



Fireplace technology

Fireplace inserts Water heating fireplace inserts





Construction of the fireplace

When building a modern fireplace, the contractor faces the same challenges as the fireplace insert manufacturer. It takes a lot to put together a functional and aesthetically pleasing fireplace that meets the challenging design and quality demands of investors. A customer buying a new fireplace asks the same questions. What makes this solution special? What extras do I get? In order to make sure your experience translates into great projects and work goes well, and so you can give meaningful answers to questions like these, you'll need a product which sets the world alight. We offer you top quality fireplace inserts, a wide range of accessories and customisations, and full technical support for your work. We're in it together.

100% inspection

Trouble-free inspection of all moving components through insert inspection holes or doors even after installation into an enclosed fireplace shell.

40 mm thick chamotte with tongue and groove joints



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Surface treatment of visible parts with water-based eco-friendly paint with 600 °C resistance

Stainless steel combustion air control mechanism which can be inspected through the firebox Liftdoor mechanism can be thoroughly inspected through the door

Inspection hole for access to counterweight and liftdoor mechanism wire

Surface treatment of the body with eco-friendly paint with 600 °C resistance



Integrated flange for central air supply for combustion

Materials and technology for accumulation operation

All of our fireplace inserts are built robustly and in a technically sophisticated way to withstand accumulation operation without any problems.

On most models, the high temperature sensor carrier can be removed through the firebox, which means that the sensor can be replaced even after the product is installed in the fireplace shell without inspection holes



The bodies of our fireplace inserts are made of P265GH boiler steel, which contains more chromium and nickel. This makes them stronger and allows them to be exposed to high temperatures for longer periods of time. We also produce most functional components from boiler steel.



Air ducting into the firebox

The combination of correct combustion air ducting, flue gas extraction piping, and an ideally tight firebox is the prerequisite for clean and ecological combustion.



Quiet and precise control

We pay great attention to the design of the controls used during each operation. We have designed the control system to work reliably and safely. The air control is always serviceable through the firebox.



Sophisticated liftdoor mechanism

The door is pressed against the frame with a spring mechanism during closing. Each of the four springs extends a carrier with two bearings that travel on stainless steel rails. The spring mechanism absorbs deformations resulting from the thermal load. So the operation of the mechanism is smooth and the firebox is still sufficiently tight. The liftdoor mechanism can be thoroughly inspected through the firebox and the top lift pocket.





Convection jacket

Selected models with a liftdoor mechanism can be equipped with a galvanized steel convection jacket for more efficient distribution of hot air.

Available models with a convection jacket

HAKA 89/72HAKA 78/57THAKA 89/45HAKA 110/51THAKA 78/57ECKA 67/45/51HAKA 110/51ECKA 76/45/57HAKA 150/51ECKA 90/40/40

UKA 37/75/37/57 UKA 37/95/37/57 UKA 37/125/37/57 UKA 86/50/86/52



A thrust spring designed in a shape ensuring flawless functionality throughout the working range without contact with the bearing pin

A tight door

A stable and durable door profile is the basis for success in fireplace tightness. Our enclosed door profile with a material thickness of 2.5 mm provides the stability of these properties even with larger door sizes and high temperature loads.

> Outer glass seal with a thicker part that fits into a groove in the profile and a thinner part that fills the space between the glass and the door profile

> > Seals to ensure expansion of the outer glass from the metal parts

Groove fixing the seal in a permanent position in the door profile



U-shaped gasket to ensure the expansion of the inner glass from the metal parts Robust door seal fixed in the tapered groove of the door profile



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Stainless steel inner glazing bar

Firebox lining

We only use materials fired at temperatures above 1,000 °C to guarantee zero residual moisture, which could lead to damage to the lining.

Nyrolit

- · Thickness 30 mm
- \cdot Refractory concrete with high thermal and mechanical resistance
- \cdot Use for "N" model combustion chambers, "G" model deflectors,
- and HAKA 63/51(W)a lining

NYRO LIT°

Dark chamotte

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- · Dark coloured mixture throughout the complete volume
- · Thickness 40 mm
- · Tongue and groove joint system



Light chamotte

- · Thickness 40 mm
- \cdot Tongue and groove joint system





Accumulation sets

80% of our models can be equipped with an accumulation set or S-accumulation set. The type of accumulation set and the number of rings used can be adjusted according to the building conditions and the fireplace insert type.





Compact solution

- Flue gases flow in the accumulation body in a spiral to minimise draft loss
- The fired material and double-walled ring design ensures safe operation and an accumulation time of up to 8 hours

Cleaning brush available as an accessory for both types of accumulation sets



Models with optional heat exchanger

The fireplace inserts with a standard firebox size suitable for all types of buildings, for which it is possible to adapt the exchanger type – cast iron cupola, hot air exchanger, accumulation set.

Cast iron cupola

- · Connection ø180 mm
- Adjustment range horizontally 360°/vertically 0–90°
 A variant without/with cleaning hole

Steel hot air exchanger

- · Connection ø150 / 180 / 200 / 250 mm
- · Vertical or 45° connection

Accumulation set

- \cdot 5× accumulation ring
- · Cast iron adapter
- \cdot Cast iron dome ø180 mm with cleaning hole
- · Total weight 156 kg



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Integrated air inlet flange for combustion

- · Flange length 50 mm
- · Connection ø125 / 150 mm

Models with integrated hot air heat exchanger

Fireplace inserts with a small installation depth or, vice versa, with large dimensions have the heat exchanger integrated into the body. These models are designed for direct connection to the chimney, some of them for connection of the accumulation mass at increased fuel doses.

Flange for smoke outlet

- · Connection ø150 / 180 / 200 / 250 mm
- · Optional horizontal or vertical connection (for ECKA and selected UKA models)



S-accumulation set

- · 5× S-accumulation ring
- · S-cast iron adapter
- · Cast iron cupola ø180 mm with cleaning hole
- · Total weight 105 kg



Integrated air inlet flange for combustion

- · Flange length 50 mm
- · Connection ø125 / 150 mm

Models with deep fire chamber "G"

Fireplace inserts with the G identification have an increased fire chamber depth. This variant is designed for higher fuel batches and longitudinal feeding of 33 cm logs.





HAKA 37/50G





Models with deep fire chamber "G"

HAKA 37/50G

Models with a secondary burning chamber "N"

NYRO LIT°

For even higher fuel doses, some fireplace inserts are equipped with a secondary burning chamber made of fired NYROLIT refractory concrete, which protects the upper part of the body. The inserts equipped in this way are designed for fuel batches of up to 8 kg and draft systems up to 5.5 m long.





Models with secondary burning chamber "N"



Models with small installation depth "S"

The S series fireplace inserts are characterised by a low power output with the possibility of accumulation and generous glazing with a compact installation size. Medium heat output 1-2 kW/hr at accumulation operation.



Standard fire chamber

Fire chamber with smaller installation depth

Models with rear feeding "a"

Our philosophy is to only offer meaningful solutions. The rear feeding system with a handy large rear door is one of them. The high-quality external and internal design ensures that the door is fully integrated into the chamotte lining.



ECKA corner models

All Hoxter fireplace insert doors are equipped with special ceramic glass designed for high temperatures.

SCHOTT



1-piece formed door

1-piece glazing is our standard. The door glass is made of single piece with a visible radius in the corner. The stable tightness of the door and the cleanliness of the glass are clear benefits.







2-piece split door

2-piece split glazing is a more affordable design.Two separate glass panes are set together in the corner and form a sharp edge. This design allows the glass to expand thus making it more resistant to rough handling.







Double glazing

Double glazing is formed by two 1-piece glass panes one behind the other as thermal insulation. Up to 1/3 less heat passes through the double glazing into the room.

Why double glazing?

Double glazing provides better insulation, lets less heat into the room and increases the temperature in the firebox. Combustion then becomes more efficient and cleaner and the outlet temperature to the accumulation superstructure is higher. The room is not heated excessively.

These values were measured for the ECKA 67/45/51W model with a fuel load of 6 kg + 4 kg.



Glass cleaning sponge

We recommend cleaning the ceramic glass dry using the special sponge included in the packaging of each of our products or available from our sales partners.

Three-sided UKA models

By continuous improvement, with the UKA models we have achieved superior firebox tightness, minimal temperature deformation, better seal protection against damage, and a clean design.



The support structure is fixed to the cooled parts of the body with permanent shape stability during operation

Build-on frame

- \cdot The adjustable top part is not firmly connected to the body
- The bottom part positioned under the door creates a clean exposed detail
- Load capacity up to 200 kg for support of the accumulation installation fireplace shell
- · Thickness 4 mm (8 mm for UKA 37/125/37/57)
- · Width 70 mm
- · 3 design variants



5-sided

8-sided







Securing the side glass panes

The door glass panes are set using an eccentric screw and a locking lever. This mechanism can be easily adjusted at any time so that the glass panes fit together exactly to ensure a leak-free firebox. The locking lever is made of stainless steel with a Teflon coating.



A removable cover strip covers the door mechanism area



A protective strip protects the seal against heat from the firebox, ash, and aggressive cleaning agents



The rear corners of the door are sealed with a moulded bar with the possibility of adjustment





In addition to a unique design, selected UKA models in combination with the compact S-accumulation set have a higher utility value in terms of thermal efficiency

UKA models available with S-accumulation set:



Water heating fireplace inserts

We try to do things in the right way, which is why we utilise the maximum possible hot water output with our hot water fireplace inserts. We work exclusively with a tubular vertical heat exchanger, where the heat transfer to the water is the most efficient. In most models, the heat exchanger is also integrated into the walls of the fireplace insert. For a higher proportion of output into the water, all models with front glazing are fitted with double glazing in the standard version.

Stainless steel cooling loop

Each of our hot water products is equipped with an integrated cooling loop, which is made of stainless steel resistant to corrosion and fouling.



Connection points of the hot water exchanger

Tubular hot water exchanger with an inclined flap for efficient evacuation of air from the hot water system

Double glazing in the standard version for HAKA water heating products with flat glazing

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Integrated stainless steel cooling loop as a safety feature against overheating

 High temperature sensor for electronic control

Body insulation for increased hot water output

Hot water exchanger around the firebox

Connection after water

Condensation of flue gases can occur in water heating products due to high efficiency. We therefore have designed the flue outlet so that the connecting flue gas pipe is inserted into the flange. In this way, any condensate is directed into the firebox.





Part of the water heating models package

All our hot water products include in the standard package:

- a brush for cleaning the hot water exchanger
- \cdot a thermostatic valve for the aftercooling loop
- \cdot a 2.5 bar safety valve
- \cdot a venting valve





Heat exchanger insulation "I"

For an even higher proportion of output into water, product variants with a thermally insulated heat exchanger are available. The insulation prevents unnecessary heat loss to the surroundings of the insert thus increasing the proportion of heat absorbed into the water.

Extra power "+"

Products with enlarged air inlet cross-sections are designed for higher fuel batches. These models offer higher overall performance.

| HAKA 63/51 | W | WI with insulation | ₩+ with extra power | WI+ with insulation and extra power |
|----------------|---------|---------------------------|-------------------------------|-------------------------------------|
| Nominal power | 14,5 kW | 14,5 kW | 22 kW | 22 kW |
| Power to water | 10 kW | 11,3 kW | 13,2 kW | 17,2 kW |

Design configuration

Our products can be configured to meet the needs of customers, architects, and stove fitters. All controls are available in a black teflon finish, and several handle and frame designs are also available.



Inner door bars UKA black/handle black



Stainless steel spiral handle



Flat handle black



Build-on frame black / stainless steel handle / stainless steel air control lever



Cover frame 1 \times 90° black / stainless steel handle / stainless steel air control lever

Removable handle

For a clean door design, we have a solution with a removable handle. A fixed storage space for the handle is provided in a housing designed for installation in the fireplace shell. The removable handle and housing are made of stainless steel.





Frames overview



Build-on frame 3sides Width 60 mm Thickness 4 mm

Build-on frame 4sides Width 50, 80 mm Thickness 4 mm



Cover frame 4sides $1 \times 90^{\circ}$ Width 50, 80 mm



Cover frame 4sides 2 \times 45° Width 80 mm



Build-on frame 4sides Width 60 mm Thickness 4 mm



Build-on frame 6sides Width 50, 80 mm Thickness 4 mm



Cover frame 4sides 1 \times 90° Width 60 mm



Cover frame 6sides $1 \times 90^{\circ}$ Width 50, 80 mm



Build-on frame 3sides Width 70 mm Thickness 4 mm Thickness 8 mm (UKA 37/125/37/57)



Build-on frame 5sides Width 70 mm Thickness 4 mm Thickness 8 mm (UKA 37/125/37/57)



Build-on frame 8sides Width 70 mm Thickness 4 mm Thickness 8 mm (UKA 37/125/37/57)

Custom production of frames

All frames can be customised to your specifications. We will inform you about the availability and price of individual customisation based on your specific order.



Contactless door sensor

The door sensor is magnetic, which means minimal maintenance and permanent functionality. We offer pre-installation of the door sensor in each of our fireplace inserts.

Electronic combustion control HOS

The best way to ensure correct and clean combustion, efficient switching of the hot water pump, and to guarantee safe operation. Our electronic HOS control can combine several functions

- · Combustion control
- · Electronic primary water cycle control
- · Safety shutdown of the air handling unit

Wireless display

The display communicates with the control unit wirelessly and does not need to be permanently installed in a specific location. This eliminates wiring and any problems with positioning on a wall.

Simple, intuitive, and fast installation

The installation is as simple as possible and takes just a few minutes. All connectors are colour coded to avoid confusion during installation. Where necessary, individual cables and temperature sensors are also colour coded.

The control unit always has preset values that allow the control to be used immediately after connection.





Overview of variants

| | It monitors | It controls | Settings options |
|---------|--|---|---|
| HOS A | the temperature in the firebox door opening status | · the amount of air currently supplied | combustion control starting temperature prolongation or shortening of the burning out phase |
| HOS U | the temperature in the firebox chimney pressure room pressure | air handling system switching | value of the pressure difference for switching the air handling system time interval of the measured pressure difference for air handling system switching |
| HOS AU | the temperature in the firebox door opening status chimney pressure room pressure | the amount of air currently supplied air handling system switching | combustion control starting temperature prolongation or shortening of the burning out phase value of the pressure difference for switching the air handling system time interval of the measured pressure difference for air handling system switching |
| HOS AW | the temperature in the firebox door opening status water temperature in the exchanger water temperature in the accumulation tank | the amount of air currently supplied circulation pump switching | combustion control starting temperature prolongation or shortening of the burning out phase temperature and temperature ratio for pump switching |
| HOS AWU | the temperature in the firebox door opening status water temperature in the exchanger water temperature in the accumulation tank chimney pressure room pressure | the amount of air currently supplied circulation pump switching air handling system switching | combustion control starting temperature prolongation or shortening of the burning out phase temperature and temperature ratio for pump switching value of the pressure difference for switching the air handling system time interval of the measured pressure difference for air handling system switching |

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