

OPTIMAJOR PLUS



The OPTIMAJOR PLUS is a medium power boiler that can be equipped with a forced draught fuel oil or gas burner. It has a cast iron heating body guaranteed for 10 years and an anti-corrosion combustion chamber, and satisfies all individual, collective and industrial heating needs, in a new or renovated installation.

70 kW - 235 kW



Saint Roch
The warmth of your life

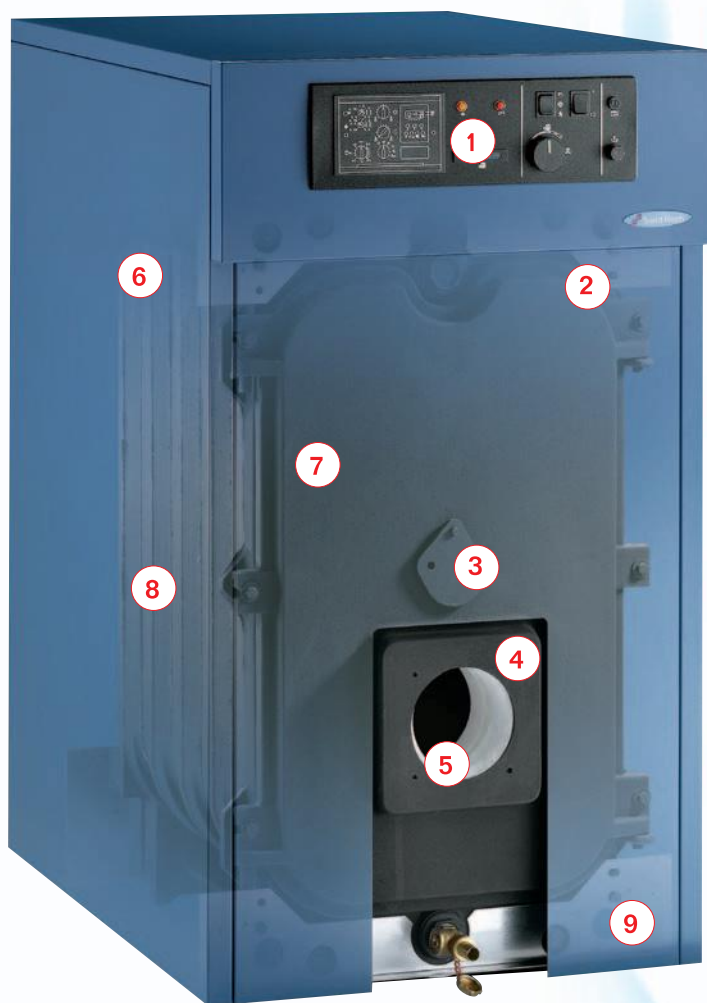


OPTIMAJOR PLUS

Saint Roch Hypoeutectic Cast Iron

Since 1903 Saint Roch Couvin Has been a leading innovator in the casting technology in Belgium. Saint Roch boilers are well known for their very long life and high output due to the Saint Roch hypoeutectic grey cast iron alloy.

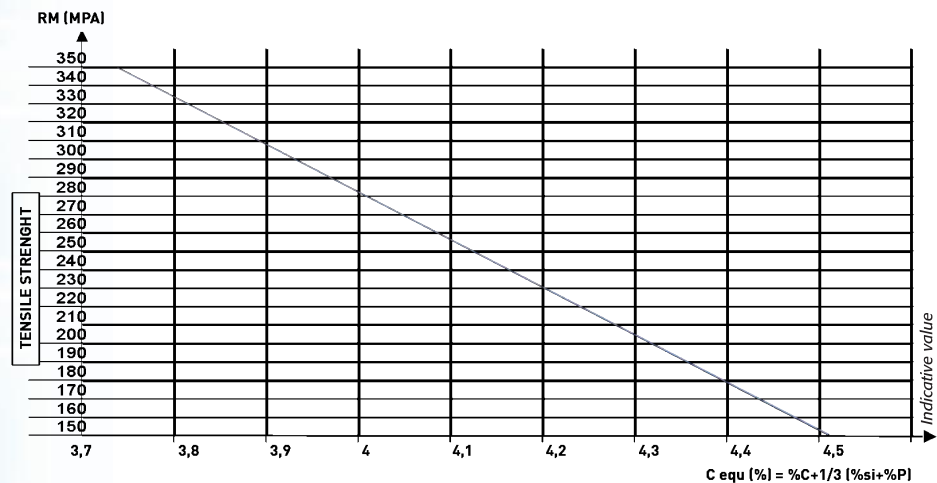
- 10 model range from : 70 kW - 235 kW.
- Saint Roch Hypoeutectic Cast Iron.
- Operates with forced draught oil or gas burners.
- 92-93 % efficiency on net calorific values.
- Operates at low or sliding temperatures.
- Resistant to condensation.
- 6 bar working pressure.
- Economizer.
- Refractory corde between elements.
- Ideal for collective applications (Ecogroupage).
- Wide range of optional control panels.
- Economic/Energy Saving/Eco-Friendly.
- 10 Year Guarantee.



- | | |
|---|---|
| 1 Control panel | 6 2x50 mm high density glass wool insulation on boiler body and casing |
| 2 Stoved sheet steel jacket. Easy assembly | 7 Horizontal cleaning traps front and rear providing access to heat exchange surfaces |
| 3 Flame inspection hole with chamber pressure measurement | 8 Cast iron boiler body |
| 4 Burner door opening to right or left factory bored on request | 9 Ø 50x60 flange for sludge drain |
| 5 Door insulation 30 mm ceramic fibre and 30 mm glass fibre | |

OPTIMAJOR PLUS

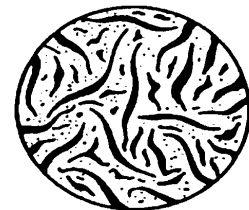
Saint Roch Hypoeutectic Grey Cast Iron



The Saint Roch Cast Iron makes the ideal compromise between tensile strength and Brinell Hardness. It provides optimal heat storage and transfer with its fine and regular graphite repartition.

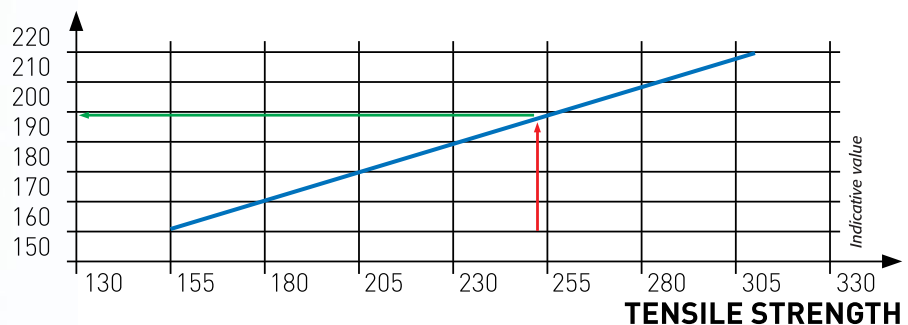
HYPOEUTECTIC GREY CAST-IRON FLAKE GRAPHITE

- HIGH SI CONTENT
 - Homogeneous fine flake graphite distribution.
 - Pearlit-**ferrite** structure
- LOW PHOSPHOR CONTENT
 - Excellent moulding capacity.
 - **Less production of steatite** (fragility of the cast-iron)
 - Excellent heat transmission
 - Water corrosion resistant (Pearlit structure)
 - High mechanical strength
 - Excellent thermal shocks resistance



Flake graphite

Hb (Brinell hardness)



TENSILE STRENGTH $\sigma_t = \frac{F}{S}$

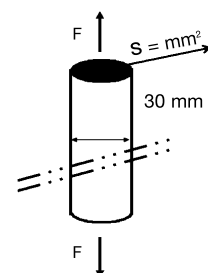
	σ_t	σ_t
GG 20	20 kg/mm ²	196 N/mm ²
GG 25	25 kg/mm ²	245 N/mm ²
Saint Roch	24,36 kg/mm ²	238,6 N/mm ²

Indicative value

Indicative value

Higher Cast-Iron thickness

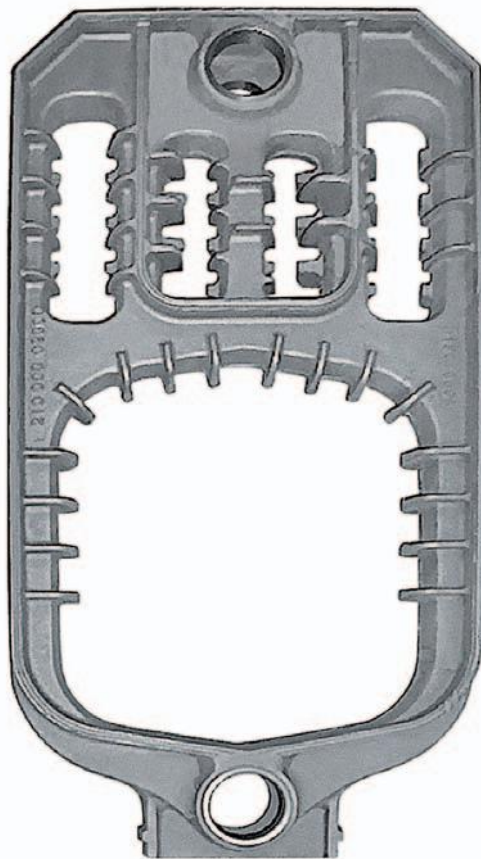
The higher "s" the higher F



OPTIMAJOR PLUS

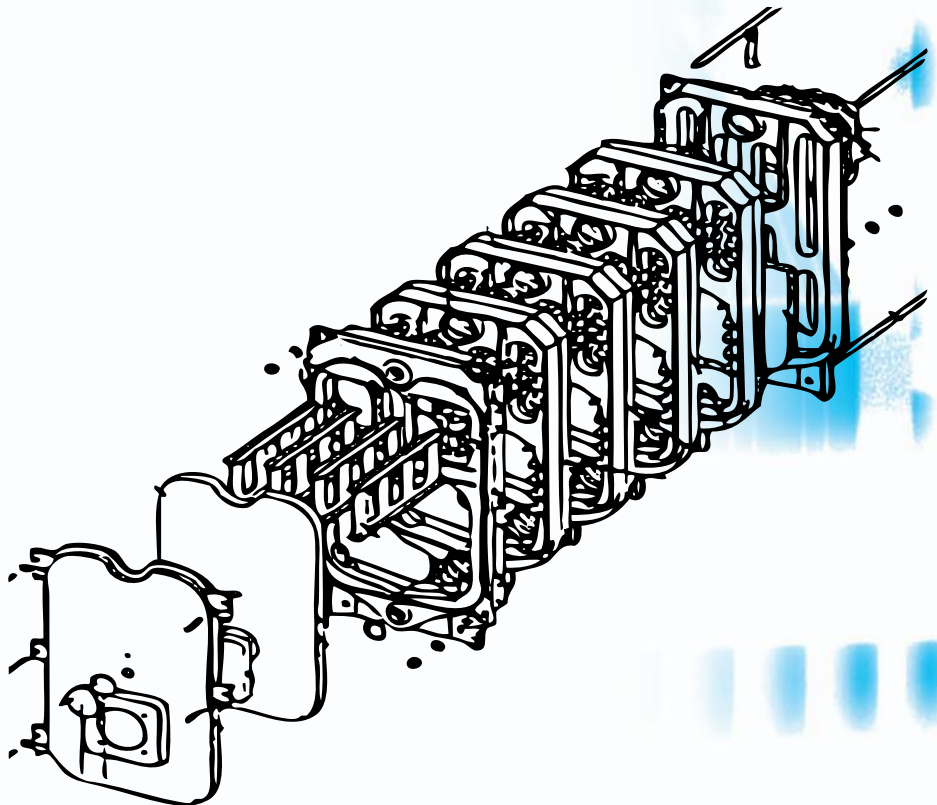
State of the Art Element Engineering

The heating elements are engineered to ensure high efficiency and boiler safety. The combustion chamber is equipped with fins ensuring exposure to burner heat, preventing the formation of dangerous inner stresses and reducing noise levels.



The elements are designed with grooves on both sides, where a refractory cord is fitted.

The refractory cord adapts to the expansion and shrinking of the heating elements.



ECONOMIZING SYSTEM

The Optimajor Plus is equipped with an economizing system to ensure higher efficiency and lower energy consumption.

OPTIMAJOR PLUS

TRIPLE INSULATION SYSTEM

100 mm thick high density glass wool covering the cast iron body. The combustion chamber door is insulated with 30 mm Ceramic fiber and 30 mm glass wool. Inter-element insulation provided by the refractory cords fitted between the elements. The triple insulation system prevents smoke leakage and heat losses, increasing boiler efficiency.

LOW TEMPERATURE

Thanks to the condensation resistant Saint Roch Cast Iron, the Optimajor Plus can operate at low and sliding temperatures.

92-93 % EFFICIENCY

The Optimajor Plus has 92-93 % efficiency on net calorific values.

EASY MAINTENANCE

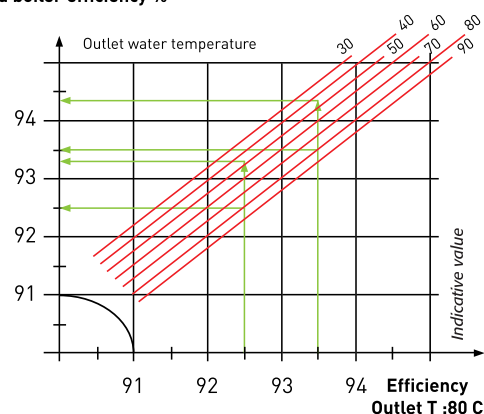
The Optimajor Plus is designed with a hinged door that pivots left and right allowing complete access to the entire boiler body which makes cleaning the boiler such an easy task.

OPTIMAJOR PLUS

Model	Heat Power	Pressure	ΔT° flue	Efficiency
	(kW)	(mbar)	$^\circ\text{C}$	%
5	70	0.15	229	90.6
6	94	0.24	241	90.1
7	111	0.30	237	90.3
8	129	0.37	236	90.3
9	146	0.43	233	90.4
10	163	0.49	231	90.5
11	180	0.56	230	90.6
12	198	0.63	230	90.6
13	216	0.71	229	90.6
14	235	0.79	230	90.6

Indicative value

Corrected boiler efficiency %



Saint Roch

The warmth of your life

