a emission free chimney with low NOx levels. Coupled to this is an advantage of reduced cold start cycle time.

The Omnimat comes with a skid mounted design thereby making it easy to handle and also saves saving on transportation and installation time and cost.

Furthermore, with an Omnimat boiler you're always one step ahead in terms of easy maintenance. The big front door reveals the whole section of the flue gas side, offering an easy access to the combustion chamber and the flue gas tubes. All other mountings and fittings and relevant boiler connections are easily accessible, and are comfortably arranged on the upper, or on the rear side of the boiler.

Auxiliary equipment

Another added advantage of the Omnimat boiler is an option of an integral exhaust gas economizer installed directly in the smoke box. With this equipment, the exhaust gas temperature is kept constant, regardless of the boiler's load. The additional generated heat in the form of hot water is fed back into the boiler.

The flue gas flow through the integral economizer is regulated with the help of a motorized damper so as to safely prevent the exhaust flue gas temperature from falling below the dew point. The economizer comes with a fin type design thereby ensuring optimum heat transfer in a very compact size.

Since integrated into the boiler's smoke chamber, the economizer claims very low additional space and hence eliminates the need for external flue gas ductings and an economizer, giving you the benefit of lower installation footprint and cost. An easy to do maintenance is guaranteed by a simple access for cleaning of the economizer.

Container solution

Due to its very compact dimensions, the Omnimat is perfectly suited for installations where either space is a constraint or mobility is required. Therefore, container solutions are an ideal application for the Omnimat as a start-up / standby or as a mobile heating station. As a all-in-one solution, Omnicall offers you a complete containerized boiler house package requiring you to only hook up the necessary connections to the distribution grid.





Advantages of the Omnimat at a glance

- Efficiency in every detail:
 - Compact design, 20-30% shorter in length than a conventional three-pass boiler.
 - Clean and complete combustion
 - Low thermal stresses due to a symmetrical boiler design
 - Dimple tubes - higher heat transfer coefficient and easy maintenance.
 - Low and even heat surface load
 - Minimum radiation loss, low flue gas temperature, high efficiency
 - Integral economizer with dew point control mechanism
 - High quality and reliable components
- Easy installation:
 - Skid mounted - saving on transportation and installation time and cost
- Easy maintenance:
 - Large front doors for optimized access and cleaning
 - Rear access for economizer cleaning



Product Offering

Omnimat for hot water applications

Type	Feature
16.1 PG	- Production of hot water up to 120°C - Max. operating pressure up to 6 / 10 bar - Thermal capacity from 0,8 MW to 9,3 MW
16.1 PGA	Additionally equipped with a build-in exhaust gas heat exchanger
23 HW	- Production of hot water up to 200°C - Max. operating pressure up to 20 bar - Thermal capacity from 0,2 MW to 8 MW
23 HWA	Additionally equipped with a build-in exhaust gas heat exchanger

Omnimat for steam application

Type	Feature
33 HD	- Production of saturated steam - Max. operating pressure up to 20 bar - Steam capacity from 0,2 to 8 t/h
33 HDA	Additionally equipped with a build-in exhaust gas heat exchanger

All Omnical boilers are designed and certified according to Pressure Equipment Directive 97/23/EG and EN12953.

Customized solutions available on request.



»Sustainable Energy Solutions«

Omnical Kessel- und Apparatebau GmbH
Hauptstrasse 156
35716 Dietzhöhlztal, GERMANY
Telefon: +49 (0) 27 74 / 81-0
Telefax: +49 (0) 27 74 / 81-292
Internet: www.omnical.de

SERVICEHOTLINE 24 / 7

Telefon: +49 (0) 27 74 / 81-247
Email: service@omnical.de

VERTRIEBSLEITUNG / HEAD OF SALES

Telefon: +49 (0) 27 74 / 81-300
Email: sales@omnical.de

VERTRIEBSBÜRO NORD / WEST

Am Wiesendamm 22a
32549 Bad Oeynhausen
Telefon: +49 (0) 5731 / 300 34 99
Email: vb-nordwest@omnical.de

VERTRIEBSBÜRO SÜD / OST

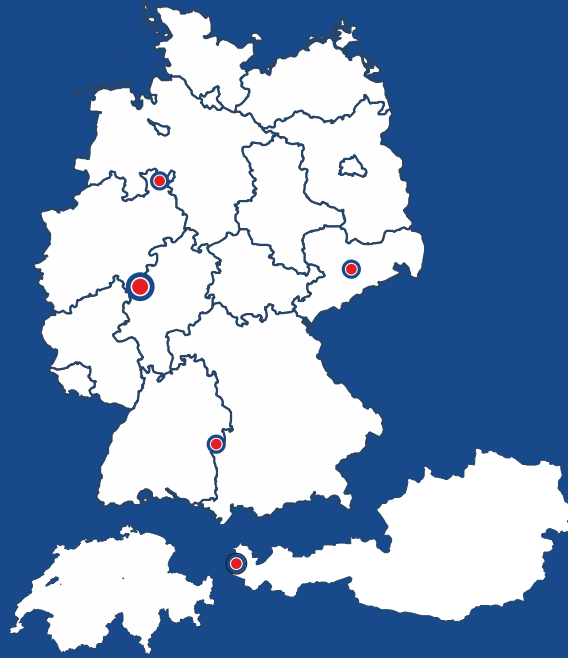
Am Wasserwerk 5
09557 Flöha
Telefon: +49 (0) 3726 / 78 90 65
Email: vb-suedost@omnical.de

VERTRIEBSBÜRO SÜD

Böttgerstraße 6
89231 Neu-Ulm
Telefon: +49 (0) 731 / 725 68 54
Email: vb-sued@omnical.de

VERTRIEBSBÜRO ÖSTERREICH / SCHWEIZ

Staubererweg 42
A-6800 Feldkirch
Telefon: +43 (0) 5522 / 365 60
Email: vb-sued@omnical.de



Our Global Network:

- Omnical
 - Dietzhöhlztal, Germany
- Danstoker
 - Herning, Denmark
- Thermax
 - Pune, India
 - Detroit, USA
 - São Paulo, Brazil
 - Milton Keynes, UK
 - Jebel Ali, UAE
 - Nairobi, Kenya
 - Moscow, Russia
 - Hongkong, China
 - Zhejiang, China
 - Kuala Lumpur, Malaysia

For further information please contact sales@omnical.de

A Thermax Group Company

