

# HEAVY OIL BURNERS

mechanical atomization

## miniflam series

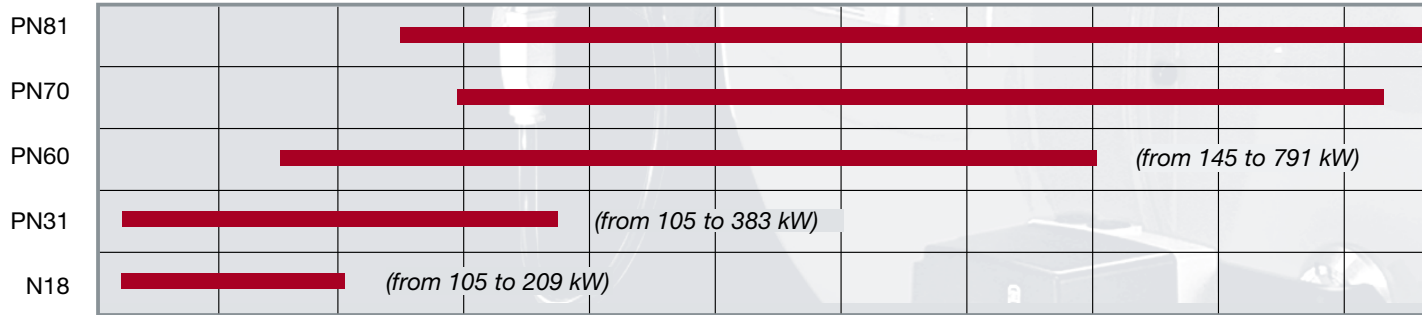
**N18** - TN

mechanical atomization

## tecnopress series

**PN30** - TN/AB      **PN70** - AB/PR/MD  
**PN60** - AB/PR/MD    **PN81** - AB/PR/MD

### Type mechanical atomization





# miniflam SERIES N18

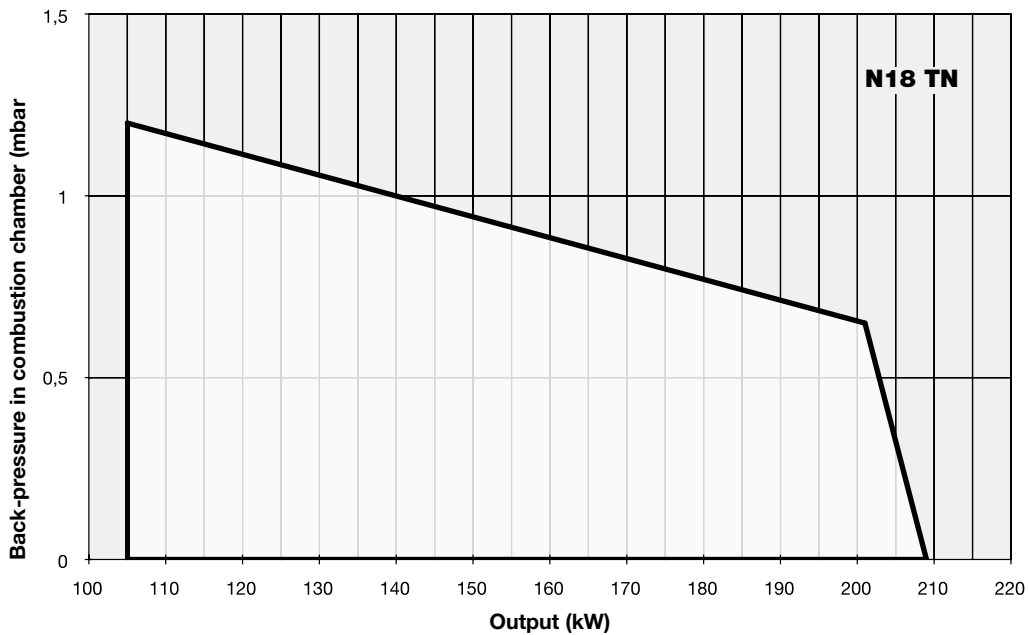
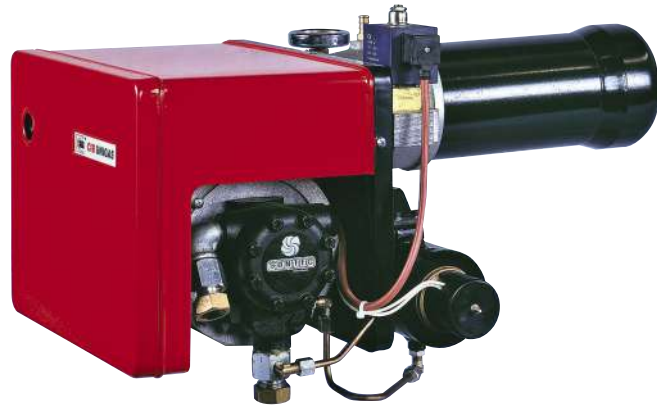
**MECHANICAL ATOMIZATION**  
with viscosity up to 50 cSt at 50°C (7°E at 50°C)

HEAVY OIL

This burner, in its standard version, is suitable to burn oil with max viscosity of 50 cSt at 50°C (7°E at 50°C).

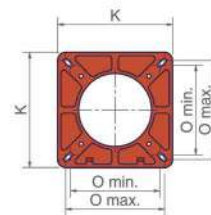
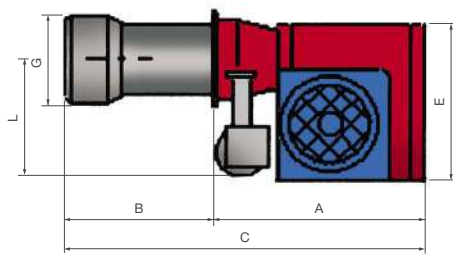
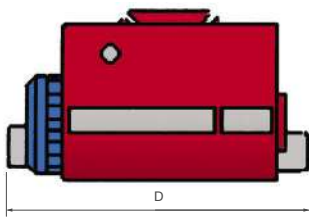
The oil heater consists of a tank with an electric element while a system of preset thermostats controls the regulation of the fuel temperature in order to ensure the optimum performance of the fuel used. The burner is provided with a cover, to protect the internal components, which is easily removable for maintenance purposes. The links to the electrical supply line and to the temperature regulators are quite easy and safe thanks to the pre-wired connectors.

Upon request we can supply the components necessary to ensure that the oil supply line complies with UNI 9248.

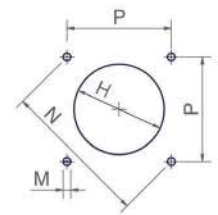


TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Resistor kW
		min.	max.			
<b>N18</b>	N-.TN.S.xx.A	105	209	230/400 V 3N ac	0,55	1,5



Burner flange



Suggested boiler drilling

Type	Model	Overall dimensions (mm)							Boiler drilling (mm)				Burner flange (mm)		Packaging dimensions (mm)			
		A	B	C	D	E	G	L	H	M	N	P	K	O min. max.	l	p	h	kg
<b>N18</b>	N-.TN.S.xx.A	400	69÷201	600	480	300	126	270	133	M8	171	121	160	103 130	800	750	560	59

Approximate values

MECHANICAL OPERATION

<b>N18</b>			
Model	Operation	Code	Price €
HEAVY OIL 50 cSt a 50°C (7°E to 50°C)			
<b>N-.TN.S.xx.A</b>	TN	002060201	

In compliance with:

- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

# tecno**press** SERIES PN30 PN60 PN70 PN81

HEAVY OIL

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)

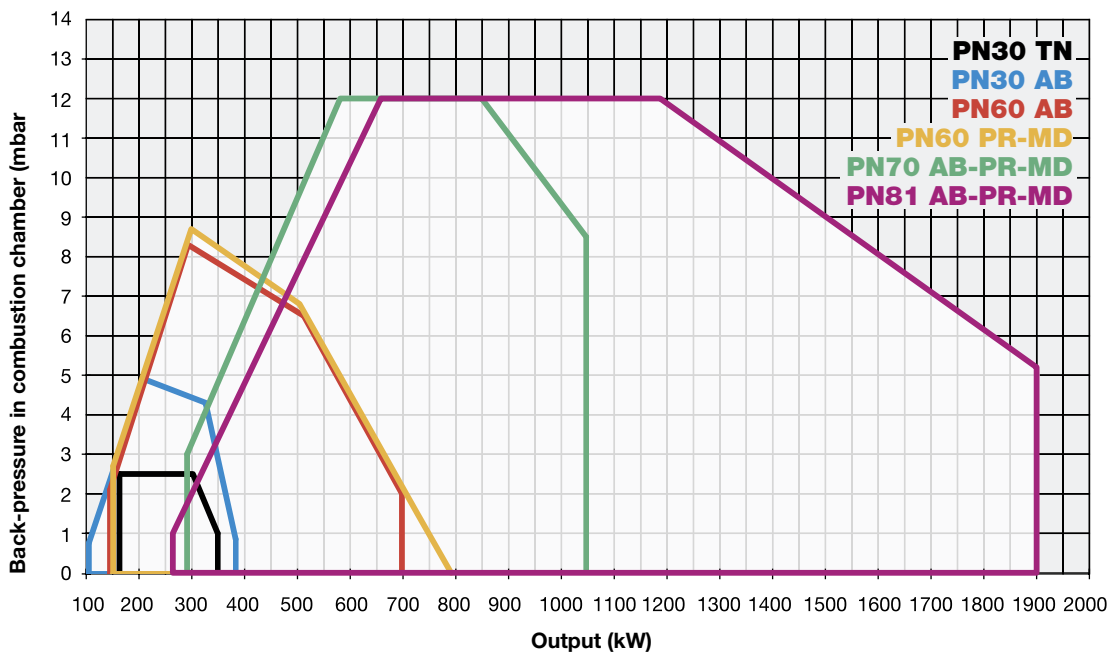
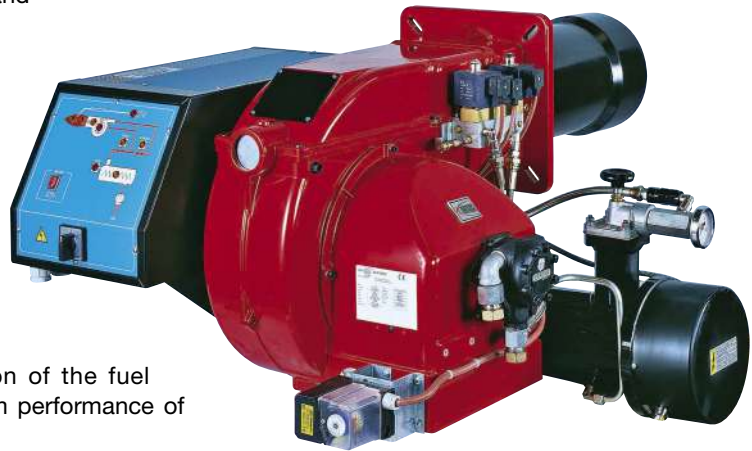
Our thirty years experience in the design and production of oil burners, has allowed us to develop and to produce a highly technical series of products renowned worldwide for their reliability.

These burners are available for oil with standard viscosity up to 50 cSt at 50°C (7°E at 50°C).

Upon request we can also supply a model for heavy oil up to 400 cSt at 50°C (50°E at 50°C).

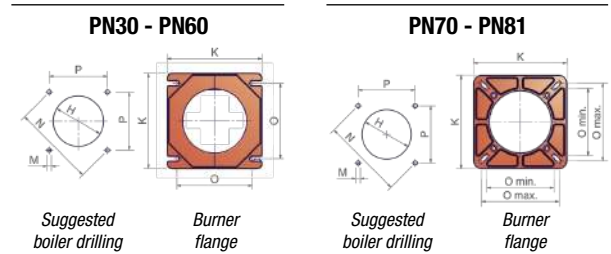
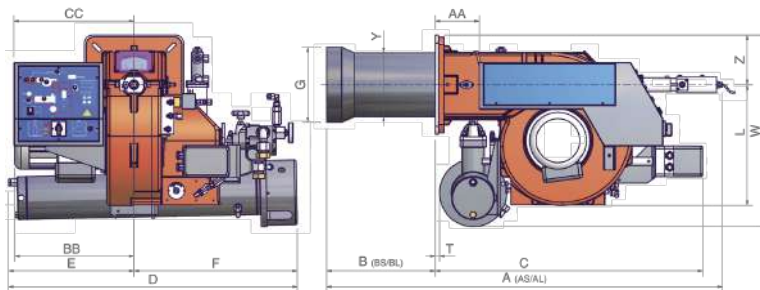
The oil heater consists of a tank with an electric element while a system of preset thermostats controls the regulation of the fuel temperature in order to ensure the optimum performance of the fuel used.

Upon request we can supply the components necessary to ensure that the oil supply line complies with UNI 9248.



TECHNICAL DETAILS

Type	Model	Power kW		Electric power supply	Fan motor kW	Resistor kW
		min.	max.			
<b>PN30</b>	x-.TN.x.xx.A	163	349	230/400 V 3N ac	0,75	2,4
<b>PN30</b>	x-.AB.x.xx.A	105	383	230/400 V 3N ac	0,75	2,4
<b>PN60</b>	x-.AB.x.xx.A	145	698	230/400 V 3N ac	1,10	4,5
<b>PN60</b>	x-.xx.x.xx.A	151	791	230/400 V 3N ac	1,10	4,5
<b>PN70</b>	x-.xx.x.xx.A	291	1.047	230/400 V 3N ac	2,20	8,0
<b>PN81</b>	x-.xx.x.xx.A	264	1.900	230/400 V 3N ac	3,00	12,0



Type	Packaging dimensions (mm)			
	l	p	h	kg
<b>PN30</b>	1180	930	720	90
<b>PN60</b>	1210	1020	790	130
<b>PN70/81</b>	1580	1010	860	170

Approximate values

Type	Model	Overall dimensions (mm)																							
		AA	AL	AS	BB	BL	BS	C	CC	D	E	F	G	H	K	L	M	N	O		P	T	W	Y	Z
		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.		min.		max.	
<b>PN30</b>	x-.xx.x.xx.A	-	860	670	-	340	150	520	-	720	270	450	121	151	190	400	M10	219	155	155	155	-	-	131	-
<b>PN60</b>	x-.AB.x.xx.A	102	1062	864	274	442	244	620	365	660	330	330	153	182	240	400	M10	269	190	190	190	92	520	162	120
<b>PN60</b>	x-.PR.x.xx.A	102	1186	1051	274	459	324	727	365	861	365	496	208	238*	240	344	M10	269	190	190	190	92	613	162	120
<b>PN70</b>	x-.AB.x.xx.A	138	1256	1106	373	557	407	699	376	871	360	511	220	250	300	475	M10	330	216	250	233	14	630	198	155
<b>PN70</b>	x-.PR.x.xx.A	138	1394	1244	373	557	407	837	376	871	360	511	220	250	300	475	M10	330	216	250	233	14	630	198	155
<b>PN81</b>	x-.AB.x.xx.A	138	1230	1080	373	490	340	699	376	903	392	511	234	264	300	376	M10	330	216	250	233	14	587	198	155
<b>PN81</b>	x-.PR.x.xx.A	138	1389	1239	373	490	340	837	376	903	392	511	234	264	300	376	M10	330	216	250	233	14	598	198	155

Approximate values

- Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the combustion head inside the boiler.

# tecno**press** SERIES PN30 PN60 PN70 PN81

## MECHANICAL ATOMIZATION

with viscosity up to 400 cSt at 50°C (50°E at 50°C)

HEAVY OIL

### MECHANICAL OPERATION

Model	Operation	PN30		PN60		PN70		PN81	
		Code	Price €	Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt a 50°C (7°E to 50°C)									
N-.TN.S.xx.A	TN	003060101		-		-		-	
N-.AB.S.xx.A	AB	003060102		004060102		008060102		008060502	
N-.PR.S.xx.A	PR (*)	-		004060103		008060103		008060503	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)									
D-.TN.S.xx.A	TN	003180101		-		-		-	
D-.AB.S.xx.A	AB	003180102		004180102		008180102		008180502	
D-.PR.S.xx.A	PR (*)	-		004180103		008180103		008180503	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*) Progressive PR control, for modulating version MD add (see price list)

In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 174).

In compliance with:

- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

### ELECTRONIC OPERATION

Model	Operation	PN60		PN70		PN81	
		Code	Price €	Code	Price €	Code	Price €
HEAVY OIL 50 cSt a 50°C (7°E to 50°C)							
N-.MD.S.xx.A.ES	MD (**)	00406010S		00806010S		00806050S	
HEAVY OIL 400 cSt at 50°C (50°E at 50°C)							
D-.MD.S.xx.A.ES	MD (**)	00418010S		00818010S		00818050S	

S = Standard combustion head (BS)

L = For long combustion head version (BL) increase the price (see price list)

(\*\*) The burners are already MD version.

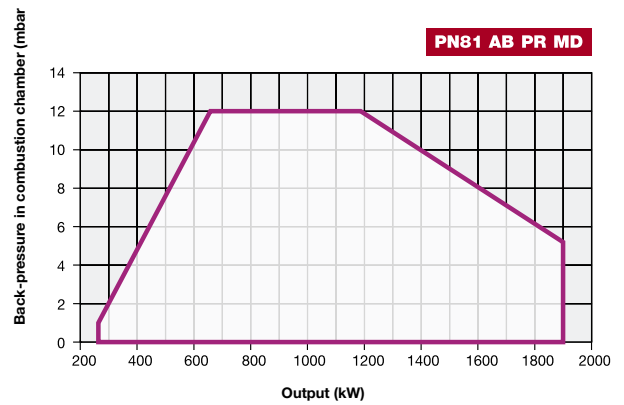
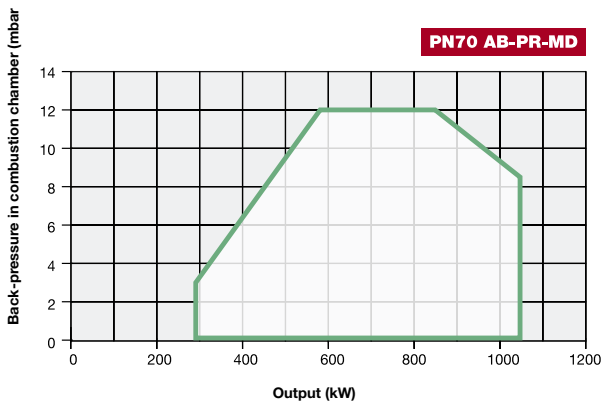
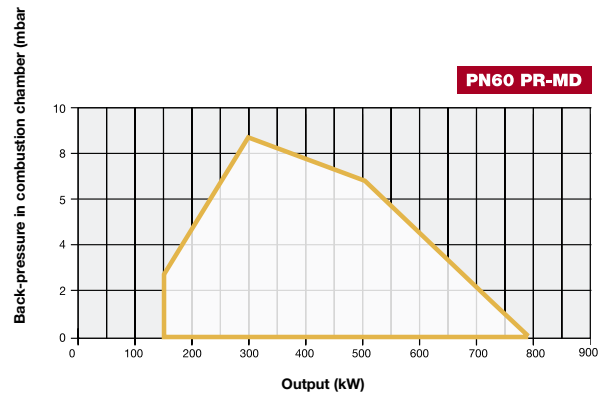
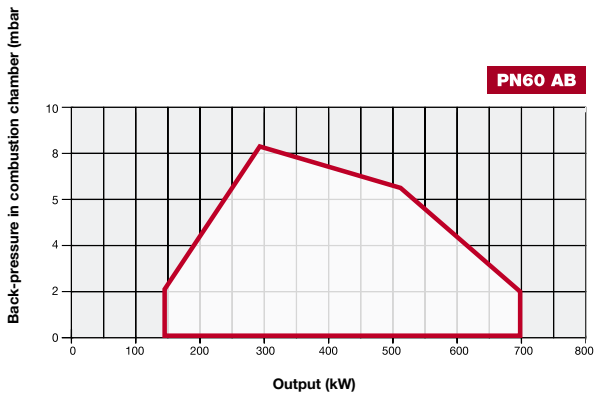
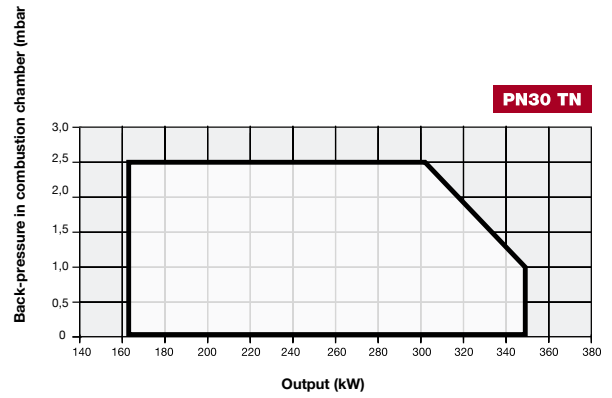
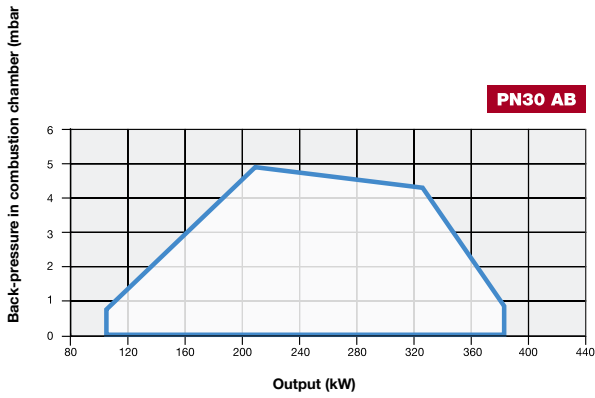
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 174).

In compliance with:

- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

**PN30 PN60 PN70 PN81 tecnopress** SERIES

**MECHANICAL ATOMIZATION**  
with viscosity up to 400 cSt at 50°C (50°E at 50°C)





# OPTIONS HEAVY OIL BURNERS

## AIR COMPRESSORS

The tables in this page include useful data to match the correct compressor in case compressed air is needed to atomize the liquid fuel (burners PBV/RBY/KPBY/KRBY).

Compressors can be supplied upon request.

Burners with pneumatic atomization are never supplied with compressor.

Air conditions are referred to standard (15°C and 1013 mbar).

In case steam is preferred to air, the characteristics are exactly the same. Steam must be saturated and dry. In any case the max pressure of the steam must not be over 12 bar (190°C).

Type	Power (kW)	Air capacity (kg/h)	Air capacity (l/second)	Air pressure (bar)	Price €
KPBY72	1530	16,5	3,7	6÷8	
KPBY73	2050	22,0	4,9	6÷8	



## HEAVY OIL FILTERS

Model	Code	Price €
Filter 1" 0,3 micron small	2090202	
Filter 1" 0,3 micron big	2090207	
Filter 1½" 0,3 for PBV	2090236	
Filter 51000/05 F (flanged DN 50)*	2090237	
Magnetic filter DN50 1"	2090203	
Magnetic filter 1½"	2090245	

\* With 300 W heater



## VACUUM GAUGE

Model	Code	Price €
Glycerine vacuum gauge -1 ÷ 0 bar (¼" connection)	2520008	



## MANOMETER

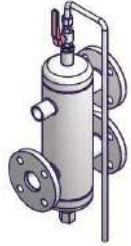
Model	Code	Price €
Glycerine gauge 0 ÷ 6 bar (¼" connection)	2520035	
Glycerine gauge 0 ÷ 10 bar (¼" connection)	2520036	
Glycerine gauge 0 ÷ 16 bar (¼" connection)	2520033	
Glycerine gauge 0 ÷ 25 bar (¼" connection)	2520034	
Glycerine gauge 0 ÷ 40 bar (¼" connection)	2520019	

## OPTIONS HEAVY OIL BURNERS



### SUPPORT FOR PRESSURE GAUGE manometer / vacuum gauge

Model	Code	Price €
Isolating valve (¼" connection)	2520005	



### DEGASSING BOTTLE

Model	Diameter	Code	Price €
Threaded	1"½	3040117	
Flanged	DN 40	3040121	



### BELT HEATER CABLE FOR PIPES

Model	Type	Code	Price €
Power 64 Watt/meter	each meter		



### MANUAL CUT OFF VALVE (BALL VALVE)

Model	Code	Price €
1"	2810024	
1"½	2810025	
2"	2810031	
2"½	-	

### OIL PRE-HEATING TANK (STEAM/DIATERMIC OIL)

Type	Capacity kg/h	Tank volume liters	Electrical heaters kW	Max temperature °C	Max pressure bar	Price €
HTS2	200	200	8	80÷100	5	
HTS5	500	500	12	80÷100	5	
HTS10	1.000	1.500	18	80÷100	5	
HTS20	2.000	2.000	24	80÷100	5	

Vertical cylindrical tanks, provided with electrical resistance and spiral heat exchanger.

Upon order please specify if the spiral must be provided for diathermic oil or steam.

Electrical panel mounted aboard.

Packaging included.

The oil flow rate is indicative: it can vary according to the type of fuel and to the thermal step required.

### OIL PRE-HEATING TANK (ONLY ELECTRICAL RESISTANCES/HOT WATER)

Type	Capacity kg/h	Tank volume liters	Electrical heaters kW	Max temperature °C	Max pressure bar	Price €
HT2	200	200	8	80÷100	5	
HT5	500	500	12	80÷100	5	
HT10	1.000	1.500	18	80÷100	5	
HT20	2.000	2.000	24	80÷100	5	

Vertical cylindrical tanks, provided with electrical resistance and spiral heat exchanger (optional).

Upon order please specify electrical resistances only or hot water coil.

Packaging included.

The oil flow rate is indicative: it can vary according to the type of fuel and to the thermal step required.



# OPTIONS HEAVY OIL BURNERS

## CRUDE AND HEAVY OIL PRESSURE REGULATOR GROUPS

Type	Capacity kg/h	Diameter	Price €
GRP-D2	500	DN 50	
GRP-D4	800	DN 50	
GRP-D7	1.300	DN 50	
GRP-D10	2.000	DN 50	

Pressure regulator group supplied pre-assembled (no frame).  
Packaging included.  
For greater flow rates, quotations upon request.



## LOW PRESSURE OIL HANDLING UNIT (RING) - HEAVY/RAW OIL - 2 PUMPS IN PARALLEL (ONE AS BACK-UP)

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-D2	500	2.700	DN 50	1.300 x 900 x 800	
GS-D4	800	4.500	DN 50	1.500 x 900 x 800	
GS-D7	1.300	6.900	DN 50	1.600 x 1.200 x 800	

## LOW PRESSURE OIL HANDLING UNIT (RING) - HEAVY/RAW OIL - SINGLE PUMP

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-D2s	500	2.700	DN 50	1.300 x 600 x 800	
GS-D4s	800	4.500	DN 50	1.500 x 600 x 800	
GS-D7s	1.300	6.900	DN 50	1.600 x 800 x 800	

The output is referred to the burners which can be supplied by the low pressure ring.  
The flow rate is referred to the heavy oil flow rate pumped into the ring.

Dimensions are indicative.

Dimensions do not include the electrical panel, the panel can be installed on the the oil ring, or wall-hung (dimensions 400x250x600h mm).

For greater flow rates quotations upon request.

In order to pick up the correct oil ring to your application, refer to the output and choose the ring one size larger. Couple the ring with the regulation group of the same size. To finish the job remember to choose the the degassing tanks (the use of degassing tanks is mandatory when 2 or more burners are supplied by the same ring, only recommended in all other cases).

