

## SCB FS- BOILER SERIES



### The SCB -Series Concept

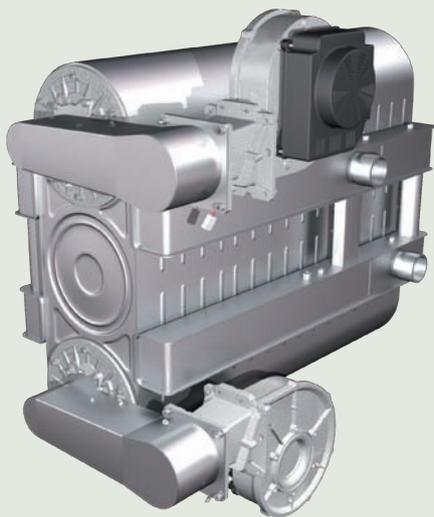
The prestige name of Strebel guarantees a commitment to technically advanced first class products, unrivalled technical support, and customer service. The Strebel SCB FS range of ultra compact gas fired condensing boilers represents in every way this commitment.

The floor standing Strebel SCB FS400 and FS550 boilers boast twin burner modulation technology, within one heat absorbing, triple multi-ring heat exchanger.

These stainless steel heat exchanger elements are proven in many countries worldwide with production into 6 figures. Twin Burners firing a single unit means exceptional modulation possibilities utilising the on-board logic sequencing program. Modulation to low fuel input levels, gives a higher absorbing surface area to input ratio, ensuring maximum efficiency and minimum pollution at all burning rates.

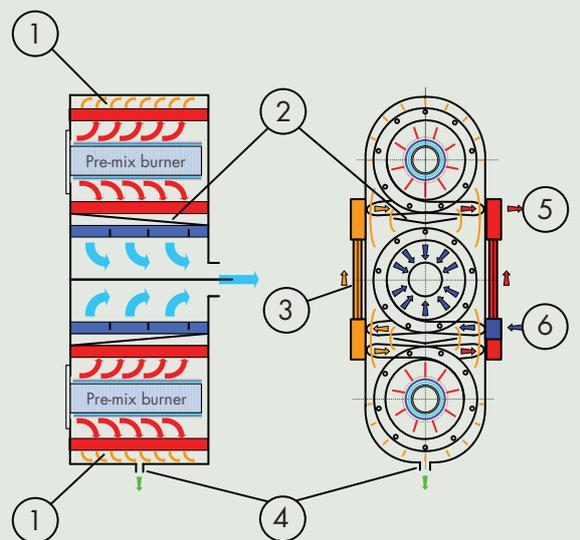
### Ultra Compact

Big in output, compact in size, the SCB FS Boiler measurements are surprisingly only 735mm wide, 1685 high, and 1095 long. Probably the smallest dimensions of any boiler of this output. The boiler is easily manoeuvrable having 2 inbuilt wheels making access and positioning problems, a thing of the past.



Legend:

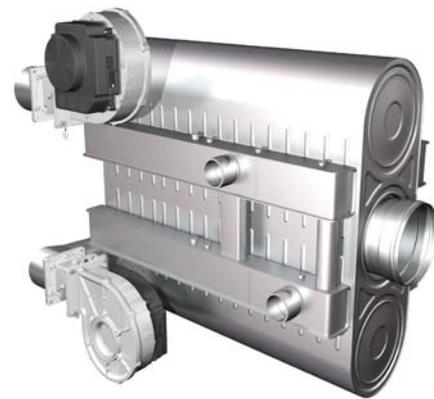
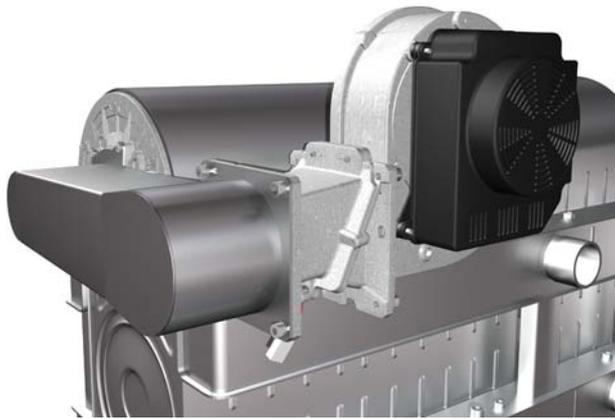
1. First heat exchanger.
2. Condensate Deflector.
3. Dividing flow header.
4. Condensate Drain.
5. Water outlet.
6. Water inlet.



-  Cooled combustion gases from 1st heat exchanger.
-  Heated combustion gases.
-  Cooled combustion gases from 2nd heat exchanger.

## Flueing

Extremely low temperature flue exhaust gasses, the result of the SCB FS clean burn condensing capability, further reinforces Strebel's claim of high efficiency products. The specially designed inbuilt pre mix burner fans give the extra capability of overcoming long flue run resistances of up to 200pa pressure.



This capability means that the Boiler can be located more or less anywhere within a building, providing an outside wall or roof outlet is available. Extra peace of mind is assured with the "Blocked Flue -No Burn "safety technology, as the in-built special burner will only fire to the safe capability of the flue on site.

## High Efficiency, Low Pollution

High efficiency and low pollution, the first design requirement of any Strebel product, is again represented by the SCB FS ultra compact Boiler. The Boiler has been independently rigorously tested ensuring that the Boiler in every way meets and exceeds the ever increasing standards that are in force today. A further advantage gained from continuing development is that when the boiler turns off, heat is not wasted, as the in-built fuel and air input valve closes, preventing any cooling air flow through the heat exchanger.

## Control

Modulation is achieved by directly controlling the fuel input, resulting in precisely matched load condition firing rates, no more, no less. The included on board modulation controls can be driven by a 0 to 10 volt signal from an external BMS or Compensating Control.

The Boiler can also be used very simply by utilising standard volt free on off devices with or without an external temperature sensor for giving full weather compensation with the inbuilt control.

In a cascade configuration, of up to 4 boilers, the inbuilt cascade control sequences the pre-mix burners using full cascade logic and gives equal efficiency usage of every element within the cascade system.

As standard, run and fault indication is provided as well as continuous boiler status read out from the top mounted Boiler Control Panel. All connections including an output for a Boiler pump relay are catered for in the connection centre which is located at the top of the boiler.



## Technical Specifications

<b>Boiler Model</b>	Units	<b>SCB FS400</b>	<b>SCB FS550</b>
Nominal output at 80/60°C	kW	55 - 386	75 - 535
Nominal output at 50/30°C	kW	60 - 418	81 - 580
Efficiency 80/60°C full load	%	96.5	97.3
Efficiency 50/30°C partial load 30%	%	108.2	108.5
Max. gas consumption (G20)	m <sup>3</sup> /h	48	66
Gas pressure minimum	mbar	15	
Gas pressure maximum	mbar	100	
Flue gas temperature (@ atmospheric temperature of 20°C)	°C	90	
Max. Flue system resistance	Pa	200	
NOx emission, RAL 61	mg/kWh	<45	
CO emission, RAL 61	mg/kWh	<50	
Noise production	dBa	46	
PH value of condensation	PH	3.5	
Maximum boiler temp.	°C	90	
Operating pressure	bar	min. 1.0	
Boiler water content	litres	30	43
Weight (empty)	kg	400	450
<b>Dimensions</b>			
Height	mm	1500	
Width	mm	750	
Depth	mm	1200	
Flow/Return connection	inches	2.5"	
Gas connection	inches	1 ½"	2"
Flue exhaust connection	mm	180	
Air supply connection	mm	180	

10/2008 - The Company reserves the right to change the specification and dimensions without prior notice.

Strebel also supply a wide range of equipment to compliment the SCB FS Boiler Series. These include:

- Solar Collectors
- Direct and indirect Cylinders
- Floor and Wall Mounted Pressurisation Units
- Plate Heat Exchangers
- Low Loss Headers
- Air & Dirt Separators
- Optimised Control Packages
- Radiators

We are pleased to announce that further information and downloads are available on our website at  
[www.strebel.co.uk](http://www.strebel.co.uk)