# xeoos

# FIRE MEETS WATER

Meet our water technology stove with the patented TwinFire® technology. Simply connect the xeoos AQUA system to your home heating circuit and be part of the new era of fireplaces, bringing envolving warmness to your home with ecologic conciousness

MADE AND DESIGNED IN GERMAN



## with great Efficiency measures up to





#### Deutschland Land der Ideen Ausgewählter Ort 2012



energyaward





# **XEOOS AQUA** is.



\$ \$ \$ \$

#### Safe and reliable

The stove can be used without electric power. In the event of a power failure, it keeps burning and it doesn't requires a buffer storage.

#### **Flexible**

You decide wether using the stove with fire only, traditionally to heat up your room or the complete experience with the water heating system.



#### Clean

The heat exchanger system doesn't need to be cleaned.



#### **Efficient**

The unique TwinFire combustion technology delivers the heat in an environmentally friendly way and with an efficiency of over 90%



Need an external combustion air supply? The xeoos AQUA can also be easily operated with external fresh air.



## Advantages



#### Less wood consumption

You save at least 40% of wood thanks to the wood gasification technology compared to a xeoos stove x8 AQUA without TwinFire® burning technology.

The fireplace consumes 1-2 kg less wood per hour thanks to the second flame, which is over 1,200 degrees hot.

Further advantages: less storage space for wood, you have to carry less wood, less dirt and ash are created. Cleaning and maintenance costs are also reduced.

#### Example:

Oconventional stove without TwinFire Technology burns aprox 4,0 kg wood/ hour.

o xeoos stove with TwinFire Technology burns aprox 2,4 Kg wood/hour.



#### Flexible water heating

We combine the unique, patented TwinFire® combustion technology with an efficiency of 93% (Omni tested, USA) with a completely new kind of hot water generation.

Take advantage of the extremely clean combustion technology of the xeoos stove while generating your domestic water heating process: keeping your home warm adding ecologic features couldn't be easier.

The water heating can be switched on and regulated.

The system is intrinsically safe and doesn't needs an extra thermal overload protection.

The principle for hot water heating is brilliant: the xeoos AQUA first heats the air, which hosts in a warm air cover, and from there, can be directed to an airwater heat exchanger under the furnace if desired. Once in there, the hot air transfers heat to the water.



#### 93% Efficiency

The renowned OMNI Institute (Portland, Oregon, USA) tested our xeoos and came to the following result:



Significantly less heat loss through the chimney and heats up to **40%** extra area!

The stove heats almost all of the healthy radiant area (infrared radiation) into the room.

150-153

\*Adjusting feet included

\*

\*

# AQUA ALL BLACK EAN code: 0745114482273

Top: steel anthracite Door handle / TwinFire-Starter: wood black Front frame: steel anthracite 8mm. Side frames: steel anthracite Upper chamber **Retainer: Glass** TwinFire Rust (cast) Door: steel anthracite 8 mm. Lower Chamber Ash box: stainless steel TwinFire-Tuner Heat exchanging system Cover: steel anthracite 8 mm.

# **AQUA INSERT** EAN code: 0745114482297

Looking to replace your old fireplace for an efficient and new one? Do you feel inspired enough? Aqua Insert is your best choice.

Give your living room a new imprint. Design and create your own oasis of wellbeing around the AQUA insert. Double benefit your home with chic new design and high quality water .





Cover, side panels and back panel not included

# AQUA BLACK SILVER

EAN code: 0745114482280

	Top: steel antrhacite
	Door handle / TF starter: wood black
	Front frame: steel anthracite 8 mm
	Side frames: steel anthracite
	Upper chamber
	Retainer: glass
	TwinFire Rust (cast)
A CONTRACTOR OF	Door: Steel silver 8 mm
	Lower chamber
	Ash box: stainless steel
	TwinFire-Tuner
	Heat exchanging system
	Cover: steel anthracite 8 mm



#### Every detail is important



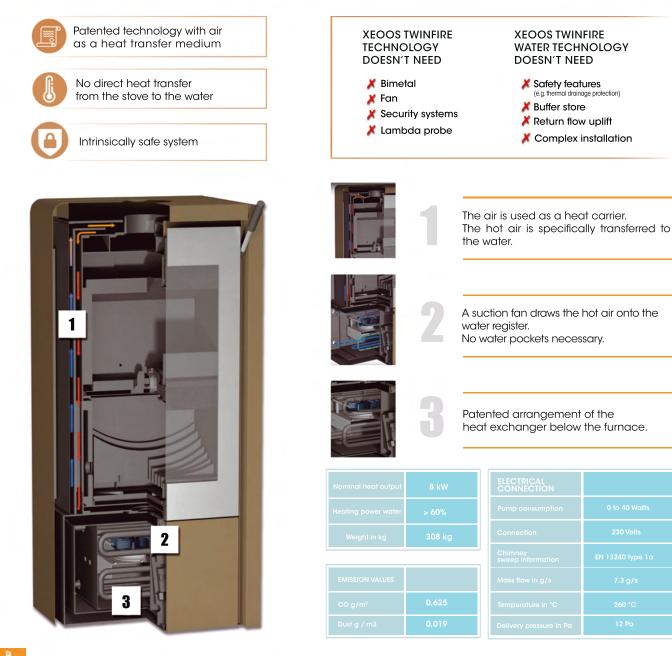
Handle

Tuner



Control with display

# THE PRINCIPLE OF XEOOS AQUA Image: Stress of thermal drain safety system of required



# Connection to the chimney

#### The xeoos AQUA is of type 1,

EN 13240, equipped with a self-closing door and also approved for operation on a multi-occupied chimney.

#### The xeoos AQUA is already assembled, ready for connection upon delivery.

It's connected to the chimney with standard smoke pipes [standard dimension 150 mm Ø]. The minimum height for the chimney connection depends on the height and the position of the flue pipe socket on the stove.

Connection piece possible according to USA norm!

We recommend having a chimney calculation according to EN 13384 carried out before installation.

Particulate matter Ecological combustion of the xeoos stoves. Fine dust is now regulated by several countries with new measures. In Germany this is 40 mg / m <sup>3</sup> for fine dust and 1.250 mg / m <sup>3</sup> for carbon monoxide. The xeoos only hits <b>19 mg / m<sup>3</sup></b> fine dust and <b>625 mg / m<sup>3</sup></b> carbon monoxide. (The combustion and functional principle of the xeoos is patented by xeoos GmbH.)			
	Legal limit values since 2010	Legal limit values since 2015	Emission values 2008 xeoos twinfire
Fine dust	75 mg/m³	40 mg/m <sup>3</sup>	19 mg/m³
Carbon monoxide	2000 mg/m³	1250 mg/m <sup>3</sup>	625 mg/m³



#### Important:

The chimney sweeper must remove the fireplace before commissioning and issue a certificate of safe use and proper flue gas discharge.

Distances to flammable components / furniture

1 8 4

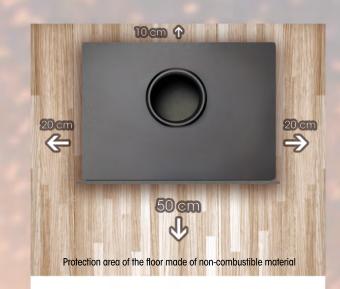
Radiant heat area 80 cm

#### **BACK AND SIDE CLEARANCES**

There must be a minimum distance of 20 cm to the side of flammable components and furniture, and at least 10 cm to the rear.

#### FRONT RANGE FIRE PROTECTION

There shouldn't be flammable components or furniture In the radiation range up to 80 cm of distance.



#### **PROTECTION OF THE FLOOR**

Flammable floors in front of the doors must be secured with a protective covering made of non-flammable material. The covering must be extended forwards by

at least 50 cm and laterally to at least 30 cm above the firing openings.

# Water Connectivity

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#### Direct integration into the heating system

- xeoos AQUA produces domestic and heating water. According to your requirements
- Direct connection to radiators available \*
- Connection to the return of heating system available (ex. underfloor heating) \*
- Optional buffer memory integration
- Very simple connection (flow and return only) to the

\* if these are integrated in a heating circuit with expansion tank and safety valve and a boiler with at least 40 l water volume is available



#### AQUA - tips and installation recommendations

To make it easier for you to install and use the xeoos AQUA, we make the following suggestions:

We recommend moving armored hoses from the oven to the Fixed connection water supply and return, so that you can move the stove a little later (not included). These should be ¾ "; not smaller in order not to reduce the cross-section (problems with the flow of water).

We recommend two shut-off valves (ball valves) with one Removable control lever for the forward and return flow on the oven (not included).

We recommend a mechanical breather (solar breather). These are made of metal instead of a plastic mixture (not included).

The signal cable to the pump is a LIYY 2 x 0.34 mm<sup>2</sup> cable.

 If the cable is laid up to 2 m in the house, bends / Bends can be made without any restrictions (2 m included). ✓ If the cable is laid 2 - 20 m in the house, we recommend a shielded cable (microphone cable) to prevent possible interference from, for example, cell phone or radio radiation. In addition, the cable should then be laid as straight as possible, with a few bends / bends (not included in the scope of delivery).

✓ During the installation, multiple venting of the heating is often not enough. We recommend rinsing with a clear current to "pull out" the air. This is extremely important for the heat output of the water-based stove.

 $\checkmark$  Note: Where there is air, there can be no water. So there is no hot water transfer.

 $\checkmark$  The fan makes noises at a volume of 52 dbA.This corresponds to the volume of a refrigerator

# 1. How many liters of water can be warmed with the xeoos Aqua in one hour?

A xeoos Aqua with 8Kw nominal power heats up to 120 I / h of water from 20°C to 80°C. At max. A load of 12 KW heats up approx. 180 I / h

#### 2. How many water radiators can you heat with a xeoos Aqua?

With a heating power of 12 KW , the xeoos AQUA theoretically and with optimal conditions can heat approx. a maximum of 16 radiators with a water content of 6 liters each one.



A family home has an average heating requirement of around 7KW



#### Attention !!

Hydraulic diagram only basic principle !! Technical changes reserved. No liability is assumed for the correctness of the drawing! We reserve all rights for this document. Without our consent it may not be reproduced, used in any other way or made accessible to third parties.

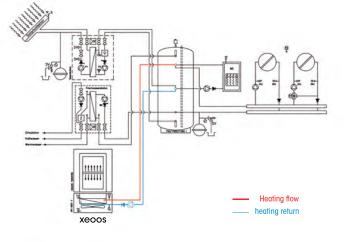
# CONNECTIVITY

The xeoos AQUA can be integrated in practically any heating system. We show in four connection diagrams how the xeoos AQUA can be integrated:



#### Connection in buffer storage

The heated water from the xeoos AQUA is temporarily stored in a buffer storage and demanded by the heating circuit as required.



# 3

Contraction Contraction

xeoos

#### **Series integration**

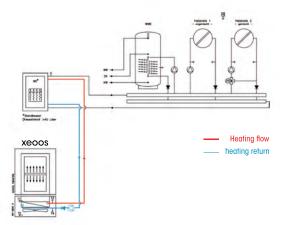
The xeoos AQUA is integrated in the return of the heating system and increases the return temperature in the boiler.

The xeoos AQUA is installed at the end of the heating chain in a row in front of the main heat generator boiler.

The boiler must have a water content of 40 I.

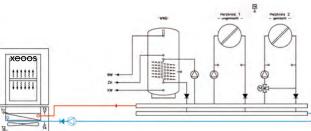
#### **Parallel integration** The heated water is fed into the free-standing bailor with its own bailor contacts. 401

boiler with its own boiler content> 40 I and supports or takes over Water heating. Forward and reverse of the xeoos AQUA and the rest Heating circuit are parallel in the boiler fed.



#### **Direct integration**

The xeoos AQUA is the only heat source. It can be dimensioned accordingly Radiators or surface heating be connected. It is also possible to use a buffer memory.



Heating flow — heating return

Maximum efficiency when using two heating systems:

a) Direct heating with fire (radiant and convection heat)

b) Water preparation for the central heating system Easy to install without much material and effort.

Heating flow

heating return

A stove in your living room that can be easily connected to your home's central heating system.



Made and invented in Germany.

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## CONTACT XEOOS GMBH

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# NOTE

For misprints we accept no responsability. All dimensions and drawings may differ slightly. The colors of the images in relation to the actual product may vary. We reserve the right to make

technical changes and further developments to our products at any time.

The xeoos Aqua development and functions have been tested under optimal laboratory conditions.

#### We strongly recommend:

Please contact your fireplace technical installer to confirm installation availability in your home. Don't hesitate to contact our technical department for questions (06452 / 92988-0). Every aspect of the xeoos Aqua shown in this brochure, such as technical descriptions, connection options, diagrams etc. are examples and cannot be generalized.



Brand and product development: www.global-mind.net