



Pos.	Designation
1	Fuel bin
2	Feed auger
3	Cast iron burner tube
4	Gas combustion tube
5	Convection tubes
6	Sprinkler
7	Exhaust outlet
8	Refractory material
9	Ash bin
10	Combustion blower
11	Microprocessor control
12	Sight glass

Construction

The REFO-boiler is made of 6 mm certified boiler steel and tubing. The circular shape of the boiler is a clear advantage, since this construction eliminates residual welding stress. The working temperature is always in excess of 61°C, owing to the use of a bypass thermostat and a pump in the return line. This arrangement prevents corrosion. For the combustion chamber and the gas combustion tube only replaceable cast iron and ceramic elements have been used. This ensures perfect combustion without radiant heat losses when the gas is being burned. In every respect these are boilers with a long working life.

Control panel

The REFO microprocessor control panel has a very user-friendly design. The user interface consists of a control thermostat, an overheat thermostat, a knob for fuel type/fuel quantity, a main switch and a button for forced auger operation. There is also a digital display showing the smoke temperature.

The control system automatically adjusts to the varying heat requirements throughout the year, so that the output of the REFO boiler varies between 30 kw and 3 kw. However the lower limit depends on the condensation level in the smoke stack.

All the electric wiring is carried out in the factory; for the connection to the mains an earthed 230 V plug is to be used.

Safety

The auger feed from the bin to the boiler has a pitch which prevents the fire from moving backwards. During operation the blower produces an overpressure in the bin for the same reason. The auger tube is further provided with a thermostat-controlled sprinkler, with a water container mounted inside the boiler cabinet.

Maintenance

The REFO boiler has vertical boiler tubes with the draught going downwards in the tubes. This is a great advantage since dust and ashes from the combustion fall downwards in the smoke chamber (no need to clean the boiler very often). For cleaning, the boiler door is opened and the ash bin with fly ash and dust can be pulled out and emptied.

Technical Data for REFO boilers

Output power:	REFO30 30 kw	REFO40 40 kw
Fuel bin:	330 und 700 Liter	
Fuel bin for coarse wood chips, with agitator:	780 Liter	
Water capacity of boiler:	150 Liter	
Test pressure:	6 bar	
Working pressure:	2,5 bar	
Bypass thermostat for boiler protection:	61°	
Combustion blower:	80 watt	
Circulation pump:	Ups 25-40, inside the cabinet	
Gear motor:	330/700 L=0,22 kw, 780 L=0,37 kw	
Dimensions:	H=1420 mm, B=725 mm, L=1480 mm (330), L=1980 mm (700), L=2460 mm (780)	
Flue, dimension:	Ø 155 mm	
Flow and return:	1"	
Mains connection:	1 x 230 Volt + N/earth (3-pin plug)	



The REFO boiler has been on the Danish market since 1992. To-day it is a thoroughly tried quality product with many well thought-out details and completely in tune with present-day requirements.

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