



## Cassette inserts and fireplace doors

Open fireplaces shine in a new splendour



# Technology. Accuracy. Future orientated.

Spartherm is the name for innovative fireplace solutions that not only meet the highest design standards but are also high quality and built for long life. That quality philosophy runs through the entire process: from the idea to development, from the different stages in production right through to delivery and service – all from a single source.

Spartherm is one of Europe's biggest producers of fireplace inserts, stoves and cassettes. More than 25 years' experience has gone into the acquired know-how of our staff, whose daily commitment is to be the best in the industry – each one in his or her own area, but all with the same aim: perfect products, happy customers.

At our two factories with a total production area of about 40,000 sq m we plan, develop and produce more than 55,000 fireplace units every year, using the latest equipment, with efficient production processes, in top quality.



We also put a lot of effort and care into making beautiful personalised creations. At our factory we turn our customers' very special dreams into reality by producing individual custom designs to fulfil all requirements.

The basis of our success? The high technical quality of our products, combined with stylish design and constant innovation in the area of combustion technology. That's what we do, and will continue to do. You can rely on that!



# Contents

Pages 04 - 09 LINEAR Standard Cassette inserts

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Pages 10 - 19 Fireplace cassette inserts - custom-made

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Page 20 Principle of operation

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Page 21 Fireplace doors

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Pages 22 - 23 Technical information



More safety for your open fireplace.  
This is now possible for almost all open fireplaces with the new LINEAR fireplace cassette.  
Available in five sizes and in the standard panel colour, black.

Technical information can be found on page 22

LINEAR XL | 900

LINEAR L | 800

LINEAR M | 700

LINEAR S | 600

LINEAR XS | 500



# LINEAR Standard cassette inserts

The universal applicable cassette for all open fireplaces

## Quicker and cleaner installation

Old fireplaces in a new splendour



Say goodbye to old, ineffective and troublesome fireplaces in your home. Choose a modern and functional Spartherm cassette insert.

Do you have an open fireplace at home and would you like to bring it up to date while at the same time enjoying more effective, cleaner and safer heating? Then choose a new LINEAR Standard cassette inserts from Spartherm Feuerungstechnik GmbH.

Technical information can be found on page 22



Cosy  
Atmospherie



## Available frame finish



Standard | black



Elegance | gold



Elegance-matt | gold matt



Avantgarde | chrome



Avantgarde-matt | chrome matt

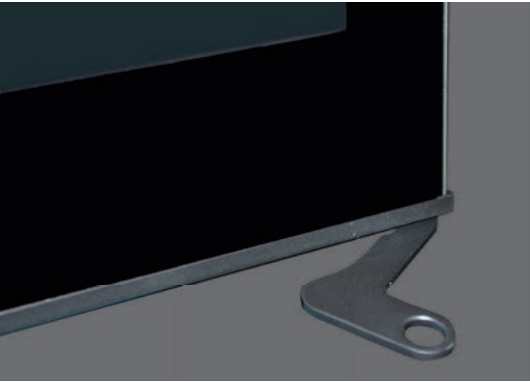


## Perfect functionality

The new LINEAR Standard cassettes offer perfect functionality and a modern and stylish appearance, as well as being easy and uncomplicated to install. They fit in stylishly with your particular ambience and don't just fill the empty space of an open fireplace but allow it to radiate in a completely new splendour.

Technical information can be found on page 22

Door handle  
open



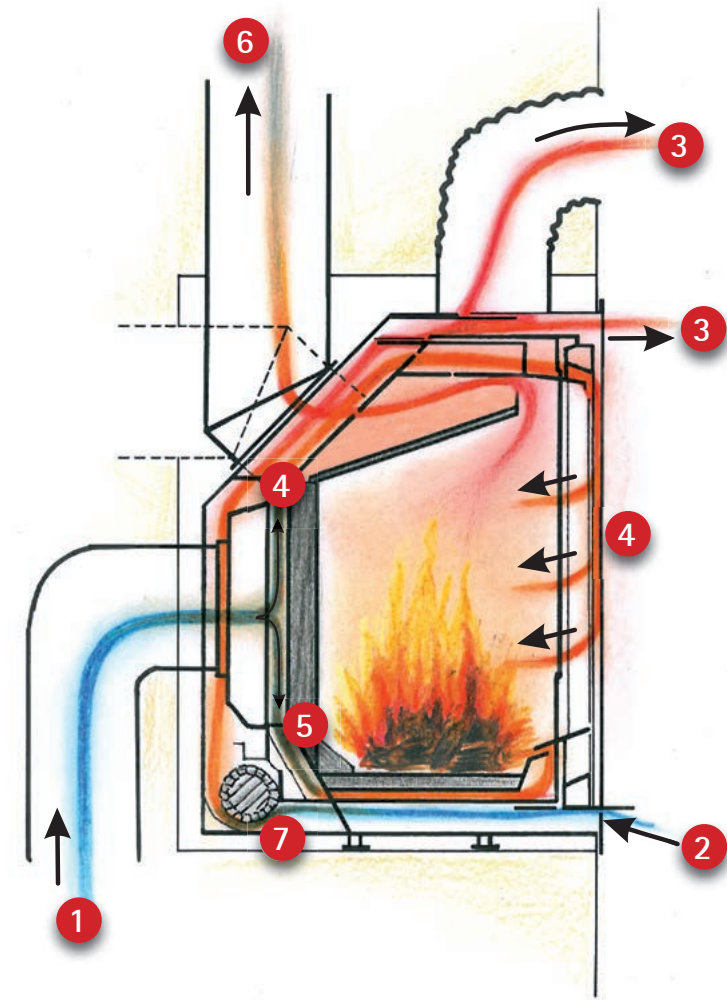
Door handle  
closed



Printed  
glass panel



Control  
for convection air fan



## Your benefits

High technical quality combined with stylish design. Enjoy those relaxing hours in the splendour of a new Spartherm LINEAR Standard fireplace cassette, while enjoying more warmth and greater safety.

- Low-key frame solution, big viewing panel for optimum fire experience
- High efficiency
- Retrofitting a blower is possible
- Safe locking mechanism

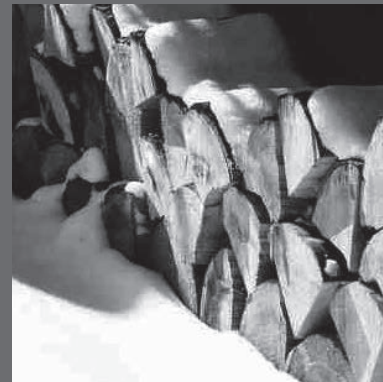
## Principle of operation of the LINEAR Standard cassette inserts

- 01 Combustion air (in this case via optional flow pipe)
- 02 Combustion air inlet
- 03 Convection air outlet
- 04 Secondary air wash
- 05 Primary air
- 06 Flue gas outlet
- 07 Optional fan





Detail of  
technology





...made according to your wishes.

**our custom-made cassette inserts!**



## Impressions

### Let yourself be inspired

We will show you a small selection from the numerous design possibilities that are possible with a Spartherm cassette inserts on the following pages. Allow your creativity to run free – we manufacture our cassettes according to your wishes.

- Almost all shapes and sizes possible
- Production according to your individual dimensions
- Different colours and surfaces to choose from
- Technical advice and support
- etc.

Feel comfortable at home – we make it possible for you.

Technical information can be found on page 23 or on request

## Your benefits

- Safe and clean
- Environment-friendly heating
- Up to 5 times enhanced efficiency in comparison to an open fireplace
- High efficient combustion up to 83% even without hot air fan
- Adjustable heat



Simpler and more flexible

# Spartherm cassette inserts



# Fire...

A feeling of warmth, cosiness and the fascination of flickering flames – quality of living enters a new dimension.

Old fireplaces fitted out in a new splendour enable you to enjoy the natural spectacle in a tamer and safer form.

Technical information can be found on page 23 or on request

Your new cassette insert allows you to immediately enjoy flickering flames in a „controlled“ and more comfortable form.

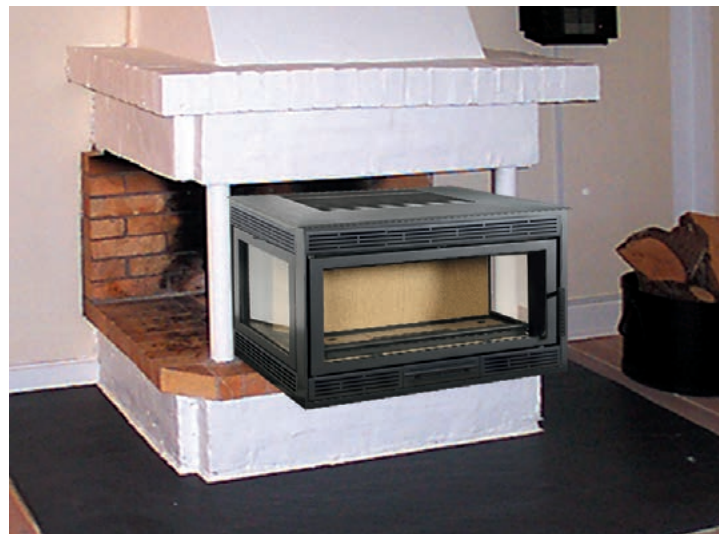
A very well sealed fireplace provides 100% protection against flying sparks and smoke nuisance into living areas. And also you should consider that open fireplaces will achieve a significantly higher efficiency when a cassette insert has been installed.

Technical information can be found on page 23 or on request

Cassette inserts – custom-made



# Varieties and installation examples



Old fireplaces  
in a new splendour

Say goodbye to old, ineffective and troublesome fireplaces in your home. Choose a modern and functional Spartherm cassette insert. Perfect functionality and the easy and clean installation, as shown in our example installation, will convince you of the quality of our fireplace cassettes.

Technical information can be found on page 23 or on request



After



Before



We implement your ideas  
– that's our guarantee!





# High technical quality combined with contemporary design

## Your advantages

- Discreetly placed control elements
- Self-closing fireplace door
- Permanent air wash system for clear glass panes
- High-heat resistant vitroc ceramic glass windows
- High material strength for greater durability
- Up to 5 times higher efficiency in comparison to an open fireplace
- Fitting a cassette clearly improves the draught properties of a flue
- Heat emission through radiation and convection
- Increased convection performance due to a continuously variable fan (as from 600 mm front width) optionally available
- Adjustable heat
- Certified according to DIN EN 13229

Technical information can be found on page 23 or on request





Always stylish:  
cassette inserts!



You often find old, open and dirty fireplaces that have been in service for a very long time. They are damaging to our environment and no longer practical to operate due to their lower efficiency levels. Our cassettes fit in with the style of the house and don't just fill the empty space of an open fireplace but emphasise the character of the room or apartment with their design.

Technical information can be found on page 23 or on request



Standard | black



Elegance | gold



Elegance-matt | gold matt



Avantgarde | chrome



Avantgarde-matt | chrome matt



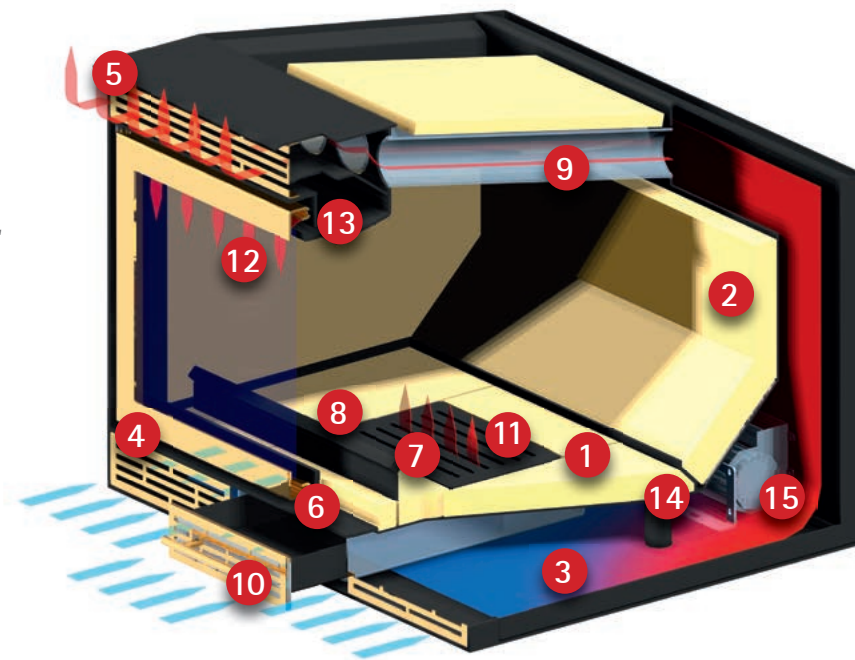
Luxury

# Cassette insert construction according to your demand

The production of your new cassette insert is carried out precisely according to the dimensions of the existing opening, which are measured on-site by the fireplace fitter.

Spartherm cassette insert and doors are tailor-made in a variety of fronts, shapes and designs. Whether you require a straight, prismatic, round, rectangular or rounded arch front, or you like a one- or two-leaf door, or even a one-sided, two-sided or three-sided viewing panel – we produce the cassettes and doors in our factory according to your personal requirements.

Technical information can be found on page 23 or on request



Standard version with ornamental molding (see Fig.)  
The trims are available with an elegant or avantgarde finish.

## Brilliant technology.

The principle of operation of the customised cassette inserts

- 01 Firebox bottom, with moulded fire-clay bricks
- 02 Firebox walls line up with vermiculite
- 03 Double-layered base and walls to circulate the convection air
- 04 Air intake slats for the convection air (cold air)
- 05 Air outlet slats for the convection air (hot air)
- 06 Ash pan
- 07 Ash grate
- 08 Wood catcher
- 09 Heat exchanger pipes for the convection air
- 10 Integrated primary air control (handle adjustable/rotatable)
- 11 Primary air intake into the firebox
- 12 Secondary air intake (pre-heated air)
- 13 Control lever for continuously adjustment of the secondary air (operation using the 'cold hand')
- 14 Adjustable feet for aligning the cassette
- 15 Optional fan

# Fireplace doors

Fireplace doors from Spartherm are a simple option for preventing flying sparks and escaping smoke. The radiant heat emitted from the glass panel is another advantage.

Just like with fireplace cassettes, we produce fireplace doors for you in all feasible sizes and forms with galvanised or black surfaces. Decide for yourself!

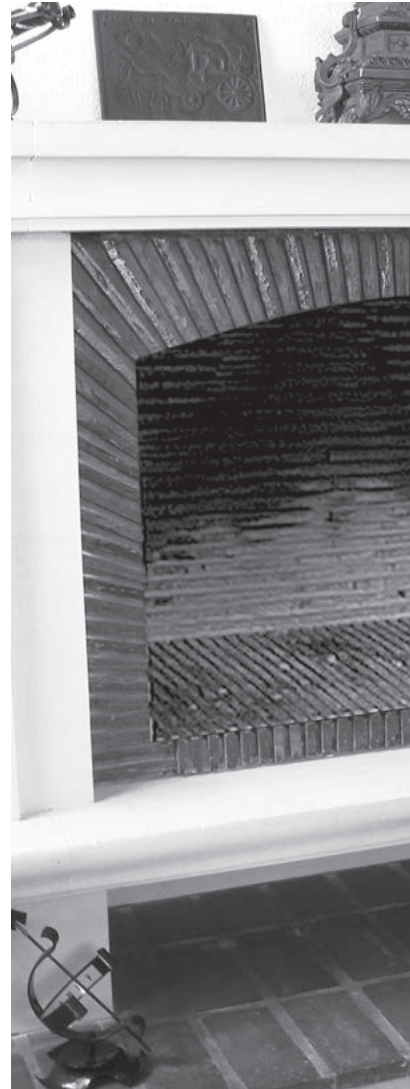
## Your benefits

- Safe and clean heating
- Cosy heating with no draughts
- Lots of radiant heat via the glass panel
- Custom-made production in a wide range of versions

## Please note:

Fireplace doors alter the structure of the existing open fireplace, so you need to observe the local regulations and ask the appropriate authority (if applicable).

Before



After



# Achieve a great deal with little expenditure

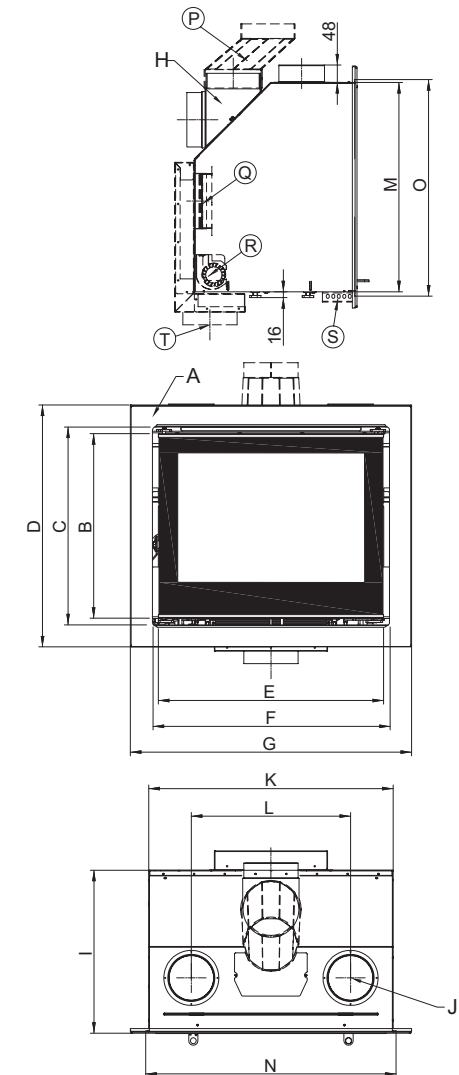
# LINEAR Standard cassette inserts

LINEAR Standard cassette inserts Images on pages 04 – 09		LINEAR XS 500	LINEAR S 600	LINEAR M 700	LINEAR L 800	LINEAR XL 900
<b>Technical data</b>	<b>Unit</b>	<b>E4</b>	<b>E5</b>	<b>E7</b>	<b>E10</b>	<b>E14</b>
Type of fuel	Wood logs	✓	✓	✓	✓	✓
Nominal heat output	kW	4.6	4.9	6.9	9.9	14.0
Fuel feed quantity	kg/h	1.4	1.5	2.0	3.0	4.3
Thermal output range min/max	kW	4.0 – 6.0	4.5 – 6.4	4.8 – 9.0	6.9 – 12.9	9.8 – 18.2
Efficiency	%	> 80	> 80	> 80	> 80	> 78
CO content	mg/m <sup>3</sup>	< 1250	< 1250	< 1250	< 1250	< 1250
Dust emissions	mg/m <sup>3</sup>	< 40	< 40	< 40	< 40	< 40
Weight	kg	80	80	90	110	135
Compliance with: BImSchV Stages 1 and 2		✓	✓	✓	✓	✓
EN 13229		✓	✓	✓	✓	✓
DIN Plus		✓	✓	✓	✓	✓
Aachen/Munich/Regensburg Ord.		✓	✓	✓	✓	✓
15a (for Austria)		✓	✓	✓	✓	✓
Air Purity Directive from January 2011 (for Switzerland)		✓	✓	✓	✓	✓

Dimensions Technical drawing	LINEAR XS 500	LINEAR S 600	LINEAR M 700	LINEAR L 800	LINEAR XL 900
A	Standard screen: 45 mm	Standard screen: 60 mm			
B	456 mm	453 mm	503 mm	523 mm	543 mm
C	492 mm	489 mm	539 mm	559 mm	579 mm
D	582 mm	609 mm	659 mm	679 mm	699 mm
E	345 mm	510 mm	610 mm	710 mm	810 mm
F	380 mm	546 mm	646 mm	746 mm	846 mm
G	470 mm	666 mm	766 mm	866 mm	966 mm
H	∅ 130 mm	∅ 150 mm	∅ 150 mm	∅ 180 mm	∅ 200 mm
I	352 mm	412 mm	442 mm	472 mm	502 mm
J	∅ 100 mm	Standard convection air opening: ∅ 125 mm			
K	400 mm	566 mm	666 mm	766 mm	866 mm
L	250 mm	374 mm	434 mm	534 mm	634 mm
M	523 mm	520 mm	570 mm	590 mm	610 mm
N	405 mm	582 mm	682 mm	782 mm	882 mm
O	541 mm	540 mm	590 mm	610 mm	630 mm

Optional accessories *	
P	Flue gas offset bend
Q	Rear combustion air connection
R	Blower
S	Governor housing
T	Bottom combustion air connection

\* for cassette inserts only  
S 600 / M 700 / L 800 / XL 900



LINEAR  
S 600 / M 700 / L 800 / XL 900

Dimensions N and O are measured from the edge of the cassette body.

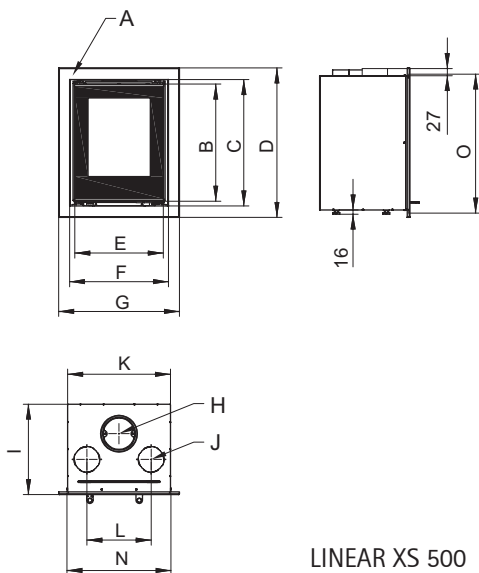
Subject to technical modifications.

# Customised cassette inserts

## Key parameters for the flue and chimney calculation

According to DIN 4705 Part 1 and Part 2 or EN 13384 for nominal heat output according to Section 7, Part 1:

Customised fireplace cassettes Illustrations on pages 12-21		Customised fireplace cassette 'small' up to 700 mm wide		Customised fireplace cassette 'large' 700 mm or wider	
Fireplace doors closed	Unit	Wood logs	Brown coal briquettes	Wood logs	Brown coal briquettes
Flue gas flow rate	g/s	4.68	5.59	7.24	7.99
Average flue gas temperature	°C	269	272	268	271
Minimum draught	mbar	0.12	0.12	0.12	0.12
Nominal heat output	kW	6.0	6.0	8.0	8.0
Heat output range	kW	4.2 – 7.8	4.2 – 7.8	5.6 – 10.4	4.2 – 7.8
Feed rate	kg/h	1.9	1.5	2.6	2.0



### Heating capacity

The heating capacity is dependent on the volume and type of fuel wood used.

### Room heating capacity

The nominal heat output is dependent on the heating conditions:

Heating conditions	8 kW sufficient for	6 kW sufficient for
Favourable	160 m <sup>2</sup>	120 m <sup>2</sup>
Less favourable	105 m <sup>2</sup>	80 m <sup>2</sup>
Unfavourable	80 m <sup>2</sup>	60 m <sup>2</sup>

Source: Handbook of Heating and Air Conditioning Technology Recknagel/Sprenger



The values stated serve only for guidance. A specific heating load investigation must be completed according to TR-OL or carried out according to DIN EN 12831 (if applicable or according to the local regulation). The room heat capacity in relation to the nominal output can be influenced by the wood feed quantity, +/- 30 %.

Subject to technical modifications.



## Cassette inserts and fireplace doors

Open fireplaces shine in a new splendour

Your specialist dealer:



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