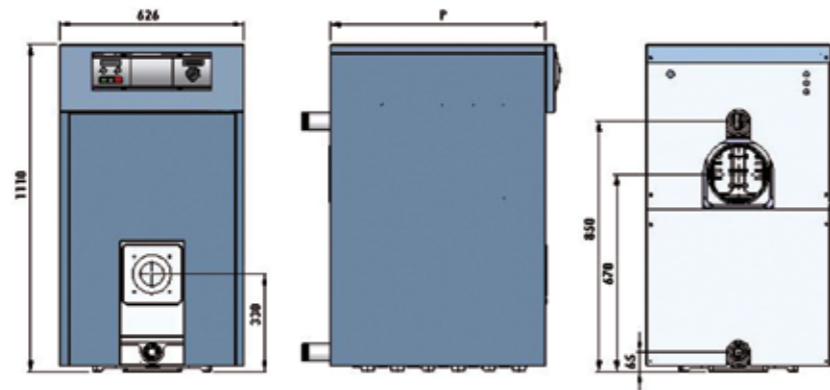


GEMMA MP	605	835	985	1135	1285	1375	
Boiler type	Low temperature						
Efficiency class (92/42 CEE)	**	**	**	**	**	**	
Flue gas evacuation	Chimney						
Flue gas connection type	B23						
Flue gas outlet diameter	200	200	200	200	200	200	
Number of elements	5	6	7	8	9	10	
Rated output	kW	60,8	76,6	92,4	108,2	124	139,7
Nominal thermal capacity	kW	67,6	84,7	101,9	119,0	136,2	153,3
Flue gas flow rate	kg/h	102	128	155	180	206	232
Volume of flue gas	m ³ /h	145	181	212	251	283	317
CO ₂ gas rate	%	10,2	10,2	10,2	10,2	10,2	10,2
Flue fuel flow rate	kg/h	103	129	154	181	209	232
Volume of flue fuel	m ³ /h	144	179	213	249	285	312
CO ₂ fuel rate	%	13,1	13,1	13,2	13,1	13	13,2
Outgoing flue gas temperature	°C	219	217	208	211	208	202
Volume of furnace	L	40,9	49,7	58,5	67,3	76,1	84,9
Length of furnace	mm	412	515	618	721	824	927
Diameter of furnace	mm	370 * 420	370 * 420	370 * 420	370 * 420	370 * 420	370 * 420
Necessary draught	mbar	0,13	0,16	0,20	0,25	0,32	0,41
Load loss combustion circuit	mbar	0,08	0,11	0,15	0,2	0,27	0,36
Efficiency at nominal load (100%/70°C)	%	89,9	90,4	90,6	90,9	91	91,1
Efficiency at 30% reduced load (30%/50°C)	%	90,1	90,7	91,3	91,9	92,2	92,5
Stop loss ΔT30°	W	152	170	178	178	168	150
Nominal water flow rate ΔT20°	m ³ /h	2,61	3,29	3,97	4,65	5,33	6,01
Water capacity	L	40	47,5	55	62,5	70	77,5
Operating maximum pressure	bar	4	4	4	4	4	4
Maximum water flow temperature	°C	90	90	90	90	90	90
Load loss on water side ΔT20°	mbar	1,7	2,7	3,9	5,3	6,9	8,7
Boiler setting range	°C	30 - 90	30 - 90	30 - 90	30 - 90	30 - 90	30 - 90
Overheating safety temperature	°C	110	110	110	110	110	110
Height of boiler	mm	1163	1163	1163	1163	1163	1163
Width of boiler	mm	626	626	626	626	626	626
Depth of boiler (P)	mm	731	731	937	937	1143	1143
Burner fixing diameter	mm	130	130	130	130	130	130
Supply	"G	2	2	2	2	2	2
Return	"G	2	2	2	2	2	2
Drain cock	"G	3/4	3/4	3/4	3/4	3/4	3/4
Net weight estimated	kg	345	395	445	495	545	595



GEMMA MP

CAST IRON OIL FIRED BOILER
RATED OUTPUT: 70 TO 235 KW



- WARMTH AT YOUR FINGERTIPS
- FOR MAXIMUM CONFORT AND EFFICIENCY
- ROBUST AND DURABLE QUALITY
- EASY TO INSTALL
- HIGH EFFICIENCY CAST IRON SECTIONNAL BOILER
- TOP TECHNOLOGY BY DESIGN

Do you want to forget your boiler? THINK GEMMA MP AND MAKE LIFE EASIER!



THE REFERENCE FOR HIGH POWER BOILER

The Gemma MP is a high power boiler that can be equipped with a forced draught fuel oil or gas burner. It has a cast iron heating body with a very high resistance to the condensation and satisfies all individual, collective and industrial heating needs.

SOLID ZAEGEL-HELD OBERNAI QUALITY

The heating elements are engineered to ensure high efficiency and boiler safety.

The combustion chamber is well designed, ensuring full exposure to burner heat, preventing the formation of dangerous inner stresses and reducing consumption of fuel/gas, emissions.

WHEN THE SPACE IS PRECIOUS

Particularly adapted for old buildings with difficult access or for new apartment blocks, the Gemma MP is the best solution in term of compacity and make easier the installation in small spaces. The boiler is installed very quickly.

EASY MAINTENANCE

The Optimajor GLP 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. Only horizontal cleaning is required.

COMPLET EQUIPMENT

A cast iron heating body with assembled elements.

The control panel includes:

- Circuit for regulator.
- ON/OFF switch.
- Boiler thermostat.
- Boiler thermometer.
- Safety thermostat.
- Pre-equipped housing for regulation.

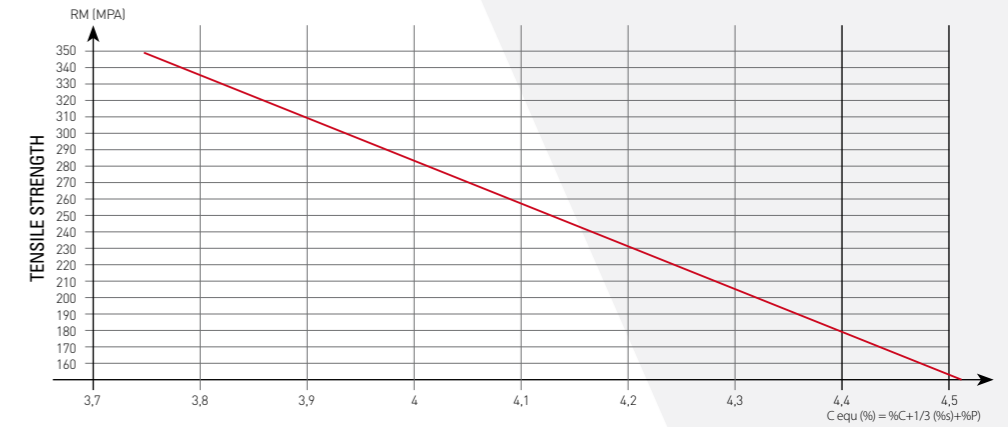
ECOGROUPAGE

The range of Gemma MP can be configured as cascade. The fractionning of the power leads to the separate start of each boiler according to the demand. This achieves output matching, optimised to the demand.

It result an important reduction of consumption and a rise of economical benefits.

The Zaegel-Held Cast Iron makes the ideal compromise between tensile strenght and brinell Hardness. It provides optimal heat storage and transfer with it's fine and regular graphite repartition.

ZAEGEL-HELD HYPOEUTECTIC GREY CAST-IRON



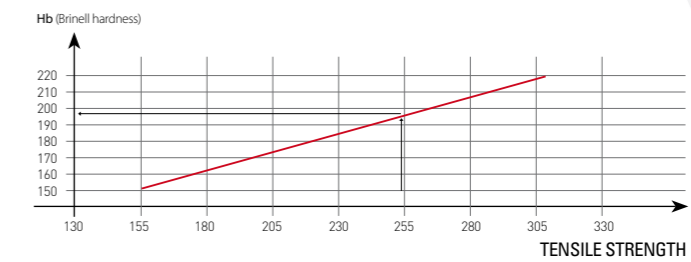
HIGH SI CONTENT

- Homogeneous fine flake graphite distribution.
- Pearliet-ferrite structure.

LOW PHOSPOR CONTENT

- Excellent moulding capacity.
- Less production of steatite.
- Excellent heat transmission.
- Water corrosion resistant (Pearliet structure).
- High mechanical strength.
- Excellent thermal shocks resistance.

HYPOEUTECTIC GREY CAST-IRON FLAKE GRAPHITE



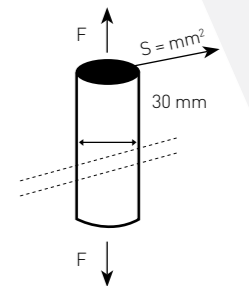
Flake graphite



TENSILE STRENGTH

	σ_t	σ_t
GG 20	20 kg/mm ²	196 N/mm ²
GG 25	25 kg/mm ²	245 N/mm ²
Zaegel-Held	24,36 kg/mm ²	238,6 N/mm ²

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



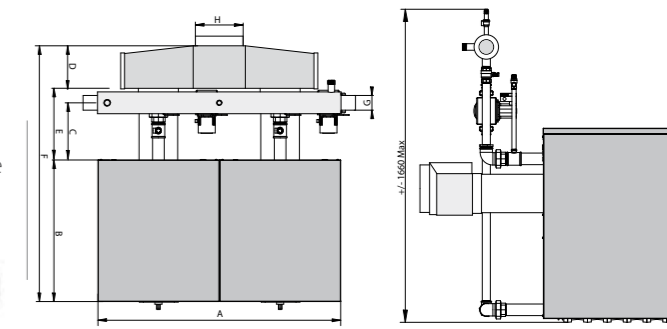
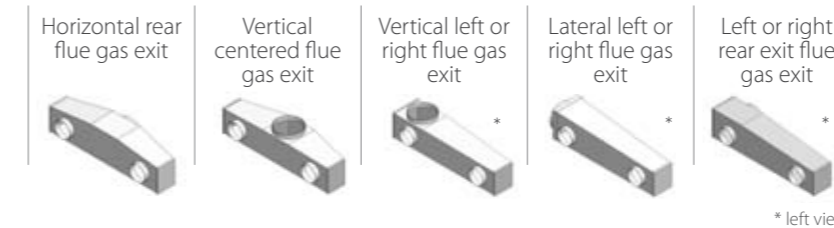
INSTALLATION IN ECOGROUPAGE

TYPE	605	605	605	835	835	835	985	985	985	1135	1135	1135	1285	1285	1285	1375	1375	1375
Nbre	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4
A	1260	1890	2520	1260	1890	2520	1260	1890	2520	1260	1890	2520	1260	1890	2520	1260	1890	2520
B	731	731	731	731	731	731	937	937	937	937	937	937	1143	1143	1143	1143	1143	1143
C	194	194	194	297	297	297	194	194	194	297	297	297	194	194	194	297	297	297
D	220	270	270	270	270	320	270	270	320	270	320	375	270	320	420	270	375	420
E	300	300	300	400	400	400	300	300	300	400	400	400	300	300	300	400	400	400
F	1251	1301	1301	1401	1401	1451	1507	1507	1557	1607	1657	1712	1713	1763	1863	1813	1918	1963
G	60	70	76	60	76	90	76	76	90	76	90	102	76	90	102	76	102	113
H	200	250	250	250	250	300	250	250	300	250	300	350	250	300	400	250	350	400

⚠ E: minimum value

OPTIONS

FLUE GAS COLLECTOR



ECOGROUPAGE OIL EQUIPMENT: 1 pump, 2 stop valves, 1 security group by boiler - 1 collector - hydraulic connection's boilers