

ecostar
COMBUSTION SYSTEMS

INDUSTRIAL BURNERS

Industryry
Process
Hot Air Generators
Burner System Equipment

www.ecostar.com.tr

INDUSTRIAL BURNERS

Ecostar Industrial Burners consist of ECO, DSE, DIB, MIB, GIB series burners, process burners including FPB, High Speed Burners, Gazoram, Ecoflue, duct burners, recuperative burners, furnace burners, coal burners, immersion burners and special burners and hot air generators. Industrial burners can operate with natural gas, LPG, heavy oil, light oil and combined fuels. Thanks to its large power capacity and high combustion efficiency, it can be used in start-up applications in Industrial boilers, steam boilers, hot water boilers, hot oil boilers, Industrial boilers, hot air generators, rotary dryers (such as asphalt plant), fluidized bed and grate boilers. It has a wide range of important uses in the Industry, including drying applications such as asphalt plant burner, Industrial furnace applications, cement plants, paper mills, sugar factories, heat treatment furnaces, melting pots, ceramic Industry baking processes, textile and wood Industry, food, soil, chemistry, fertilizer, metal Industry, paper and packaging Industry, biomass power plants, thermal power plants.



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6 - FAN SPEED CONTROL
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INDUSTRIAL BURNERS INDUSTRY

Thanks to the high energy efficiency and application-specific models it offers, Ecostar Industrial coal burner with monoblock and duoblock body structure that can operate with natural gas, LPG, heavy oil, light oil and dual fuels can be used in hot water boilers, steam boilers, hot oil boilers, fluidized bed boilers, drying applications, asphalt plants, start-up applications and hot air generators.



ECO

[28 PRODUCTS](#)

[Detailed Information ▶](#)



MIB

[17 PRODUCTS](#)

[Detailed Information ▶](#)



DIB

[17 PRODUCTS](#)

[Detailed Information ▶](#)



DES

[10 PRODUCTS](#)

[Detailed Information ▶](#)



GIB

[17 PRODUCTS](#)

[Detailed Information ▶](#)



CIB

[3 PRODUCTS](#)

[Detailed Information ▶](#)

INDUSTRIAL BURNERS

ECO

- ECOSTAR ECO series industrial burners with duoblock body structure are used in hot water boilers, steam boilers, hot oil boilers, dryers, fluidized bed and grate boilers and hot air generators in start-up applications.
- It can be used with Natural Gas, LPG, Heavy Oil, Light Oil, Biogas and special fuels in ECO series industrial burners.
- Thanks to its duoblock structure, the burner body, air control cage and fan can be located in different spaces, offering effective use of this area and flexible process design.
- With different combustion nozzle designs and flame pipe lengths suitable for the process, it can work in harmony in different combustion chambers, including modernized applications.
- Thanks to its high pressure and low pressure liquid fuel lances, it offers various application according to special needs. High pressure mechanical atomization and low pressure air/steam atomization lance options are suitable for use in liquid fuel products.
- According to the process needs, it is possible to control the octopus head and liquid fuel lance with a movable structure in order to move it away from the hot area.
- Able to operate at combustion air fan suitable for the process and at 200°C combustion air temperatures. (It is painted with high temperature resistant paint; product capacity varies in hot air operation.) In hot weather applications, insulation is possible to protect the equipment on the body.
- It has an oblique rear structure due to the optimized air flow with its renewed body structure.



- Thanks to the specially designed protective concrete cover application, a protective barrier can be applied between the combustion chamber and the burner. In this way, it provides long-lasting use by providing burner protection in start-up processes.
- High burning safety thanks to photocell flame control.
- Suitable for manufacturing from completely stainless material in processes that require chemical resistance.
- Possible to request as mechanical and electronic modulating depending on the process needs.
- Depending on the process needs, the control panel can be produced as integrated on the product or as an external panel. In this way, it is possible to use on the process management room or local area.
- Light oil filtering and pumping station is produced externally according to customer demand.
- Light oil filtering, heating and pumping station are produced externally according to customer demand.
- Special design pilot ignition burners for ignition (ECOSTAR PAL burner is standard in ECO-500 series and above) is available,
- Combustion optimization with O₂-CO trim system adaptation in electronic proportional burners, if demanded.
- Energy saving with fan speed control in electronic proportional burners, if demanded.
- Remote management by connecting to PLC systems using BMS (Burner Management System) or software.

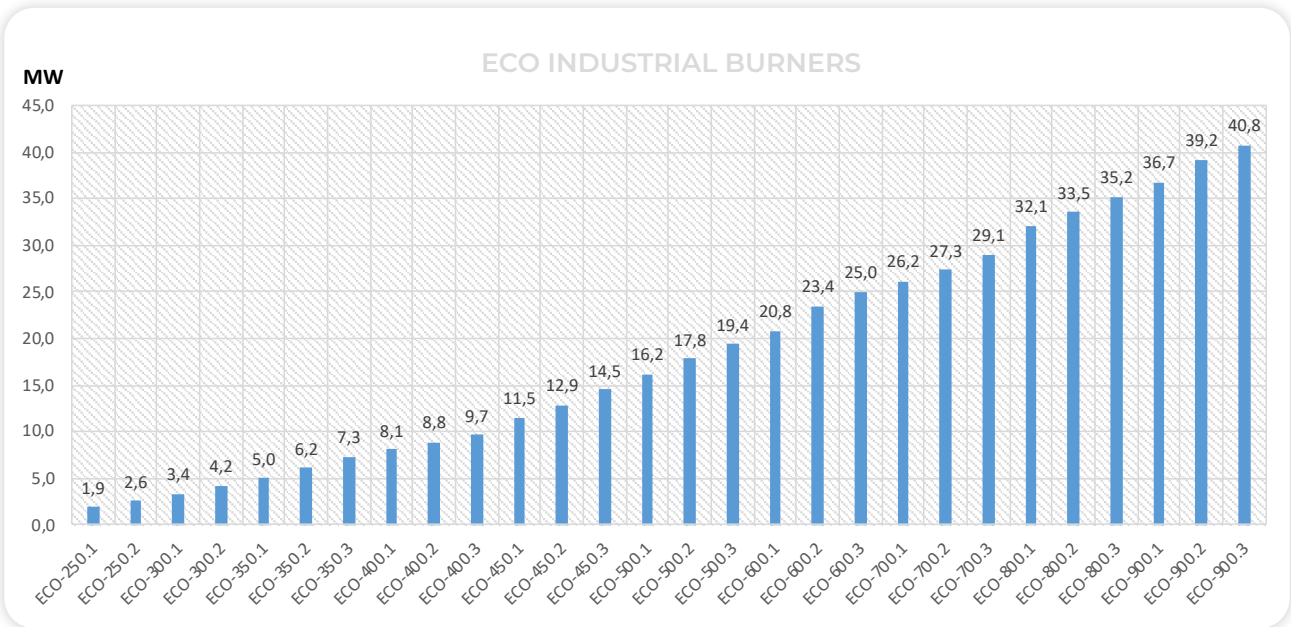
ECO INDUSTRIAL BURNERS CAPACITY TABLE

ECO SERIES INDUSTRIAL BURNERS CAPACITY TABLE					
BURNER TYPE	BURNER CAPACITY		NATURAL GAS CONSUMPTION	LIGHT OIL CONSUMPTION	HEAVY OIL CONSUMPTION
	Max. MW	Max. kcal/h	Max. Nm ³ /h	Max. kg/h	Max. kg/h
ECO-250.1	1,9	1.600.000	194	157	166
ECO-250.2	2,6	2.250.000	273	221	233
ECO-300.1	3,4	2.900.000	352	284	301
ECO-300.2	4,2	3.600.000	436	353	373
ECO-350.1	5,0	4.300.000	521	422	446
ECO-350.2	6,2	5.300.000	642	520	549
ECO-350.3	7,3	6.300.000	764	618	653
ECO-400.1	8,1	7.000.000	848	686	725
ECO-400.2	8,8	7.600.000	921	745	788
ECO-400.3	9,7	8.300.000	1006	814	860
ECO-450.1	11,5	9.900.000	1200	971	1026
ECO-450.2	12,9	11.100.000	1345	1088	1150
ECO-450.3	14,5	12.450.000	1509	1221	1290
ECO-500.1	16,2	13.900.000	1685	1363	1440
ECO-500.2	17,8	15.300.000	1855	1500	1585
ECO-500.3	19,4	16.650.000	2018	1632	1725
ECO-600.1	20,8	17.900.000	2170	1755	1855
ECO-600.2	23,4	20.150.000	2442	1975	2088
ECO-600.3	25,0	21.500.000	2606	2108	2228
ECO-700.1	26,2	22.500.000	2727	2206	2332
ECO-700.2	27,3	23.500.000	2848	2304	2435
ECO-700.3	29,1	25.000.000	3030	2451	2591
ECO-800.1	32,1	27.600.000	3345	2706	2860
ECO-800.2	33,5	28.850.000	3497	2828	2990
ECO-800.3	35,2	30.250.000	3667	2966	3135
ECO-900.1	36,7	31.600.000	3830	3098	3275
ECO-900.2	39,2	33.750.000	4091	3309	3497
ECO-900.3	40,8	35.050.000	4248	3436	3632
Mechanical Modulating Ratio: Natural Gas 5:1, Liquid Fuel 3:1 Electronic Modulating Ratio: Natural Gas 10:1, Liquid Fuel 5:1					

ECO

INDUSTRIAL BURNERS

BURNER SPECIFICATIONS

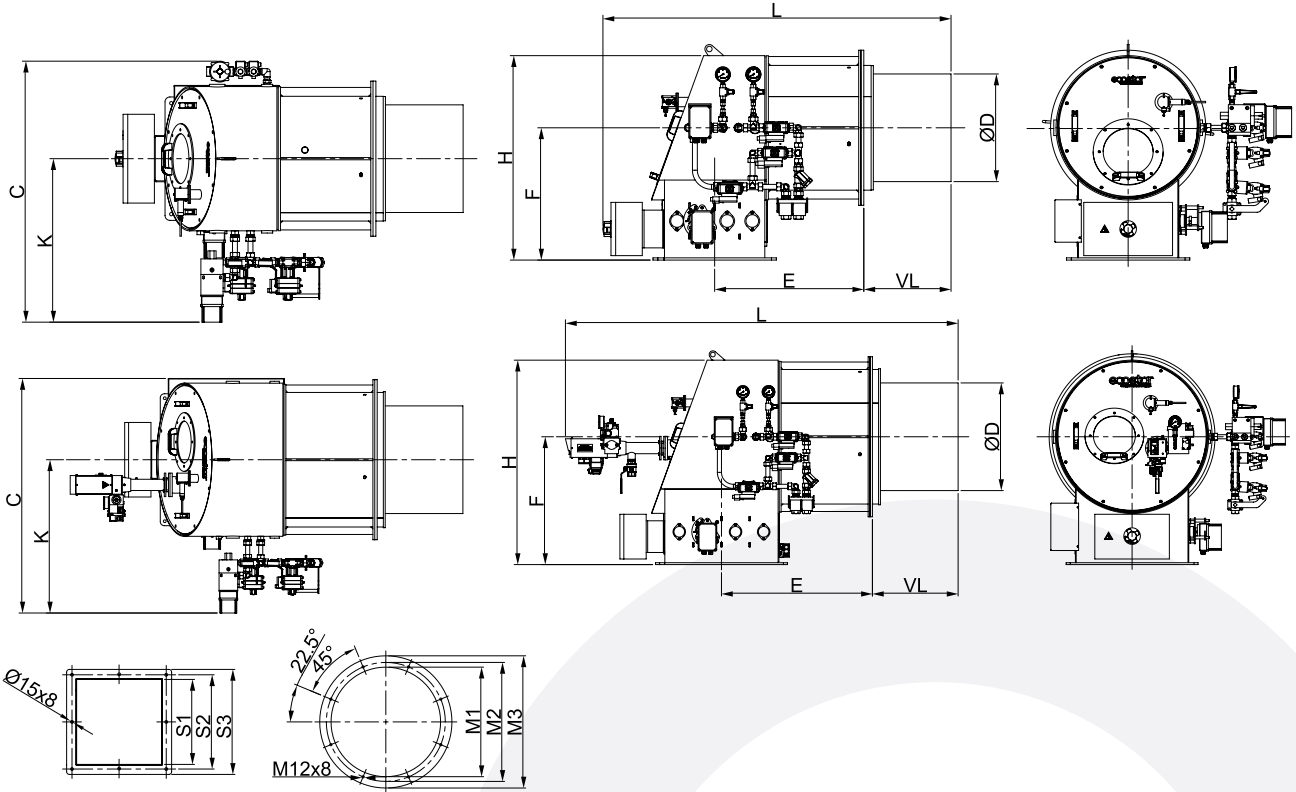


SPECIFICATIONS	ECO 250 ME	ECO 250 EL	ECO 300 ME	ECO 300 EL	ECO 350 ME	ECO 350 EL	ECO 400 ME	ECO 400 EL	ECO 450 ME	ECO 450 EL	ECO 500 ME	ECO 500 EL	ECO 600 ME	ECO 600 EL	ECO 700 ME	ECO 700 EL	ECO 800 ME	ECO 800 EL	ECO 900 ME	ECO 900 EL
Electronic modulating control option	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔
Mechanical modulating control option	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘
Photocell flame control	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Internal pilot ignition	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
ECOSTAR PAL pilot ignition burner	✘	✘	✘	✘	✘	✘	✘	✘	✘	✘	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Pilot ignition gas valve	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Air pressure switch	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Options of operating with Gas / Heavy Oil / Light Oil / Gas-Light Oil / Gas-Heavy Oil	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
In liquid fuel products, high-pressure mechanic atomization lance or low-pressure air/steam-atomization lance,	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Ability to operate with hot combustion air*	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Different mounting options	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Serviceability without dismounting the burner from the boiler /service cover	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Different flame tube length	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Control via PLC with BMS or software	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
O2-CO combustion management system connection	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
Combustion air fan inverter connection	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
Fuel preparation stations (Gas line/Heavy Oil Station/Light Oil Station)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
TSE EN Declaration of Conformity	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

✘ Not Included / N/A ✔ Included / Available ○ Optional ME Mechanical Modulating EL Electronic Modulating

INDUSTRY ECO

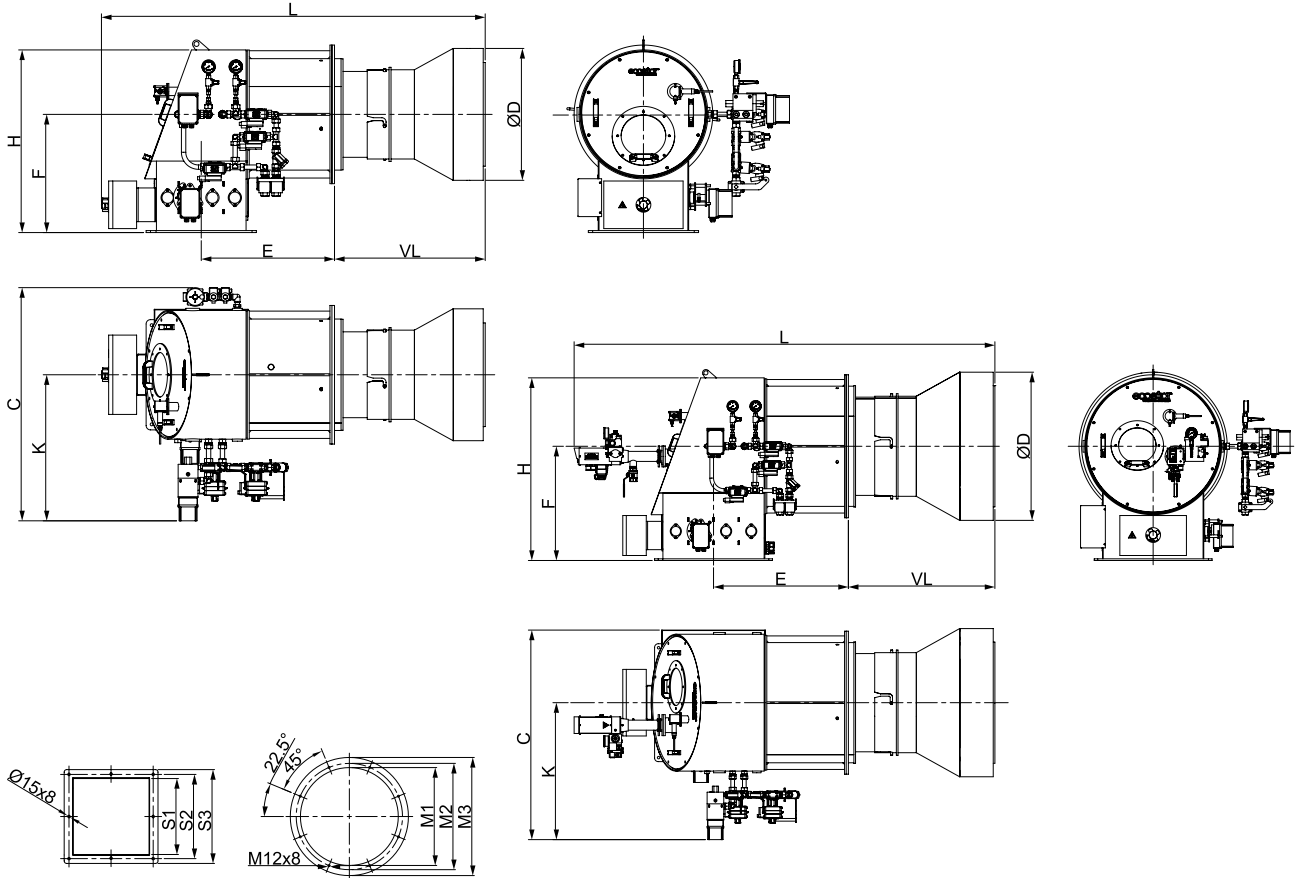
FUEL OIL - ASPHALT



	ØD	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
ECO 300 OS 1	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570
ECO 300 OS 2	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570
ECO 350 OS 1	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
ECO 350 OS 2	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
ECO 350 OS 3	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
ECO 400 OS 1	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670
ECO 400 OS 2	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670
ECO 400 OS 3	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670
ECO 450 OS 1	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750
ECO 450 OS 2	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750
ECO 450 OS 3	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750
ECO 500 OS1	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
ECO 500 OS 2	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
ECO 500 OS 3	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
ECO 600 OS 1	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
ECO 600 OS 2	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
ECO 600 OS 3	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
ECO 700 OS 1														
ECO 700 OS 2														
ECO 700 OS 3														
ECO 800 OS 1														
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ECO 900 OS 1														
ECO 900 OS 2														
ECO 900 OS 3														
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*YOU CAN GET SUPPORT FROM OUR SALES DEPARTMENT FOR SPECIAL VL SIZES														

INDUSTRY ECO

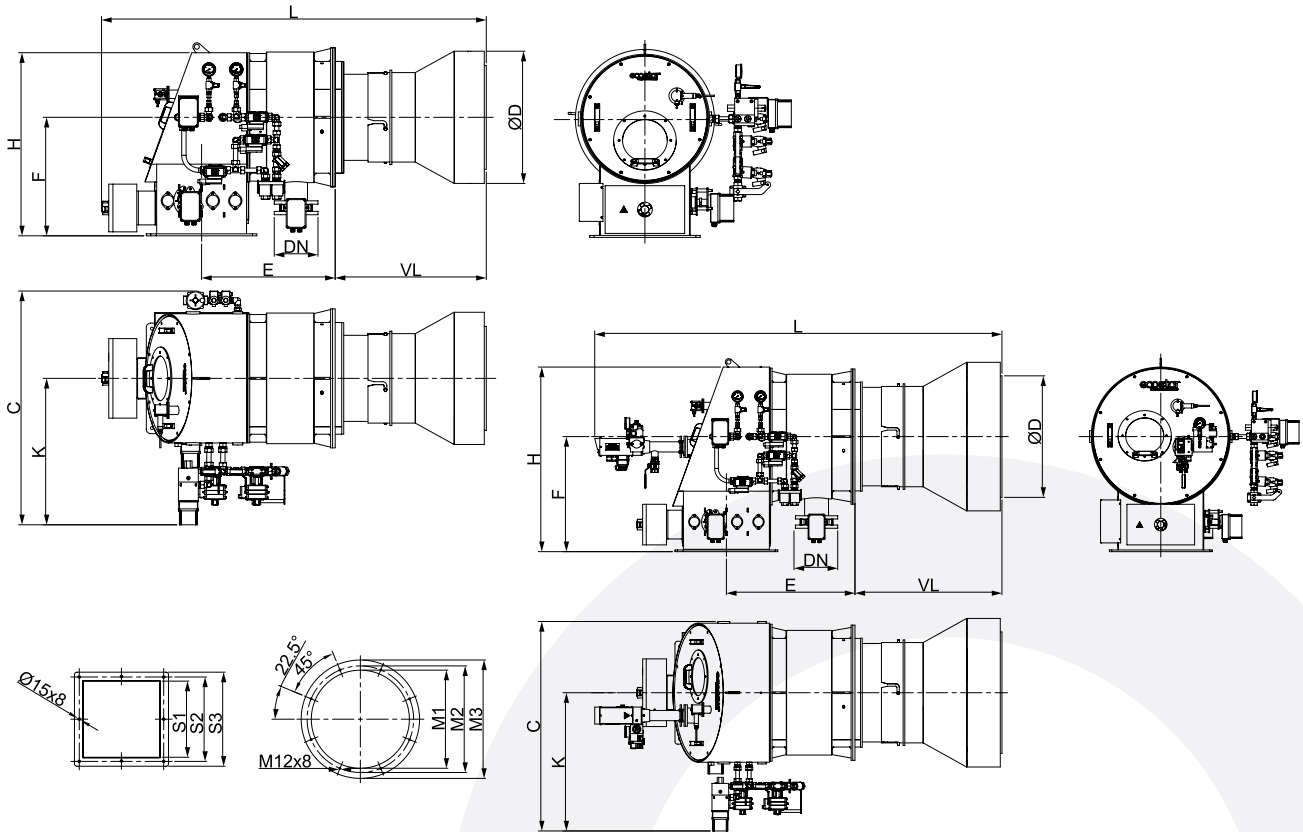
FUEL OIL - STEAM



	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
ECO 250 OS 1	Ø219	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320
ECO 250 OS 2	Ø246	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320
ECO 300 OS 1	Ø259	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320
ECO 300 OS 2	Ø295	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320
ECO 350 OS 1	Ø323	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
ECO 350 OS 2	Ø350	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
ECO 350 OS 3	Ø365	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
ECO 400 OS 1	Ø393	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370
ECO 400 OS 2	Ø401	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370
ECO 400 OS 3	Ø431	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370
ECO 450 OS 1	Ø450	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350
ECO 450 OS 2	Ø485	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350
ECO 450 OS 3	Ø499	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350
ECO 500 OS1	Ø542	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
ECO 500 OS 2	Ø556	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
ECO 500 OS 3	Ø568	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
ECO 600 OS 1	Ø599	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
ECO 600 OS 2	Ø619	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
ECO 600 OS 3	Ø630	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
ECO 700 OS 1														
ECO 700 OS 2														
ECO 700 OS 3														
ECO 800 OS 1														
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ECO 800 OS 3														
ECO 900 OS 1														
ECO 900 OS 2														
ECO 900 OS 3														
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INDUSTRY ECO

FUEL OIL+GAS - ASPHALT



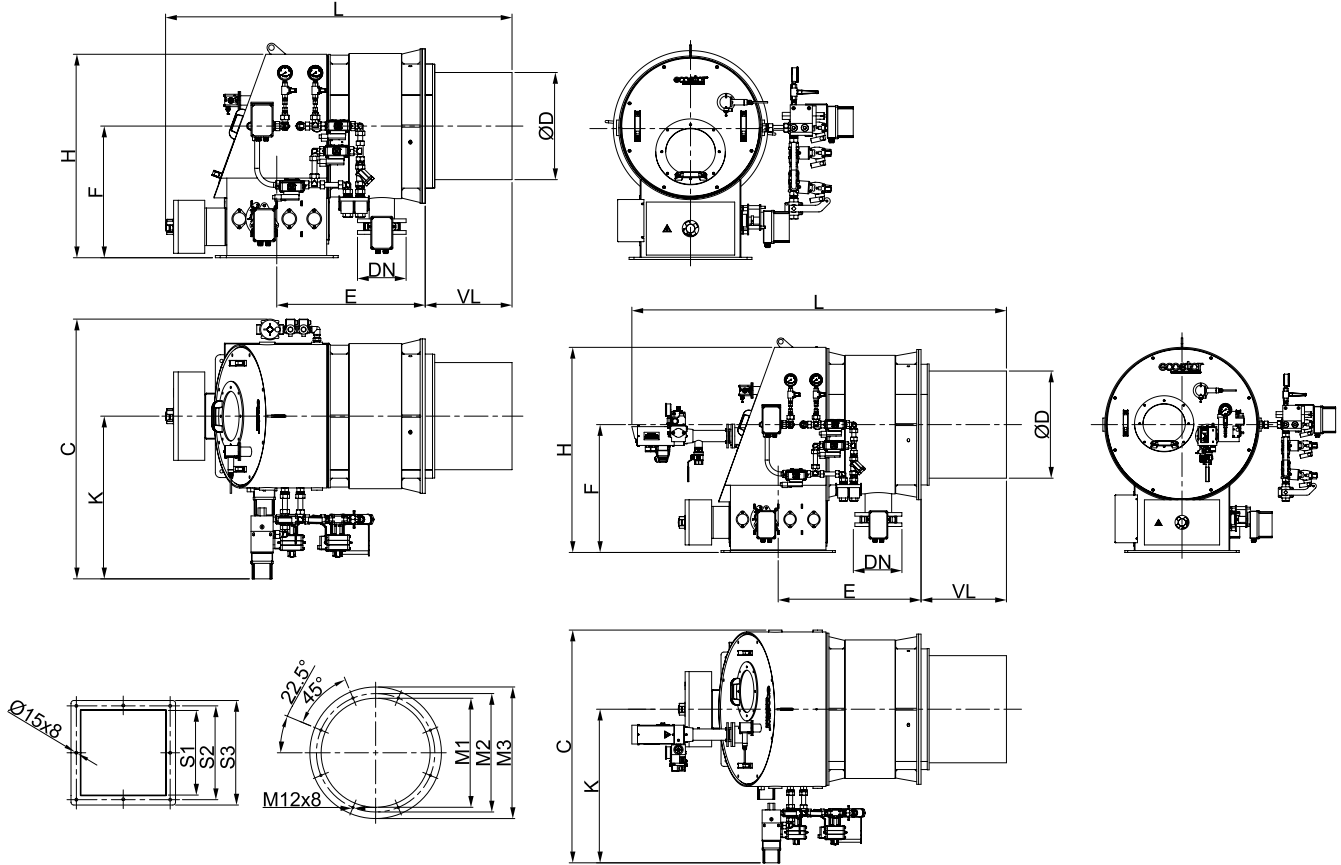
	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
ECO 300 KS 1	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
ECO 300 KS 2	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
ECO 350 KS 1	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 350 KS 2	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 350 KS 3	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 400 KS 1	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 400 KS 2	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 400 KS 3	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 450 KS 1	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 450 KS 2	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 450 KS 3	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 500 KS1	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 500 KS 2	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 500 KS 3	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 600 KS 1	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 600 KS 2	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 600 KS 3	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 700 KS 1															
ECO 700 KS 2															
ECO 700 KS 3															
ECO 800 KS 1															
ECO 800 KS 2															
ECO 800 KS 3															
ECO 900 KS 1															
ECO 900 KS 2															
ECO 900 KS 3															

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INDUSTRY ECO

FUEL OIL+GAS - STEAM



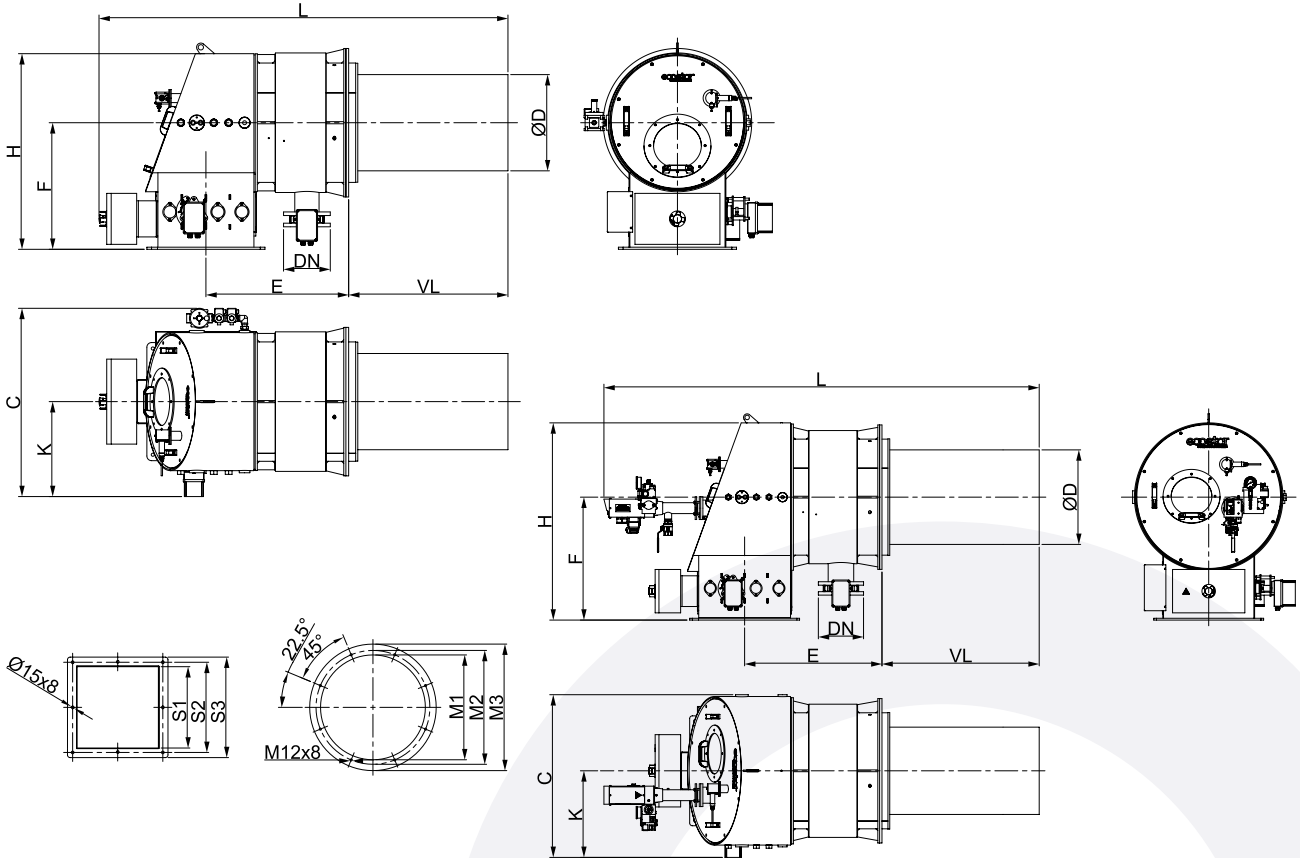
	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
ECO 250 KS 1	Ø219	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320	DN50
ECO 250 KS 2	Ø246	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320	DN50
ECO 300 KS 1	Ø259	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
ECO 300 KS 2	Ø295	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
ECO 350 KS 1	Ø323	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 350 KS 2	Ø350	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 350 KS 3	Ø365	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 400 KS 1	Ø393	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 400 KS 2	Ø401	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 400 KS 3	Ø431	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 450 KS 1	Ø450	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 450 KS 2	Ø485	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 450 KS 3	Ø499	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 500 KS1	Ø542	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 500 KS 2	Ø556	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 500 KS 3	Ø568	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 600 KS 1	Ø599	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 600 KS 2	Ø619	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 600 KS 3	Ø630	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 700 KS 1															
ECO 700 KS 2															
ECO 700 KS 3															
ECO 800 KS 1															
ECO 800 KS 2															
ECO 800 KS 3															
ECO 900 KS 1															
ECO 900 KS 2															
ECO 900 KS 3															

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INDUSTRY ECO

GAS - ASPHALT



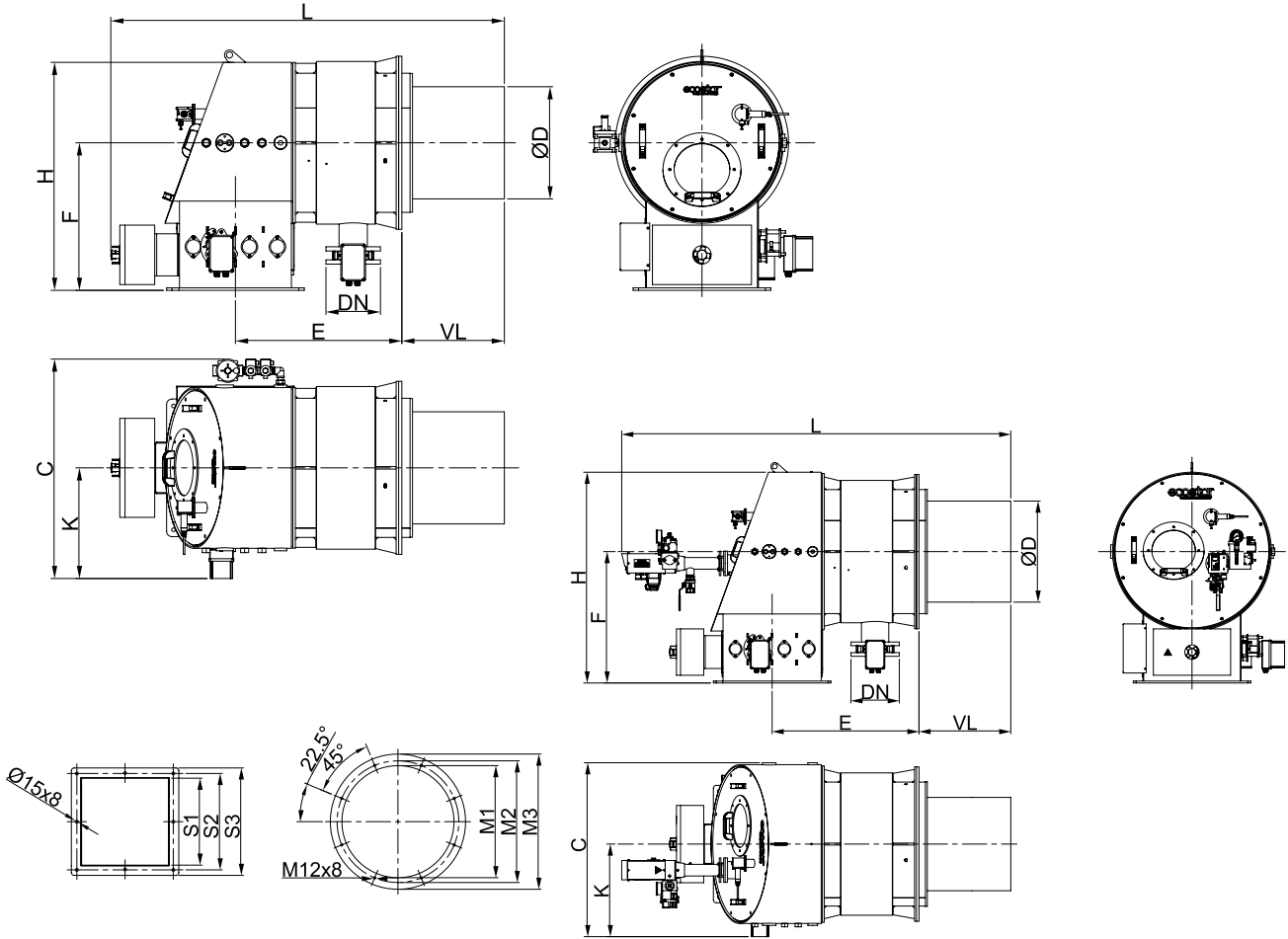
	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
ECO 250 G 1	Ø296	1850	650	875	500	700	325	250	300	340	Ø330	Ø380	Ø450	570	DN50
ECO 250 G 2	Ø252	1850	650	875	500	700	325	250	300	340	Ø330	Ø380	Ø450	570	DN50
ECO 300 G 1	Ø268	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
ECO 300 G 2	Ø278	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
ECO 350 G 1	Ø298	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 350 G 2	Ø323	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 350 G 3	Ø343	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 400 G 1	Ø358	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 400 G 2	Ø373	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 400 G 3	Ø388	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 450 G 1	Ø408	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 450 G 2	Ø433	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 450 G 3	Ø453	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 500 G 1	Ø483	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 500 G 2	Ø503	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 500 G 3	Ø523	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 600 G 1	Ø553	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 600 G 2	Ø568	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 600 G 3	Ø588	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 700 G 1															
ECO 700 G 2															
ECO 700 G 3															
ECO 800 G 1															
ECO 800 G 2															
ECO 800 G 3															
ECO 900 G 1															
ECO 900 G 2															
ECO900G 3															

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INDUSTRY ECO

GAS - STEAM

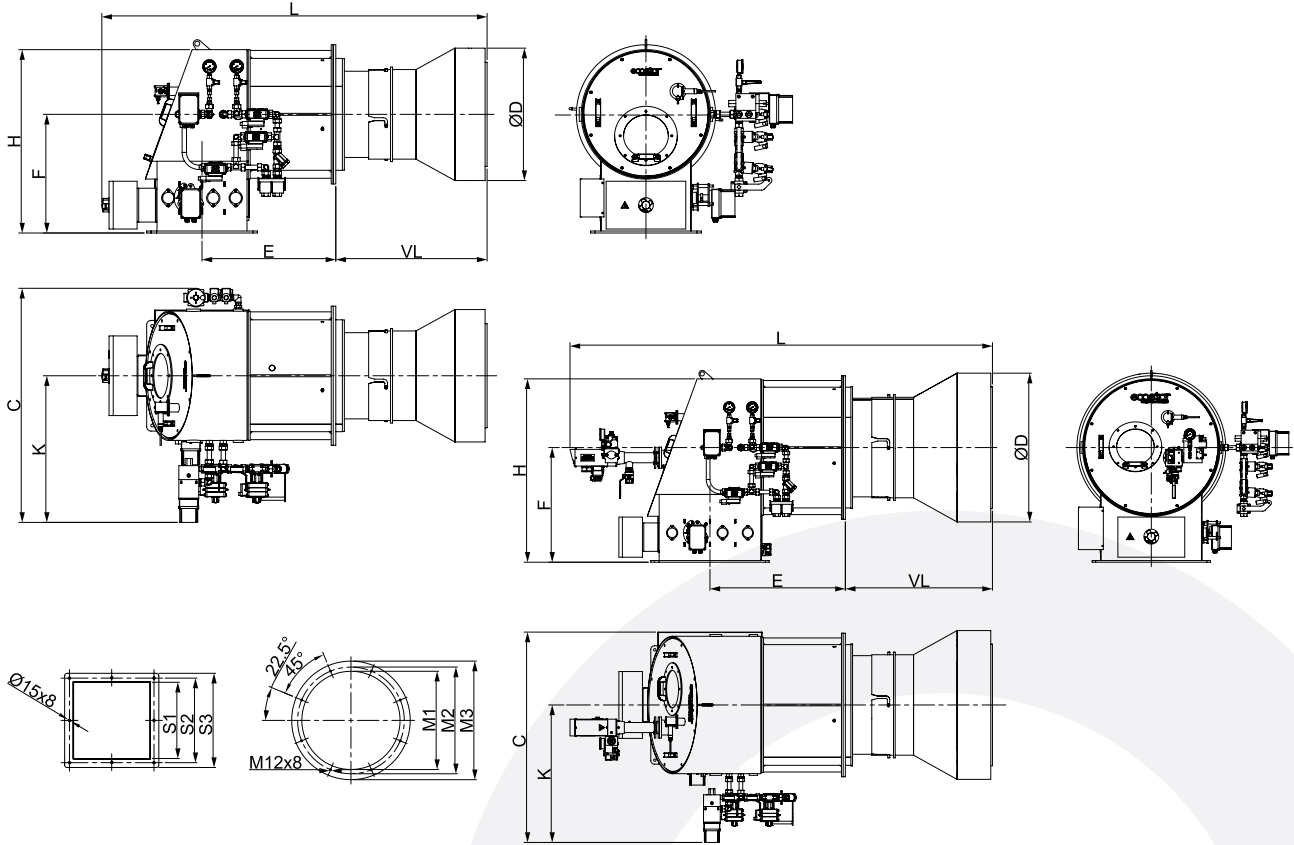


	ØD	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
ECO 250 G 1	Ø264	1600	650	875	500	700	325	250	300	340	Ø330	Ø380	Ø450	320	DN50
ECO 250 G 2	Ø287	1600	650	875	500	700	325	250	300	340	Ø330	Ø380	Ø450	320	DN50
ECO 300 G 1	Ø307	1600	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	320	DN65
ECO 300 G 2	Ø326	1600	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	320	DN65
ECO 350 G 1	Ø346	1550	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 350 G 2	Ø375	1550	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 350 G 3	Ø389	1550	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 400 G 1	Ø422	1600	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 400 G 2	Ø430	1600	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 400 G 3	Ø439	1600	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 450 G 1	Ø492	1550	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 450 G 2	Ø525	1550	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 450 G 3	Ø539	1550	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 500 G 1	Ø591	2100	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 500 G 2	Ø602	2100	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 500 G 3	Ø619	2100	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 600 G 1	Ø671	2150	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 600 G 2	Ø684	2150	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 600 G 3	Ø698	2150	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 700 G 1															
ECO 700 G 2															
ECO 700 G 3															
ECO 800 G 1															
ECO 800 G 2															
ECO 800 G 3															
ECO 900 G 1															
ECO 900 G 2															
ECO 900 G 3															

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INDUSTRY ECO

LIGHT OIL - ASPHALT

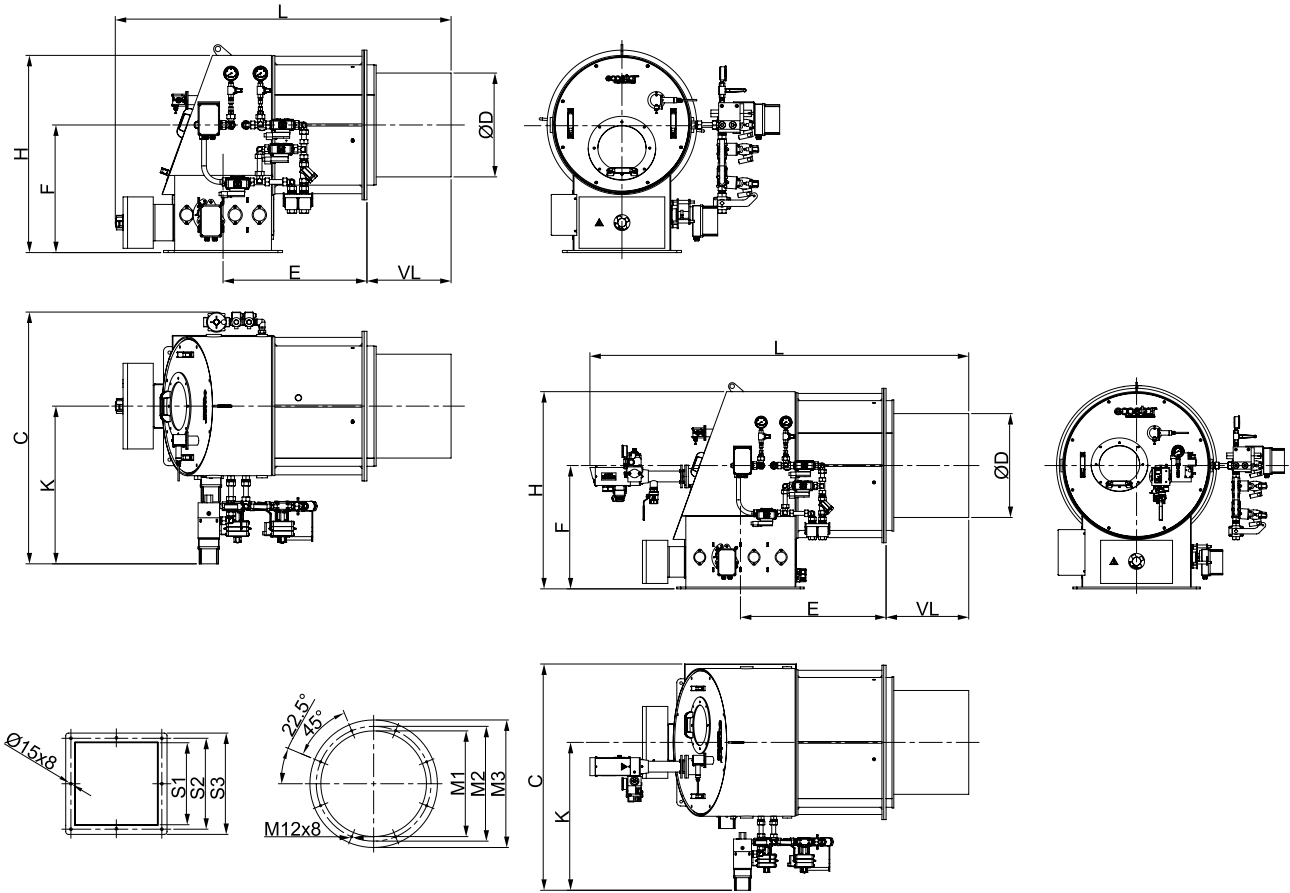


	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
ECO 300 OL 1	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570
ECO 300 OL 2	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570
ECO 350 OL 1	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
ECO 350 OL 2	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
ECO 350 OL 3	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
ECO 400 OL 1	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670
ECO 400 OL 2	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670
ECO 400 OL 3	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670
ECO 450 OL 1	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750
ECO 450 OL 2	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750
ECO 450 OL 3	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750
ECO 500 OL 1	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
ECO 500 OL 2	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
ECO 500 OL 3	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
ECO 600 OL 1	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
ECO 600 OL 2	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
ECO 600 OL 3	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
ECO 700 OL 1														
ECO 700 OL 2														
ECO 700 OL 3														
ECO 800 OL 1														
ECO 800 OL 2														
ECO 800 OL 3														
ECO 900 OL 1														
ECO 900 OL 2														
ECO 900 OL 3														

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INDUSTRY ECO

LIGHT OIL - STEAM

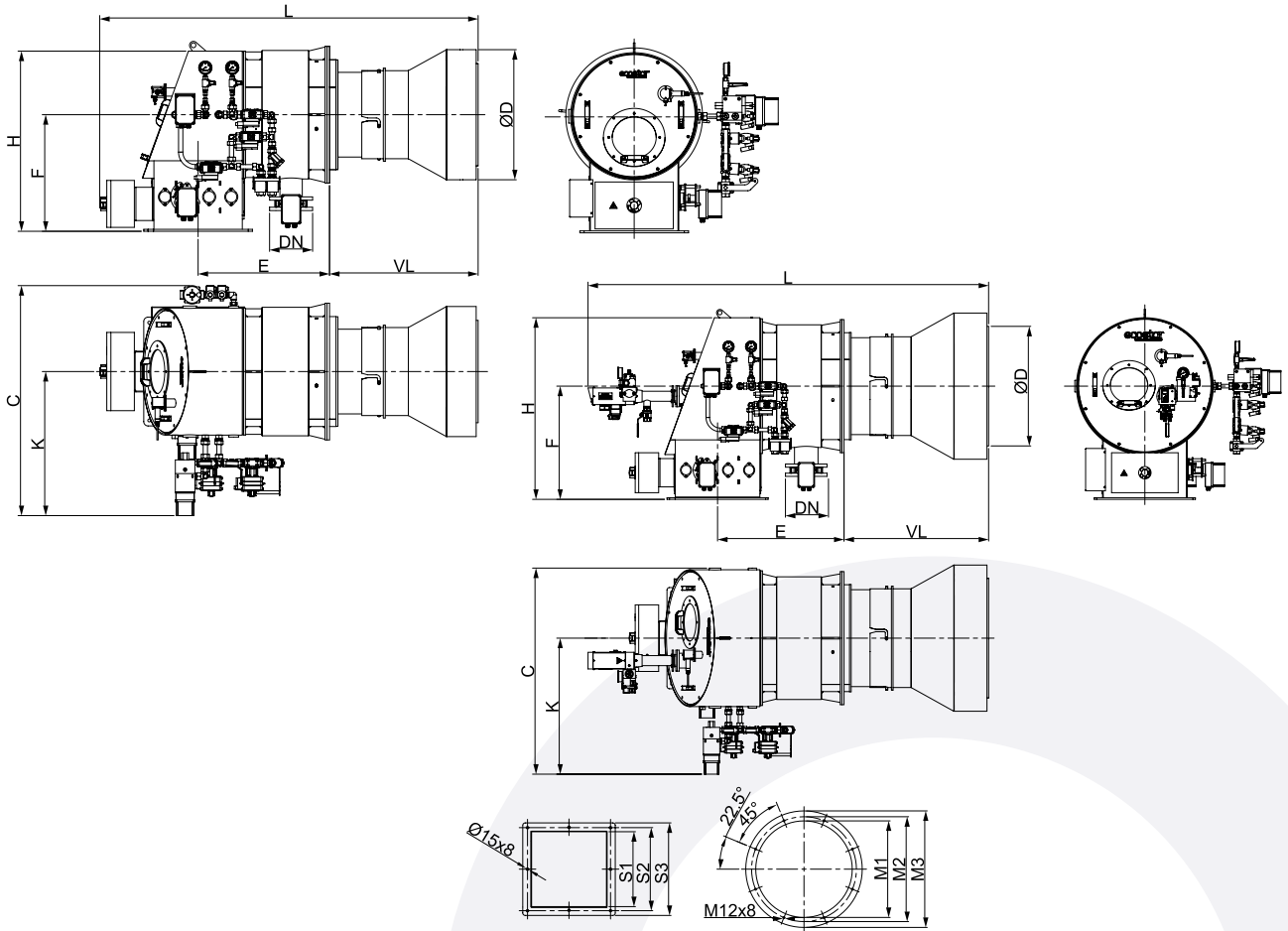


	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
ECO 250 OL 1	Ø219	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320
ECO 250 OL 2	Ø246	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320
ECO 300 OL 1	Ø259	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320
ECO 300 OL 2	Ø295	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320
ECO 350 OL 1	Ø323	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
ECO 350 OL 2	Ø350	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
ECO 350 OL 3	Ø365	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
ECO 400 OL 1	Ø393	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370
ECO 400 OL 2	Ø401	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370
ECO 400 OL 3	Ø431	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370
ECO 450 OL 1	Ø450	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350
ECO 450 OL 2	Ø485	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350
ECO 450 OL 3	Ø499	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350
ECO 500 OL1	Ø542	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
ECO 500 OL 2	Ø556	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
ECO 500 OL 3	Ø568	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
ECO 600 OL 1	Ø599	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
ECO 600 OL 2	Ø619	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
ECO 600 OL 3	Ø630	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
ECO 700 OL 1														
ECO 700 OL 2														
ECO 700 OL 3														
ECO 800 OL 1														
ECO 800 OL 2														
ECO 800 OL 3														
ECO 900 OL 1														
ECO 900 OL 2														
ECO 900 OL 3														

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INDUSTRY ECO

LIGHT OIL+GAS - ASPHALT

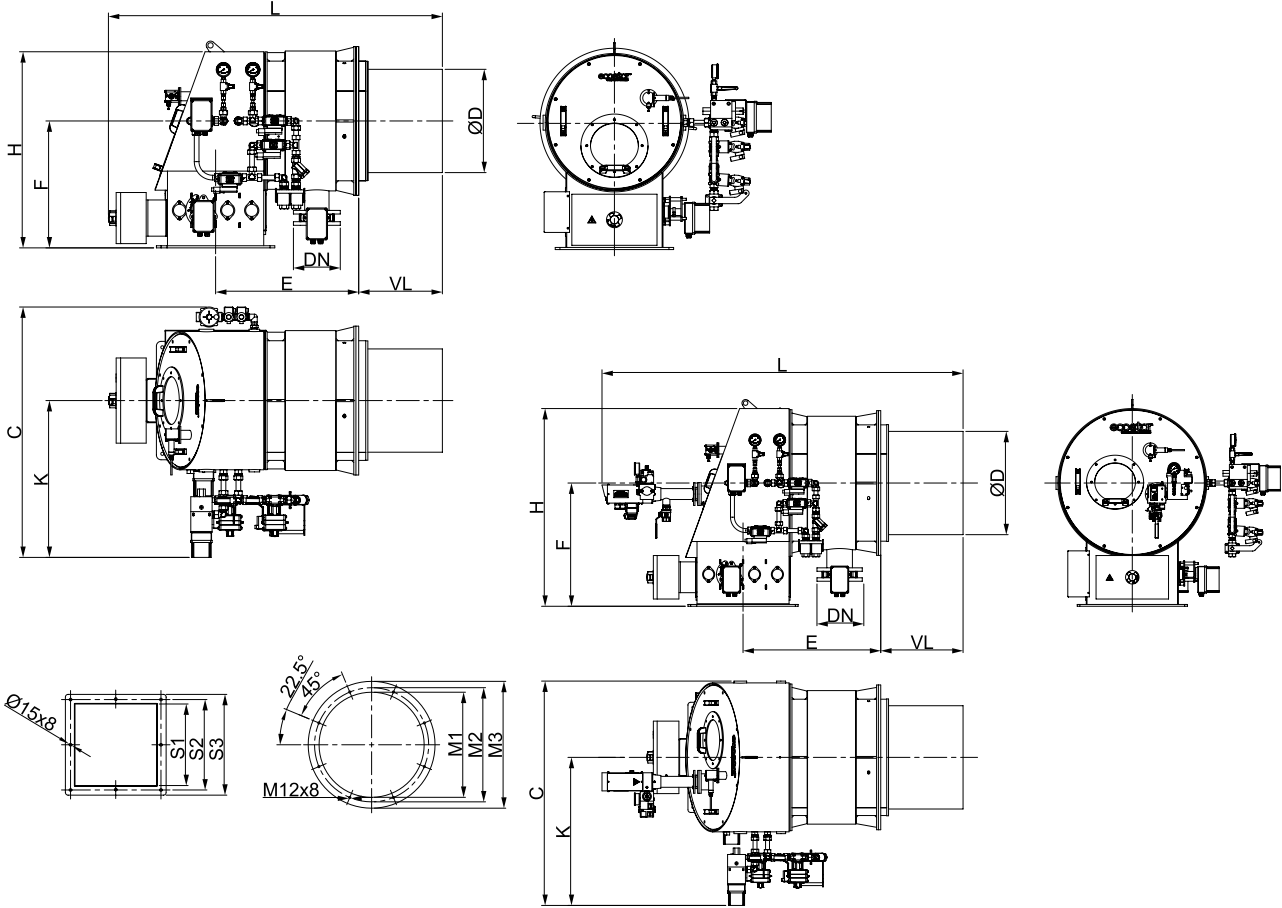


	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
ECO 300 KL 1	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
ECO 300 KL 2	-	1850	650	875	500	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
ECO 350 KL 1	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 350 KL 2	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 350 KL 3	Ø520	1900	675	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
ECO 400 KL 1	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 400 KL 2	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 400 KL 3	Ø590	1900	675	920	600	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
ECO 450 KL 1	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 450 KL 2	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 450 KL 3	Ø665	1950	675	960	640	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
ECO 500 KL 1	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 500 KL 2	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 500 KL 3	Ø740	2500	760	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
ECO 600 KL 1	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 600 KL 2	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 600 KL 3	Ø890	2550	810	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
ECO 700 KL 1															
ECO 700 KL 2															
ECO 700 KL 3															
ECO 800 KL 1															
ECO 800 KL 2															
ECO 800 KL 3															
ECO 900 KL 1															
ECO 900 KL 2															
ECO 900 KL 3															

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INDUSTRY ECO

LIGHT OIL+GAS - STEAM



	Ø D	L	E	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
ECO 250 KL 1	Ø219	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320	DN50
ECO 250 KL 2	Ø246	1600	650	875	500	1100	725	250	300	340	Ø330	Ø380	Ø450	320	DN50
ECO 300 KL 1	Ø259	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
ECO 300 KL 2	Ø295	1600	650	875	500	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
ECO 350 KL 1	Ø323	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 350 KL 2	Ø350	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 350 KL 3	Ø365	1550	675	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
ECO 400 KL 1	Ø393	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 400 KL 2	Ø401	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 400 KL 3	Ø431	1600	675	920	600	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
ECO 450 KL 1	Ø450	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 450 KL 2	Ø485	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 450 KL 3	Ø499	1550	675	960	640	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
ECO 500 KL1	Ø542	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 500 KL 2	Ø556	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 500 KL 3	Ø568	2105	760	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
ECO 600 KL 1	Ø599	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 600 KL 2	Ø619	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 600 KL 3	Ø630	2155	810	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
ECO 700 KL 1															
ECO 700 KL 2															
ECO 700 KL 3															
ECO 800 KL 1															
ECO 800 KL 2															
ECO 800 KL 3															
ECO 900 KL 1															
ECO 900 KL 2															
ECO 900 KL 3															

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INDUSTRIAL BURNERS

MIB

- ECOSTAR MIB series industrial burners with monoblock body structure are used in hot water boilers, steam boilers, hot oil boilers, drying, asphalt plant dryers applications.
- Natural Gas, LPG, Heavy Oil, Light Oil, Biogas, Pulverized Coal and special fuels can be used in MIB series industrial burners.
- With different combustion nozzle designs and flame pipe lengths suitable for the process, it can work in harmony in different combustion chambers, including modernized applications.
- There are turbulators developed for different types of flame forms.
- Optional high pressure fan on demand. (25mbar & 50mbar)
- High fire safety thanks to flame control with photocell.
- Special design pilot ignition burners are available for ignition (ECOSTAR PAL burner is standard in MIB-500 series and above).
- Light oil filtering and pumping station is produced externally according to customer demand.
- Light oil filtering, heating and pumping station are produced externally according to customer demand.
- The control panel of MIB series burners can be produced as integrated or external panel according to the process needs. In this way, it is possible to use on the process management room or local area.
- Possible to request as mechanical and electronic modulating depending on the process needs.
- Thanks to its high pressure and low pressure liquid fuel lances, it offers various application according to special needs.



MIB

INDUSTRIAL BURNERS

CAPACITY TABLE

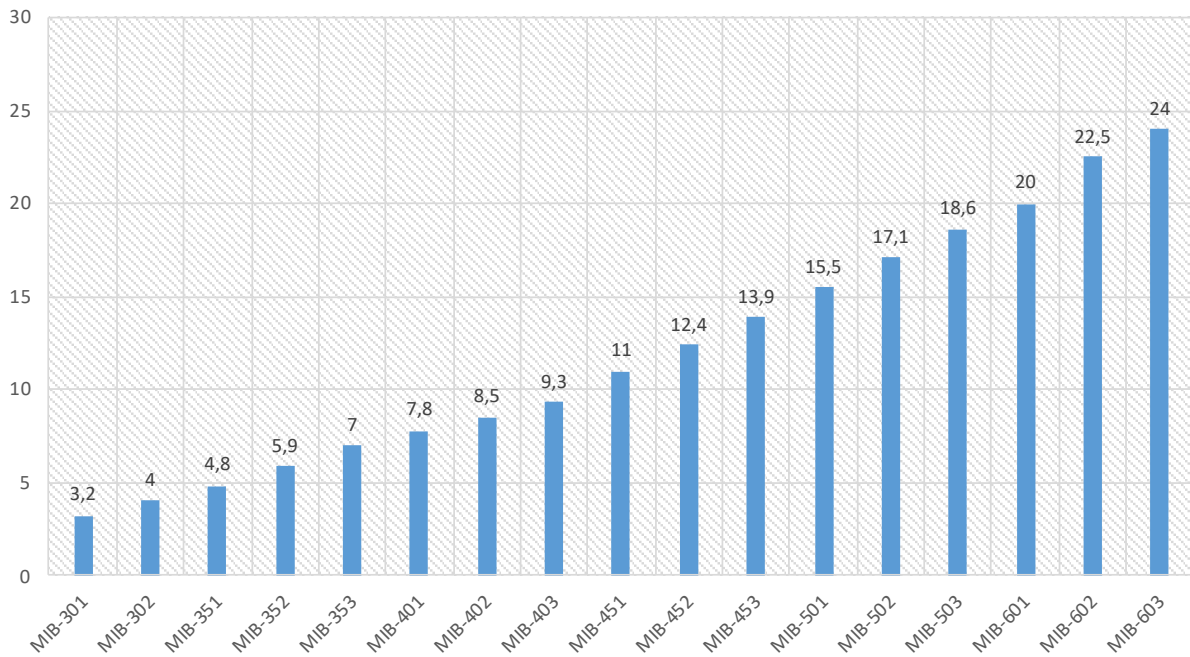
MIB SERIES INDUSTRIAL BURNERS CAPACITY TABLE					
BURNER TYPE	BURNER CAPACITY		NATURAL GAS CONSUMPTION	LIGHT OIL CONSUMPTION	HEAVY OIL CONSUMPTION
	Max. MW	Max. kcal/h	Max. kg/h	Max. kg/h	Max. kg/h
MIB-301	3,2	2.752.000	334	270	285
MIB-302	4	3.440.000	417	337	356
MIB-351	4,8	4.128.000	500	405	428
MIB-352	5,9	5.074.000	615	497	526
MIB-353	7	6.020.000	730	590	624
MIB-401	7,8	6.708.000	813	658	695
MIB-402	8,5	7.310.000	886	717	758
MIB-403	9,3	7.998.000	969	784	829
MIB-451	11	9.460.000	1147	927	980
MIB-452	12,4	10.664.000	1293	1045	1105
MIB-453	13,9	11.954.000	1449	1172	1239
MIB-501	15,5	13.330.000	1616	1307	1381
MIB-502	17,1	14.706.000	1783	1442	1524
MIB-503	18,6	15.996.000	1939	1568	1658
MIB-601	20	17.200.000	2085	1686	1782
MIB-602	22,5	19.350.000	2345	1897	2005
MIB-603	24	20.640.000	2502	2024	2139
Mechanical Modulating Ratio: Natural Gas 5:1, Liquid Fuel 3:1 Electronic Modulating Ratio: Natural Gas 10:1, Liquid Fuel 5:1					

MIB

INDUSTRIAL BURNERS

BURNER SPECIFICATIONS

MIB INDUSTRIAL BURNERS

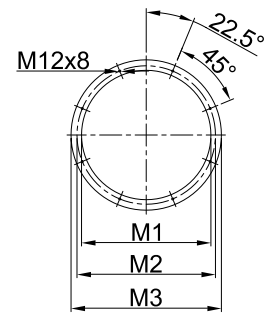
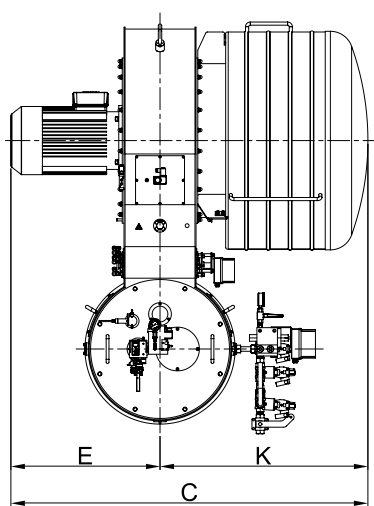
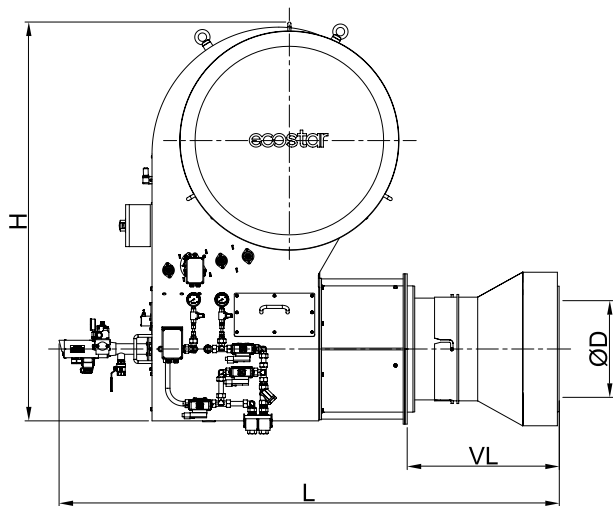
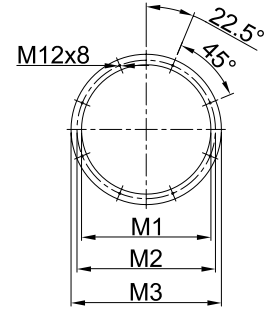
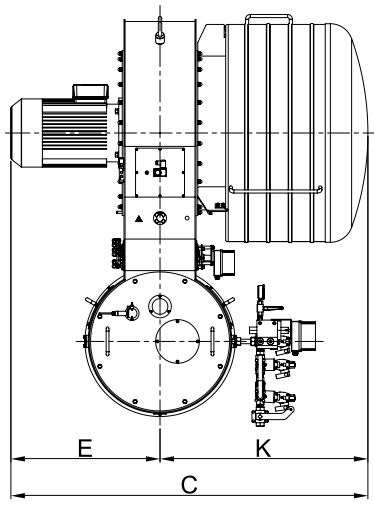
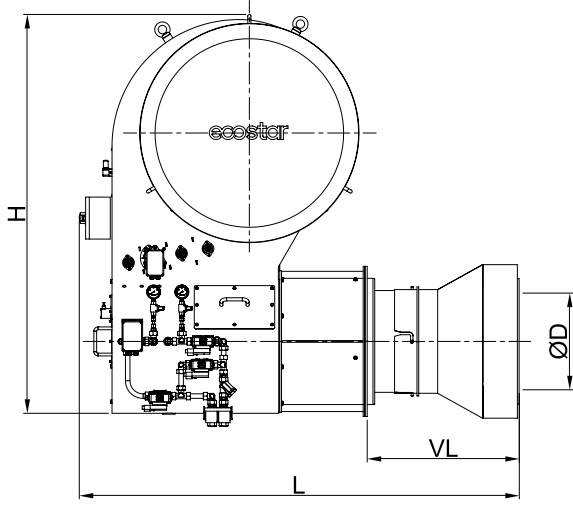


SPECIFICATIONS	MIB 301 ME	MIB 301 EL	MIB 350 ME	MIB 350 EL	MIB 400 ME	MIB 400 EL	MIB 450 ME	MIB 450 EL	MIB 500 ME	MIB 500 EL	MIB 600 ME	MIB 600 EL
Electronic modulating control option	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔
Mechanical modulating control option	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘
Photocell flame control	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Internal pilot ignition	✔	✔	✔	✔	✔	✔	✔	✔	✘	✘	✘	✘
ECOSTAR PAL pilot ignition burner	✘	✘	✘	✘	✘	✘	✘	✘	✔	✔	✔	✔
Pilot ignition gas valve	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Air pressure switch	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Options of operating with Gas / Heavy Oil / Light Oil / Gas-Light Oil / Gas-Heavy Oil	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
In liquid fuel products, high-pressure mechanic atomization lance or low-pressure air/steam-atomization lance,	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Different mounting options	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Serviceability without dismounting the burner from the boiler /service cover	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Different flame tube length	○	○	○	○	○	○	○	○	○	○	○	○
Control via PLC with BMS or software	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
O-2CO combustion management system connection	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
Combustion air fan inverter connection	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
Fuel preparation stations (Gas line/Heavy Oil Station/Light Oil Station)	○	○	○	○	○	○	○	○	○	○	○	○
TSE EN Declaration of Conformity	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

✘ Not Included / N/A ✔ Included / Available ○ Optional ME Mechanical Modulating EL Electronic Modulating

INDUSTRY MIB

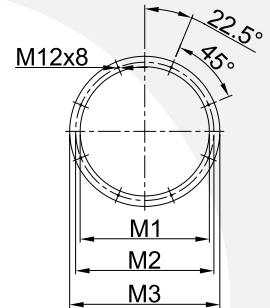
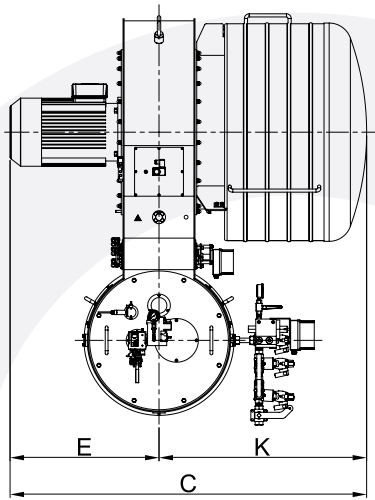
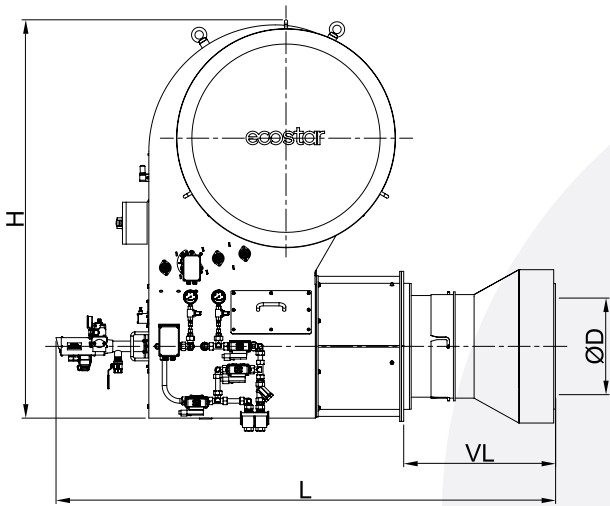
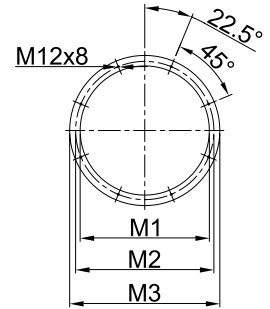
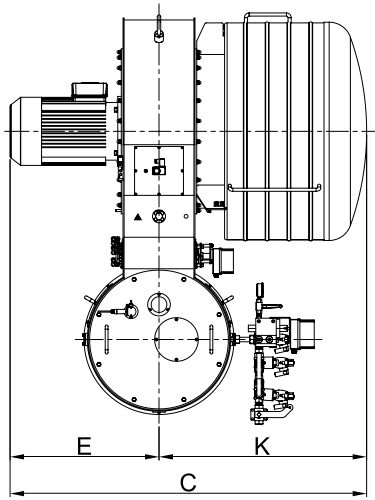
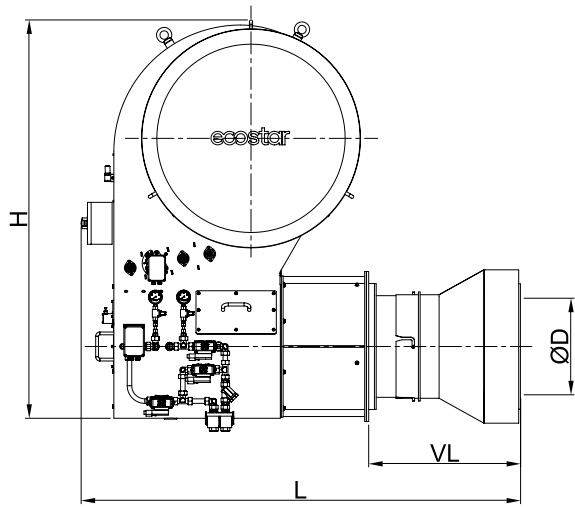
EL ASPHALT



	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL	DN
MIB-301 EL	Ø268	1900	1650	1000	650	1750	Ø380	Ø430	Ø500	570	DN65
MIB-302 EL	Ø278	1900	1650	1000	650	1750	Ø380	Ø430	Ø500	570	DN65
MIB-351 EL	Ø298	1900	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-352 EL	Ø323	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-353 EL	Ø343	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-401 EL	Ø358	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-402 EL	Ø373	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-403 EL	Ø388	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-451 EL	Ø408	2100	1730	1050	730	2300	Ø580	Ø630	Ø700	750	DN100
MIB-452 EL	Ø433	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-453 EL	Ø453	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-501 EL	Ø483	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-502 EL	Ø503	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-503 EL	Ø523	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-601 EL	Ø553	2900	1970	1200	770	2300	Ø740	Ø792	Ø860	870	DN125
MIB-602 EL	Ø568	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125
MIB-603 EL	Ø588	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125

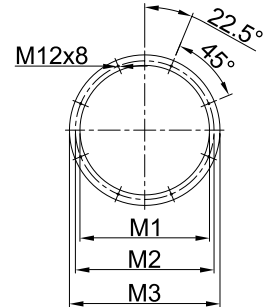
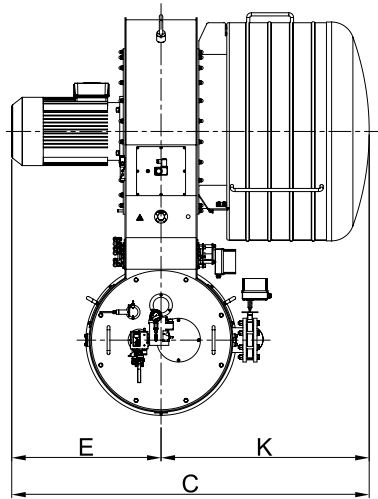
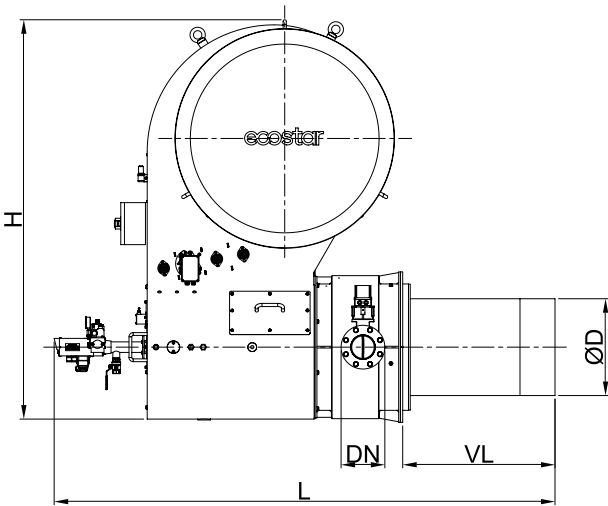
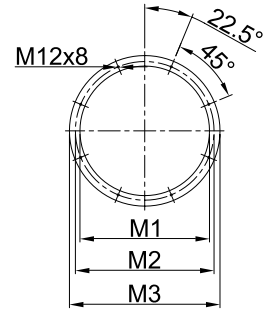
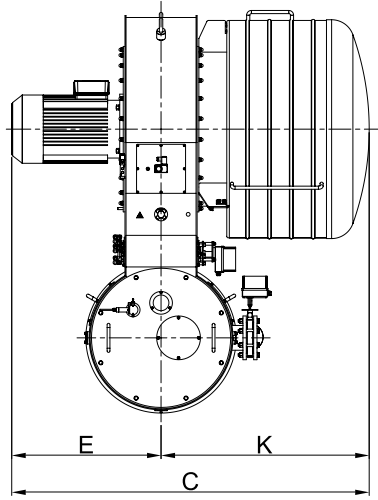
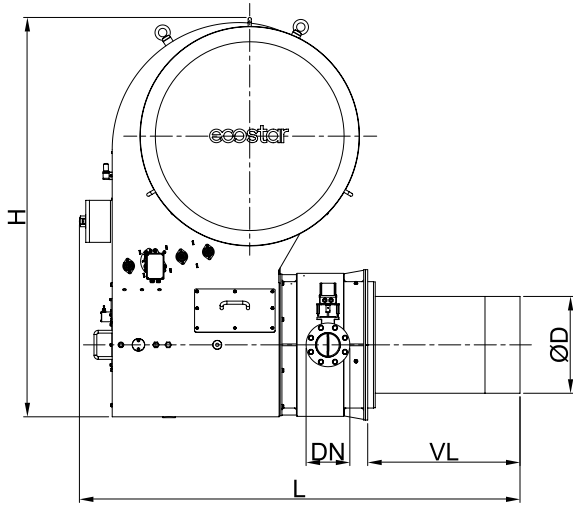
INDUSTRY MIB

MS ASPHALT



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MIB-302 MS	Ø278	1900	1650	1000	650	1750	Ø380	Ø430	Ø500	570	DN65
MIB-351 MS	Ø298	1900	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-352 MS	Ø323	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-353 MS	Ø343	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-401 MS	Ø358	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-402 MS	Ø373	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-403 MS	Ø388	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-451 MS	Ø408	2100	1730	1050	730	2300	Ø580	Ø630	Ø700	750	DN100
MIB-452 MS	Ø433	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-453 MS	Ø453	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-501 MS	Ø483	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-502 MS	Ø503	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-503 MS	Ø523	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-601 MS	Ø553	2900	1970	1200	770	2300	Ø740	Ø792	Ø860	870	DN125
MIB-602 MS	Ø568	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125
MIB-603 MS	Ø588	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125

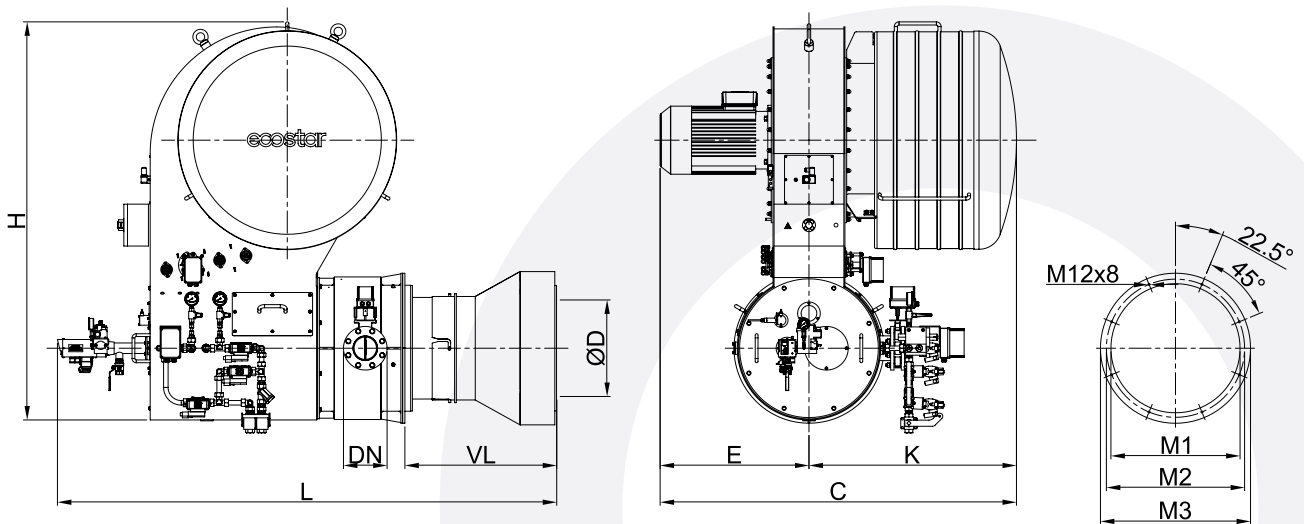
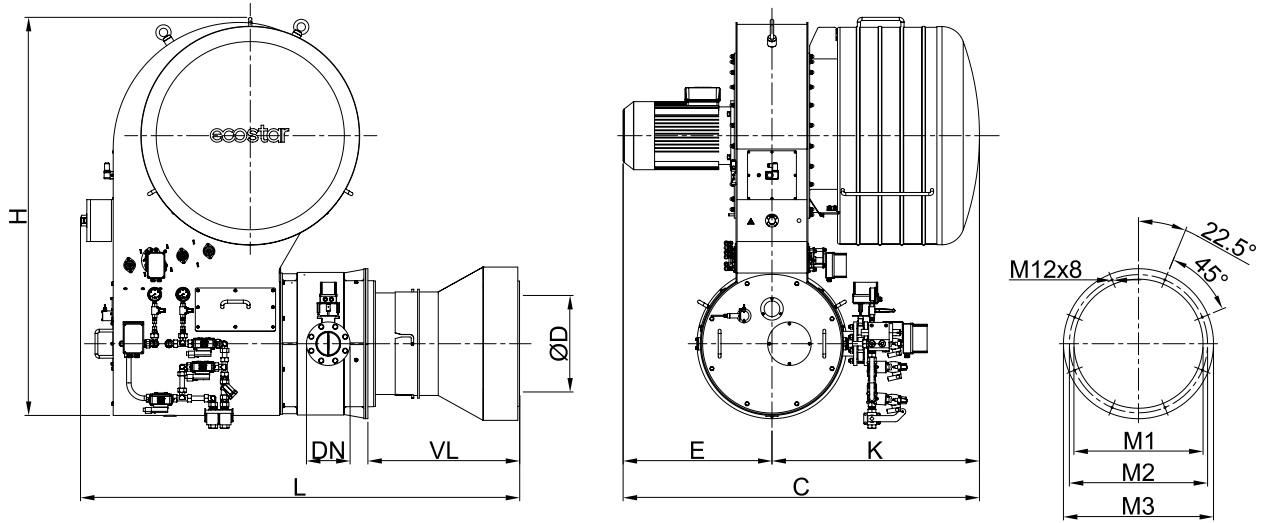
INDUSTRY MIB N ASPHALT



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MIB-302 N	Ø278	1900	1650	1000	650	1750	Ø380	Ø430	Ø500	570	DN65
MIB-351 N	Ø298	1900	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-352 N	Ø323	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-353 N	Ø343	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-401 N	Ø358	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-402 N	Ø373	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-403 N	Ø388	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-451 N	Ø408	2100	1730	1050	730	2300	Ø580	Ø630	Ø700	750	DN100
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MIB-502 N	Ø503	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-503 N	Ø523	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-601 N	Ø553	2900	1970	1200	770	2300	Ø740	Ø792	Ø860	870	DN125
MIB-602 N	Ø568	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125
MIB-603 N	Ø588	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125

INDUSTRY MIB

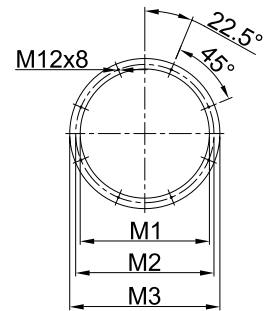
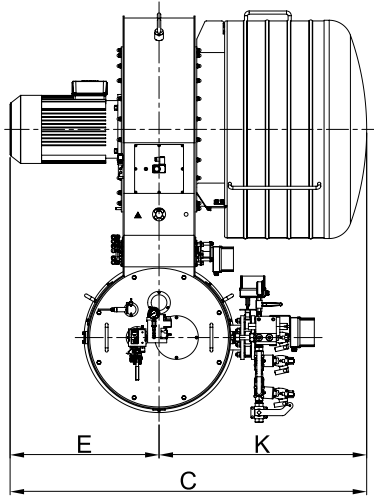
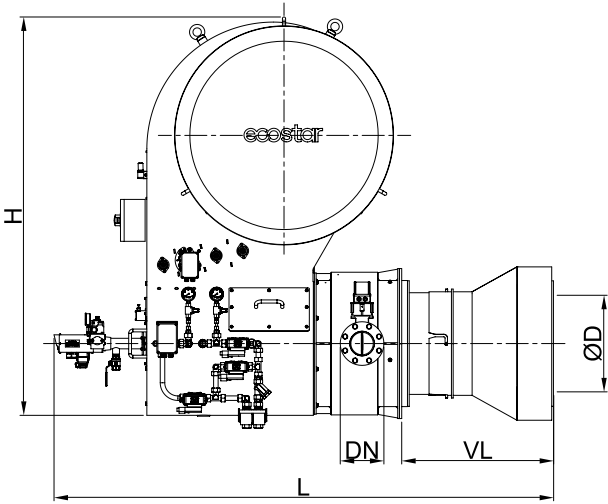
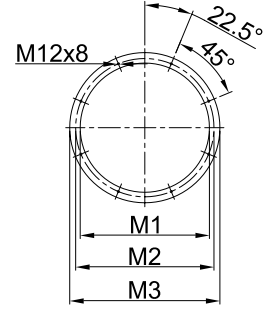
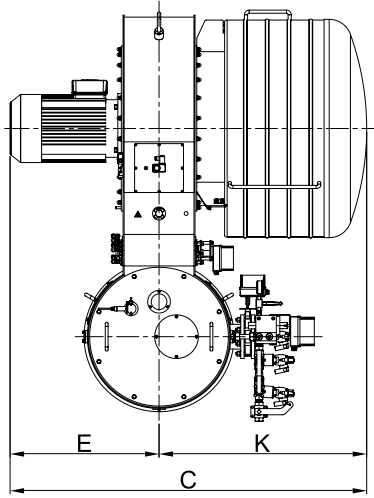
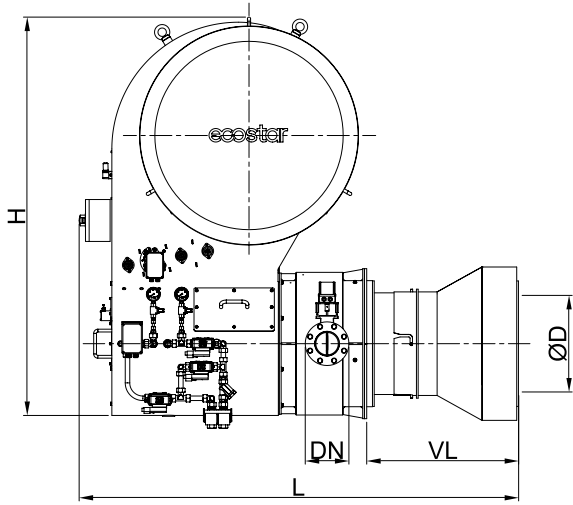
NEL ASPHALT



	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL	DN
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MIB-302 NEL	Ø278	1900	1650	1000	650	1750	Ø380	Ø430	Ø500	570	DN65
MIB-351 NEL	Ø298	1900	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-352 NEL	Ø323	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-353 NEL	Ø343	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-401 NEL	Ø358	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-402 NEL	Ø373	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-403 NEL	Ø388	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-451 NEL	Ø408	2100	1730	1050	730	2300	Ø580	Ø630	Ø700	750	DN100
MIB-452 NEL	Ø433	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-453 NEL	Ø453	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-501 NEL	Ø483	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-502 NEL	Ø503	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-503 NEL	Ø523	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-601 NEL	Ø553	2900	1970	1200	770	2300	Ø740	Ø792	Ø860	870	DN125
MIB-602 NEL	Ø568	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125
MIB-603 NEL	Ø588	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125

INDUSTRY MIB

NMS ASPHALT

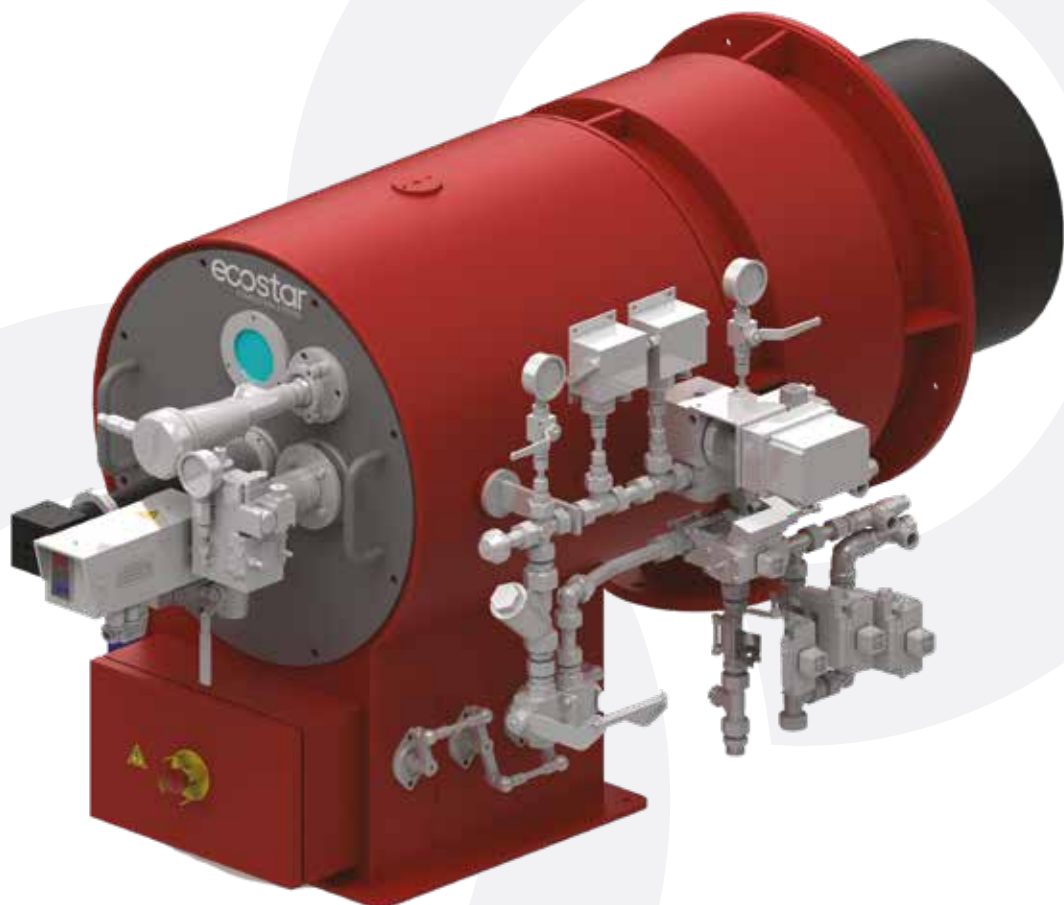


	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL	DN
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MIB-302 NMS	Ø278	1900	1650	1000	650	1750	Ø380	Ø430	Ø500	570	DN65
MIB-351 NMS	Ø298	1900	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-352 NMS	Ø323	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-353 NMS	Ø343	2000	1650	1000	650	1750	Ø430	Ø480	Ø550	670	DN80
MIB-401 NMS	Ø358	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-402 NMS	Ø373	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-403 NMS	Ø388	2000	1650	1000	650	1750	Ø480	Ø530	Ø600	670	DN80
MIB-451 NMS	Ø408	2100	1730	1050	730	2300	Ø580	Ø630	Ø700	750	DN100
MIB-452 NMS	Ø433	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-453 NMS	Ø453	2100	1820	1050	770	2300	Ø580	Ø630	Ø700	750	DN100
MIB-501 NMS	Ø483	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-502 NMS	Ø503	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-503 NMS	Ø523	2900	1970	1200	770	2300	Ø660	Ø710	Ø800	870	DN125
MIB-601 NMS	Ø553	2900	1970	1200	770	2300	Ø740	Ø792	Ø860	870	DN125
MIB-602 NMS	Ø568	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125
MIB-603 NMS	Ø588	2900	2040	1200	840	2300	Ø740	Ø792	Ø860	870	DN125

INDUSTRIAL BURNERS

DIB

- ECOSTAR DIB series industrial burners with duoblock body structure are used in steam boilers, hot oil boilers, start-up applications and hot air generators.
- Natural gas, LPG, Heavy Oil, Light Oil, Biogas and special fuels can be used.
- With different combustion nozzle designs and flame pipe lengths suitable for the process, it can work in harmony in different combustion chambers, including modernized applications.
- Able to operate at combustion air fan suitable for the process and at 200°C combustion air temperatures. (It is painted with high temperature resistant paint; product capacity varies in hot air operation.)
- Suitable for manufacturing from completely stainless material in processes that require chemical resistance.
- Possible to request as mechanical, electronic and modulating depending on the process needs.
- Light oil filtering and pumping station is produced externally according to customer demand.
- Light oil filtering, heating and pumping station are produced externally according to customer demand.
- Special design pilot ignition burners are available for ignition (ECOSTAR PAL burner is standard in DIB-500 series and above).
- Combustion optimization with O₂-CO trim system adaptation in electronic proportional burners, if demanded.
- Energy saving with fan speed control in electronic proportional burners, if demanded.
- Remote management by connecting to PLC systems using BMS (Burner Management System) or software.
- High fire safety thanks to flame control with photocell.



DIB

INDUSTRIAL BURNERS

CAPACITY TABLE

DIB SERIES INDUSTRIAL BURNERS CAPACITY TABLE					
BURNER TYPE	BURNER CAPACITY		NATURAL GAS CONSUMPTION	LIGHT OIL CONSUMPTION	HEAVY OIL CONSUMPTION
	Max. MW	Max. kcal/h	Max. kg/h	Max. kg/h	Max. kg/h
DIB-301	3,2	2.752.000	334	270	285
DIB-302	4	3.440.000	417	337	356
DIB-351	4,8	4.128.000	500	405	428
DIB-352	5,9	5.074.000	615	497	526
DIB-353	7	6.020.000	730	590	624
DIB-401	7,8	6.708.000	813	658	695
DIB-402	8,5	7.310.000	886	717	758
DIB-403	9,3	7.998.000	969	784	829
DIB-451	11	9.460.000	1147	927	980
DIB-452	12,4	10.664.000	1293	1045	1105
DIB-453	13,9	11.954.000	1449	1172	1239
DIB-501	15,5	13.330.000	1616	1307	1381
DIB-502	17,1	14.706.000	1783	1442	1524
DIB-503	18,6	15.996.000	1939	1568	1658
DIB-601	20	17.200.000	2085	1686	1782
DIB-602	22,5	19.350.000	2345	1897	2005
DIB-603	24	20.640.000	2502	2024	2139
Mechanical Modulating Ratio: Natural Gas 5:1, Liquid Fuel 3:1 Electronic Modulating Ratio: Natural Gas 10:1, Liquid Fuel 5:1					

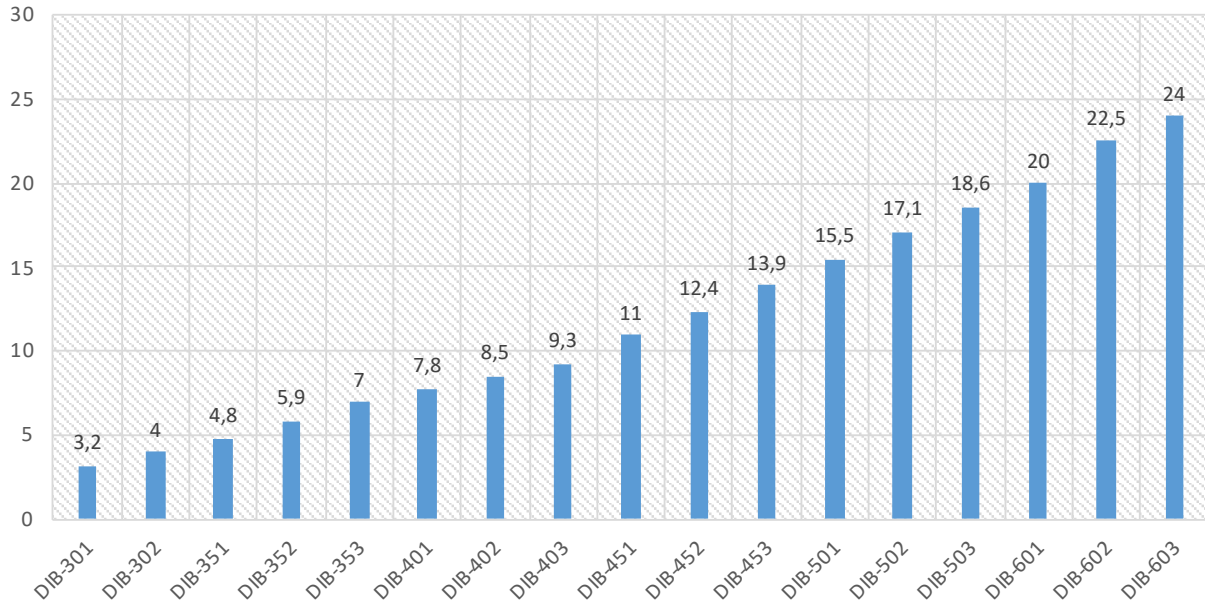
DIB

INDUSTRIAL BURNERS

BURNER SPECIFICATIONS

MW

DIB INDUSTRIAL BURNERS



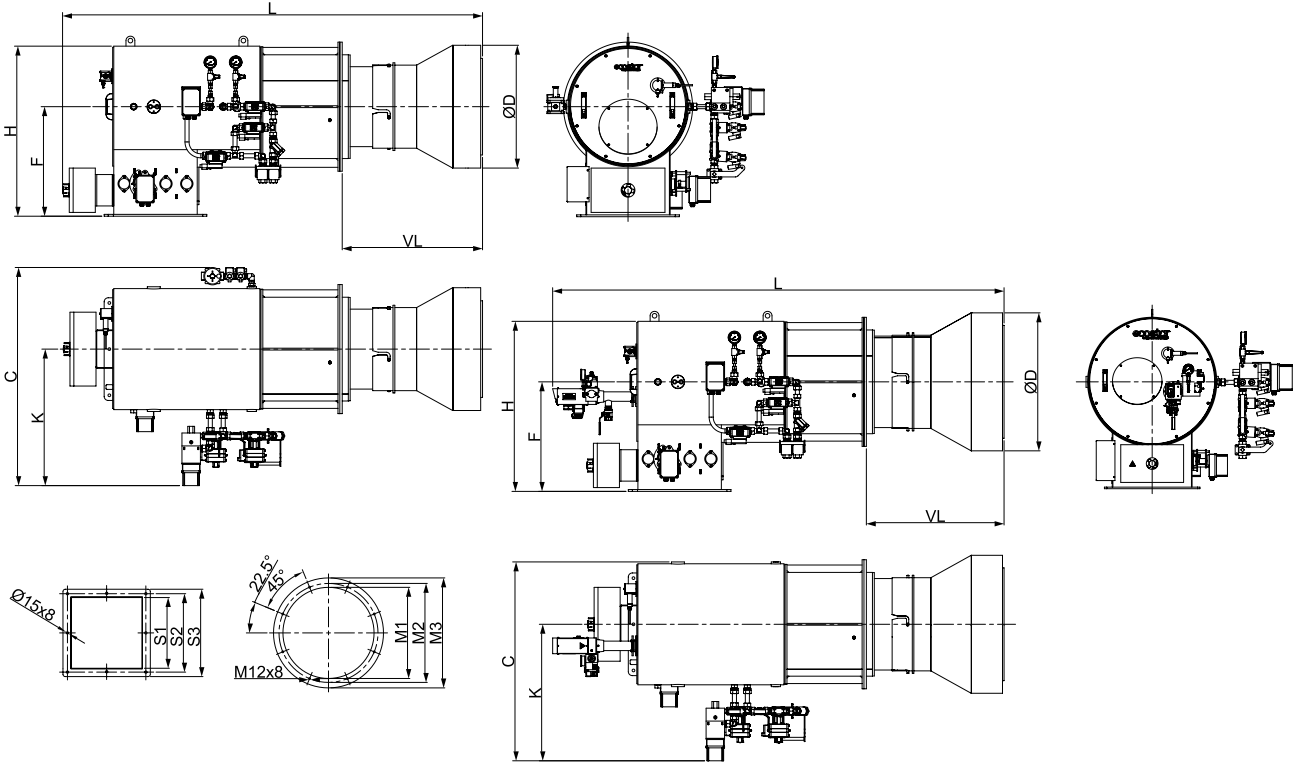
SPECIFICATIONS	DIB 300 ME	DIB 300 EL	DIB 350 ME	DIB 350 EL	DIB 400 ME	DIB 400 EL	DIB 450 ME	DIB 450 EL	DIB 500 ME	DIB 500 EL	DIB 600 ME	DIB 600 EL
Electronic modulating control option	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔
Mechanical modulating control option	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘	✔	✘
Photocell flame control	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Internal pilot ignition	✔	✔	✔	✔	✔	✔	✔	✔	✔	✘	✘	✘
ECOSTAR PAL pilot ignition burner	✘	✘	✘	✘	✘	✘	✘	✘	✔	✔	✔	✔
Pilot ignition gas valve	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Air pressure switch	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Options of operating with Gas / Heavy Oil / Light Oil / Gas-Light Oil / Gas-Heavy Oil	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
In liquid fuel products, high-pressure mechanic atomization lance or low-pressure air/steam-atomization lance,	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Different mounting options	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Serviceability without dismounting the burner from the boiler /service cover	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Different flame tube length	○	○	○	○	○	○	○	○	○	○	○	○
Control via PLC with BMS or software	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
O-2CO combustion management system connection	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
Combustion air fan inverter connection	✘	○	✘	○	✘	○	✘	○	✘	○	✘	○
Fuel preparation stations (Gas line/Heavy Oil Station/Light Oil Station)	○	○	○	○	○	○	○	○	○	○	○	○
TSE EN Declaration of Conformity	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
CE Declaration of Conformity	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

✘ Not Included / N/A ✔ Included / Available ○ Optional

ME Mechanical Modulating EL Electronic Modulating

INDUSTRY DIB

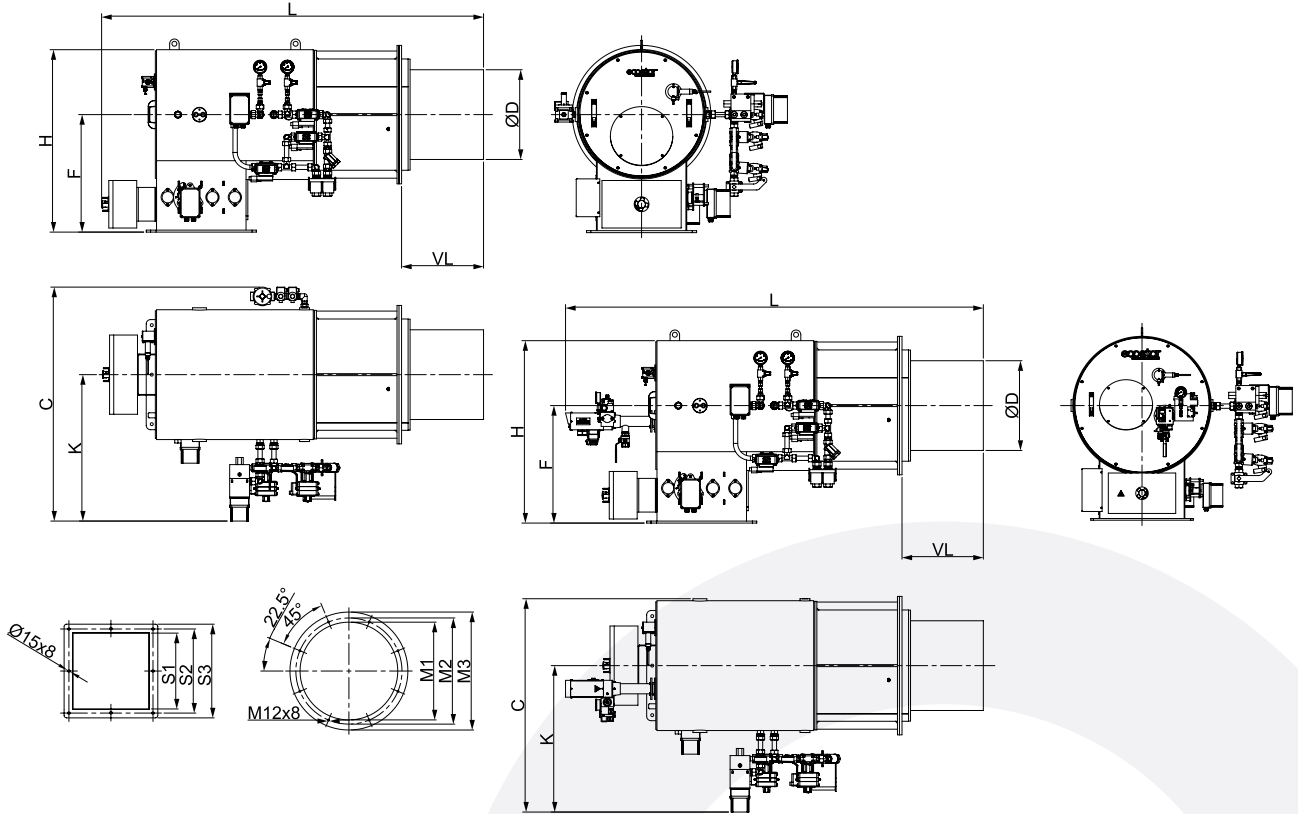
EL ASPHALT



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
DIB 300 EL 1	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570
DIB 300 EL 2	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570
DIB 350 EL 1	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
DIB 350 EL 2	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
DIB 350 EL 3	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
DIB 400 EL 1	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670
DIB 400 EL 2	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670
DIB 400 EL 3	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670
DIB 450 EL 1	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750
DIB 450 EL 2	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750
DIB 450 EL 3	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750
DIB 500 EL1	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
DIB 500 EL 2	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
DIB 500 EL 3	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
DIB 600 EL 1	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
DIB 600 EL 2	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
DIB 600 EL 3	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
DIB 700 EL 1													
DIB 700 EL 2													
DIB 700 EL 3													
DIB 800 EL 1													
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DIB 800 EL 3													
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DIB 900 EL 2													
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INDUSTRY DIB

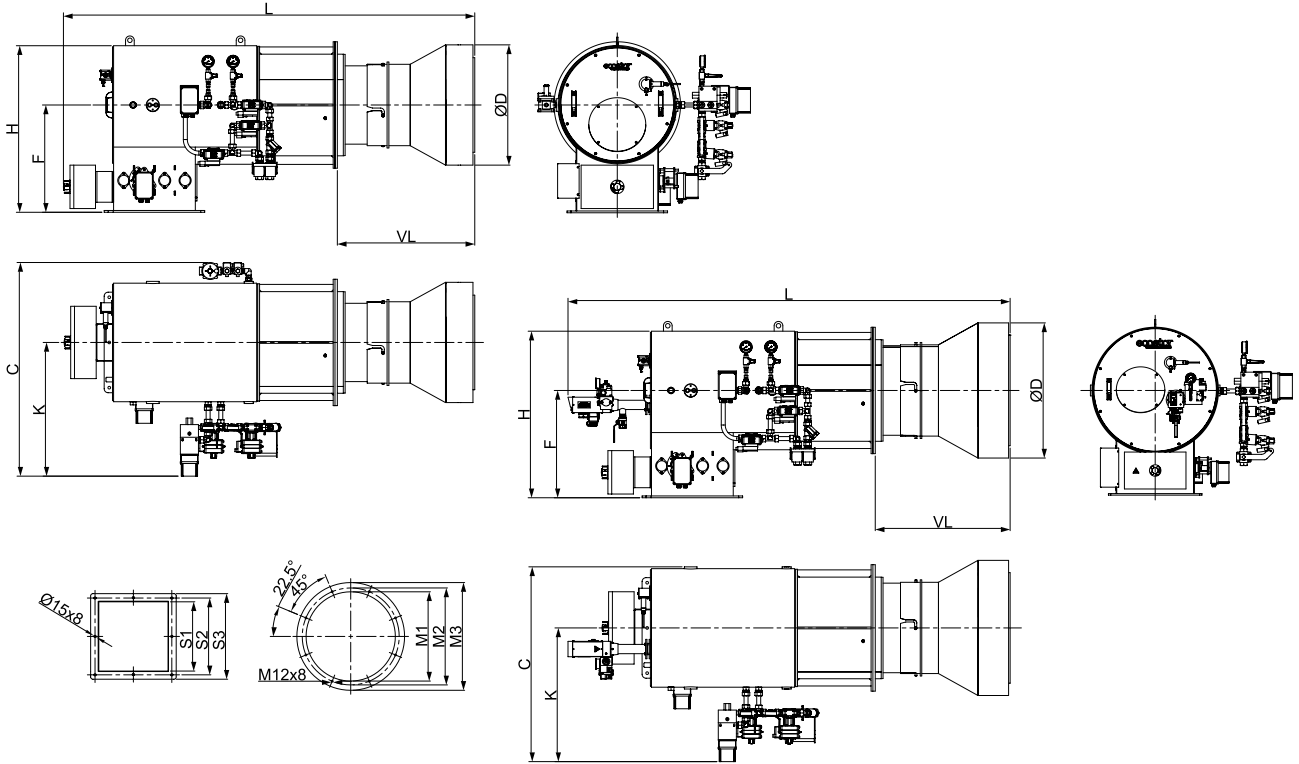
EL STEAM



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
DIB 300 EL 1	Ø259	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320
DIB 300 EL 2	Ø295	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320
DIB 350 EL 1	Ø323	1700	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
DIB 350 EL 2	Ø350	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
DIB 350 EL 3	Ø365	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
DIB 400 EL 1	Ø393	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370
DIB 400 EL 2	Ø401	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370
DIB 400 EL 3	Ø431	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370
DIB 450 EL 1	Ø450	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350
DIB 450 EL 2	Ø485	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350
DIB 450 EL 3	Ø499	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350
DIB 500 EL1	Ø542	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
DIB 500 EL 2	Ø556	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
DIB 500 EL 3	Ø568	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
DIB 600 EL 1	Ø599	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
DIB 600 EL 2	Ø619	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
DIB 600 EL 3	Ø630	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
DIB 700 EL 1													
DIB 700 EL 2													
DIB 700 EL 3													
DIB 800 EL 1													
DIB 800 EL 2													
DIB 800 EL 3													
DIB 900 EL 1													
DIB 900 EL 2													
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INDUSTRY DIB

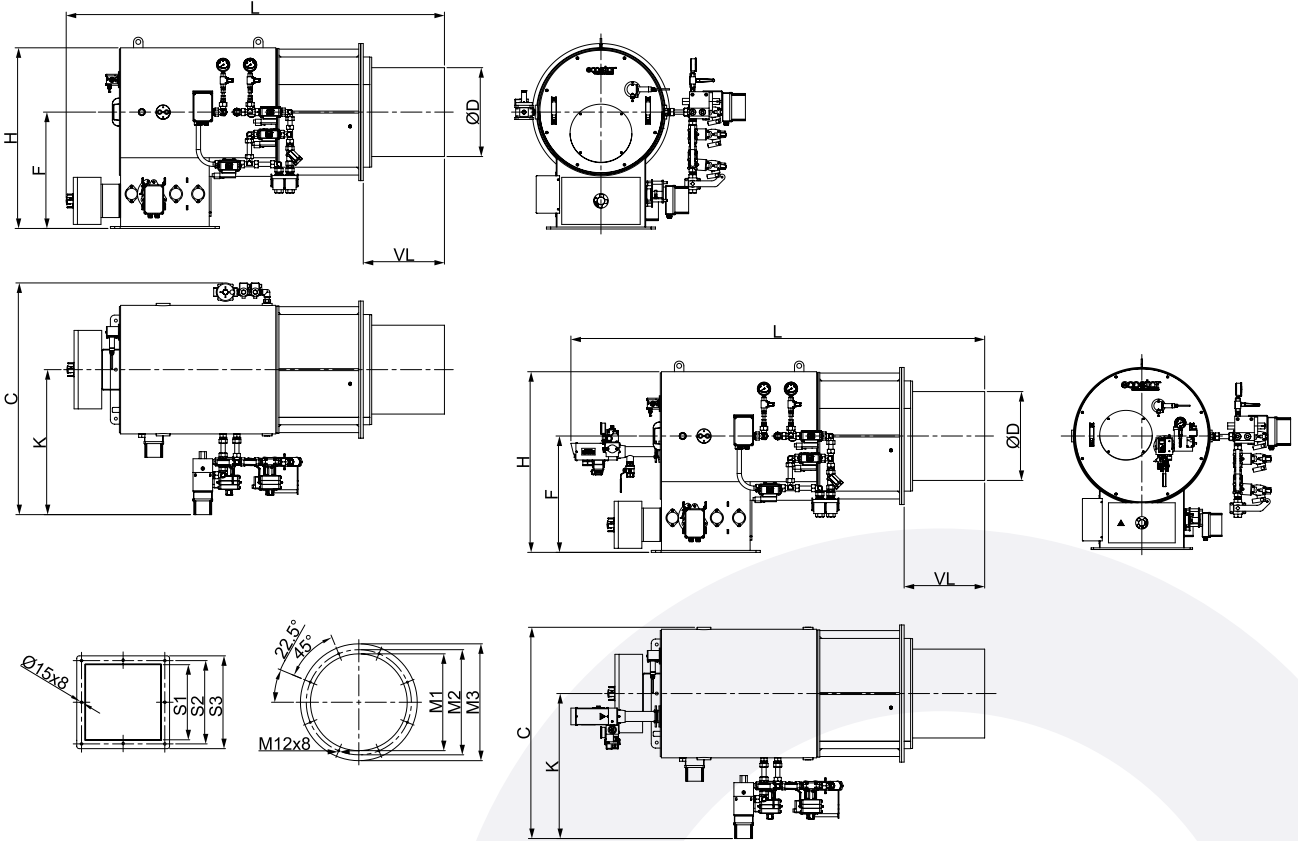
MS ASPHALT



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
DIB 300 MS 1	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570
DIB 300 MS 2	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570
DIB 350 MS 1	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
DIB 350 MS 2	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
DIB 350 MS 3	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670
DIB 400 MS 1	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670
DIB 400 MS 2	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670
DIB 400 MS 3	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670
DIB 450 MS 1	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750
DIB 450 MS 2	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750
DIB 450 MS 3	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750
DIB 500 MS1	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
DIB 500 MS 2	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
DIB 500 MS 3	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870
DIB 600 MS 1	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
DIB 600 MS 2	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
DIB 600 MS 3	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870
DIB 700 MS 1													
DIB 700 MS 2													
DIB 700 MS 3													
DIB 800 MS 1													
DIB 800 MS 2													
DIB 800 MS 3													
DIB 900 MS 1													
DIB 900 MS 2													
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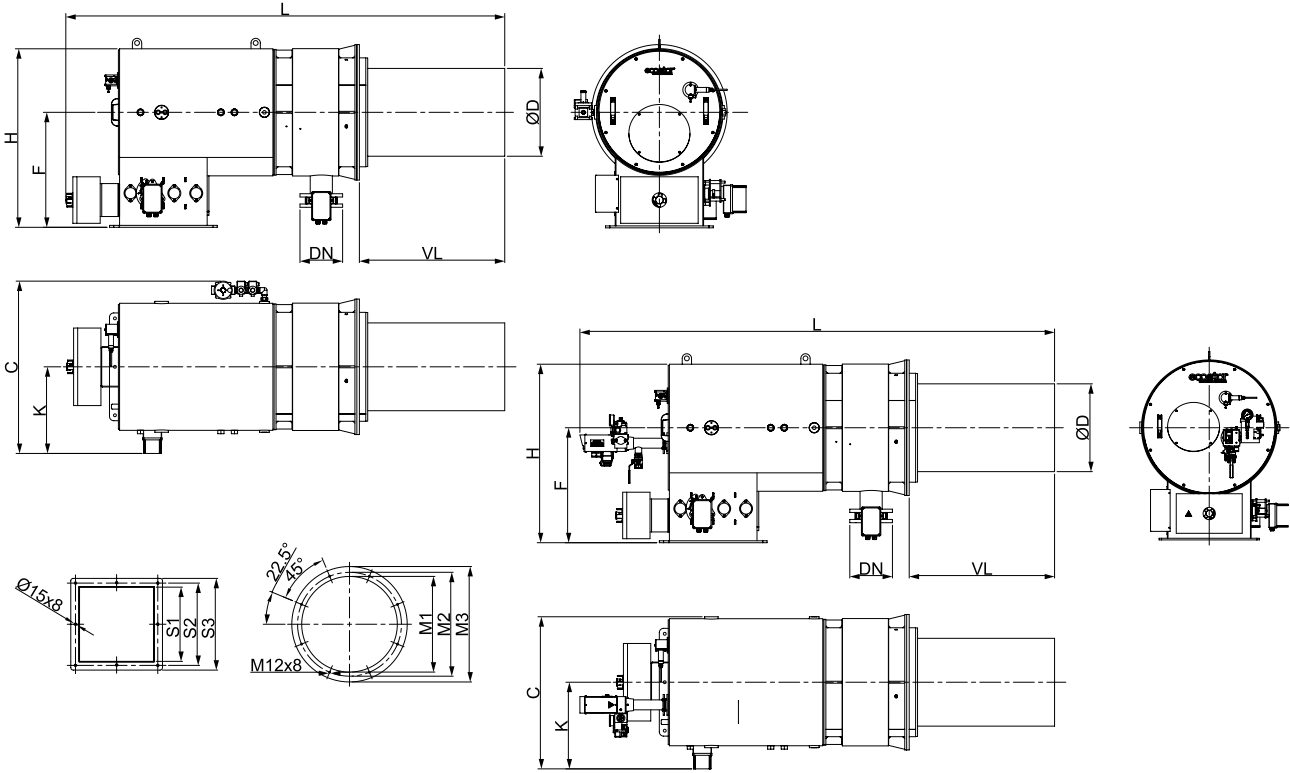
INDUSTRY DIB

MS STEAM



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL
DIB 300 MS 1	Ø259	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320
DIB 300 MS 2	Ø295	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320
DIB 350 MS 1	Ø323	1700	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
DIB 350 MS 2	Ø350	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
DIB 350 MS 3	Ø365	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320
DIB 400 MS 1	Ø393	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370
DIB 400 MS 2	Ø401	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370
DIB 400 MS 3	Ø431	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370
DIB 450 MS 1	Ø450	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350
DIB 450 MS 2	Ø485	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350
DIB 450 MS 3	Ø499	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350
DIB 500 MS1	Ø542	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
DIB 500 MS 2	Ø556	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
DIB 500 MS 3	Ø568	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475
DIB 600 MS 1	Ø599	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
DIB 600 MS 2	Ø619	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
DIB 600 MS 3	Ø630	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475
DIB 700 MS 1													
DIB 700 MS 2													
DIB 700 MS 3													
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DIB 800 MS 2													
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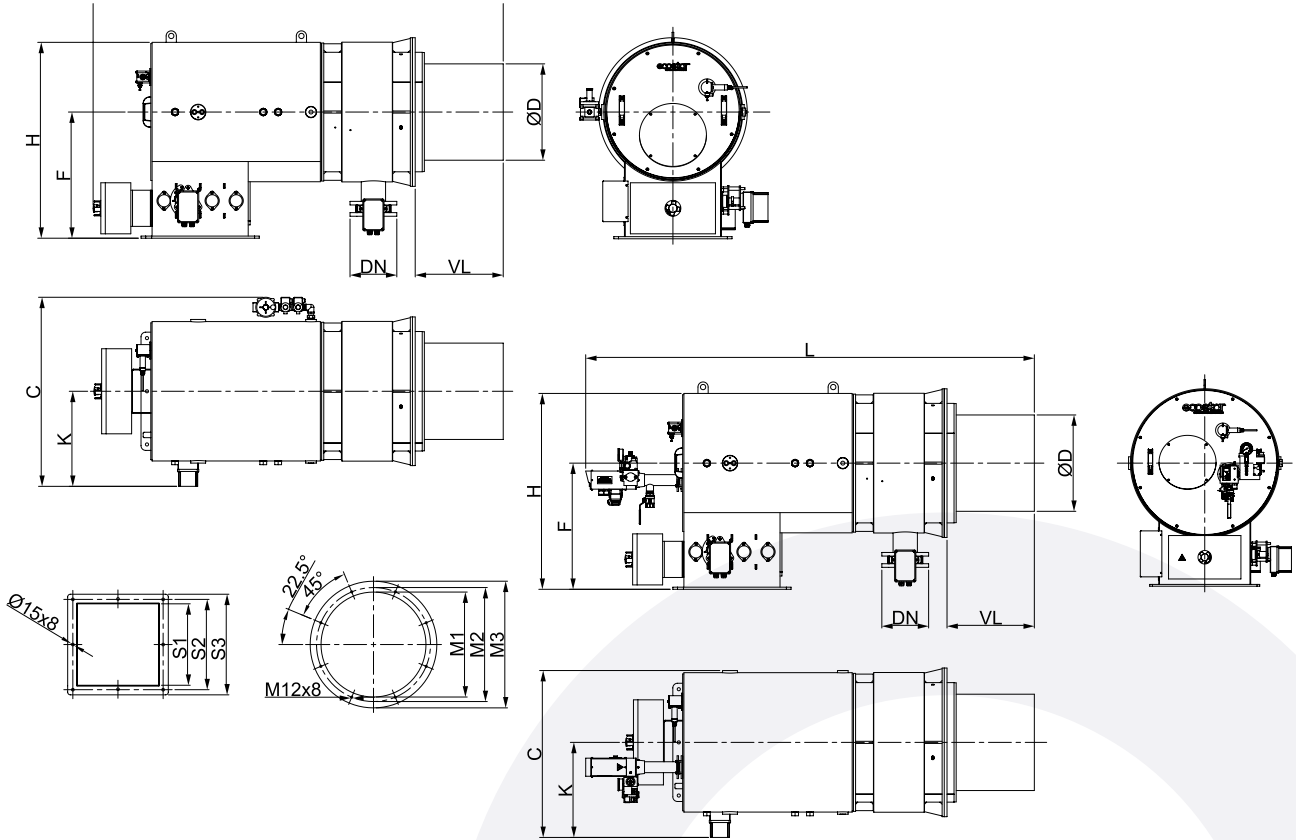
INDUSTRY DIB N ASPHALT



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
DIB 300 N 1	Ø268	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
DIB 300 N 2	Ø278	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
DIB 350 N 1	Ø298	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 350 N 2	Ø323	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 350 N 3	Ø343	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 400 N 1	Ø358	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 400 N 2	Ø373	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 400 N 3	Ø388	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 450 N 1	Ø408	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 450 N 2	Ø433	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 450 N 3	Ø453	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 500 N1	Ø483	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 500 N 2	Ø503	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 500 N 3	Ø523	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 600 N 1	Ø553	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 600 N 2	Ø568	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 600 N 3	Ø588	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 700 N 1														
DIB 700 N 2														
DIB 700 N 3														
DIB 800 N 1														
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INDUSTRY DIB

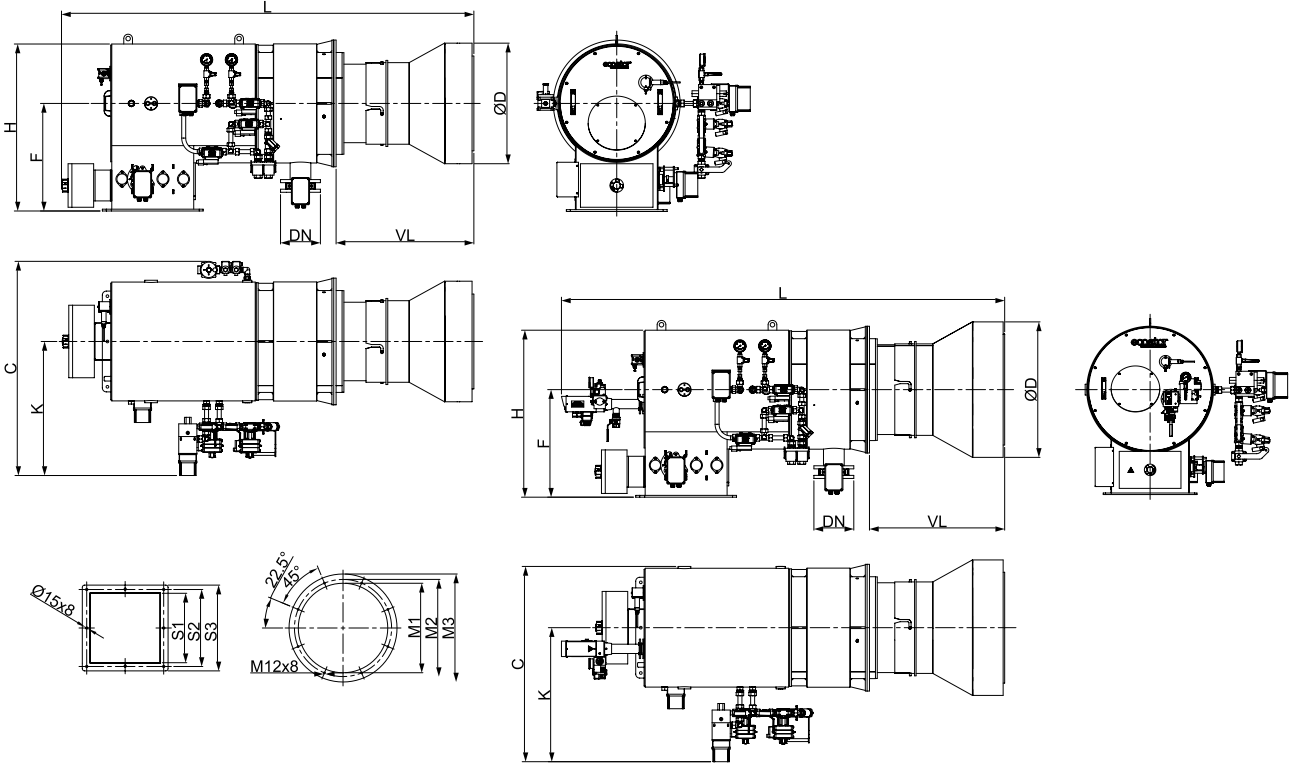
N STEAM



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
DIB 300 N 1	Ø307	1750	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	320	DN65
DIB 300 N 2	Ø326	1750	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	320	DN65
DIB 350 N 1	Ø346	1700	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 350 N 2	Ø375	1550	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 350 N 3	Ø389	1550	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 400 N 1	Ø422	1750	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 400 N 2	Ø430	1750	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 400 N 3	Ø439	1750	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 450 N 1	Ø492	1800	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 450 N 2	Ø525	1800	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 450 N 3	Ø539	1800	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 500 N1	Ø591	2475	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 500 N 2	Ø602	2475	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 500 N 3	Ø619	2475	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 600 N 1	Ø671	2525	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 600 N 2	Ø684	2525	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 600 N 3	Ø698	2525	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 700 N 1														
DIB 700 N 2														
DIB 700 N 3														
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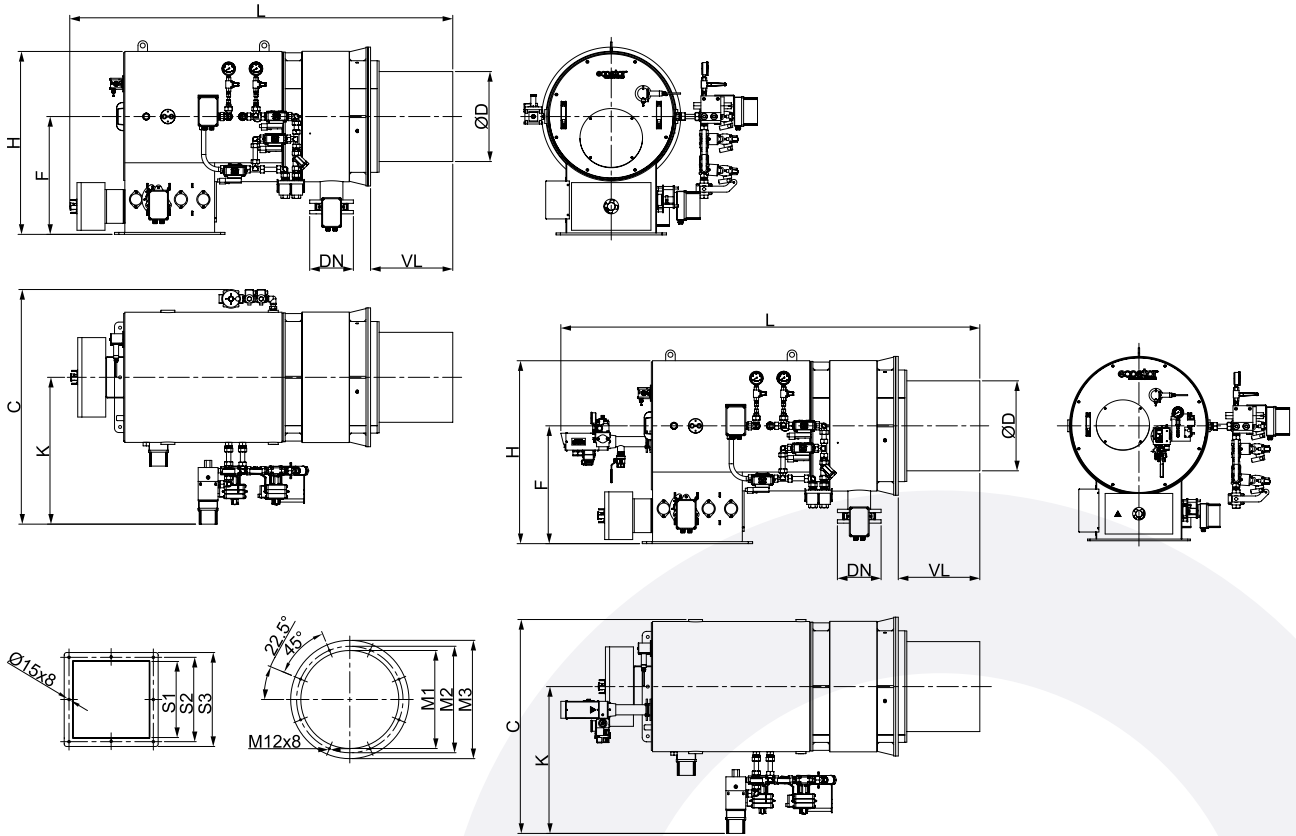
YOU CAN GET SUPPORT FROM THE SALES DEPARTMENT

INDUSTRY DIB NEL ASPHALT



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
DIB 300 NEL 1	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
DIB 300 NEL 2	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
DIB 350 NEL 1	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 350 NEL 2	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 350 NEL 3	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 400 NEL 1	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 400 NEL 2	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 400 NEL 3	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 450 NEL 1	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 450 NEL 2	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 450 NEL 3	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 500 NEL1	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 500 NEL 2	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 500 NEL 3	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 600 NEL 1	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 600 NEL 2	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 600 NEL 3	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 700 NEL 1														
DIB 700 NEL 2														
DIB 700 NEL 3														
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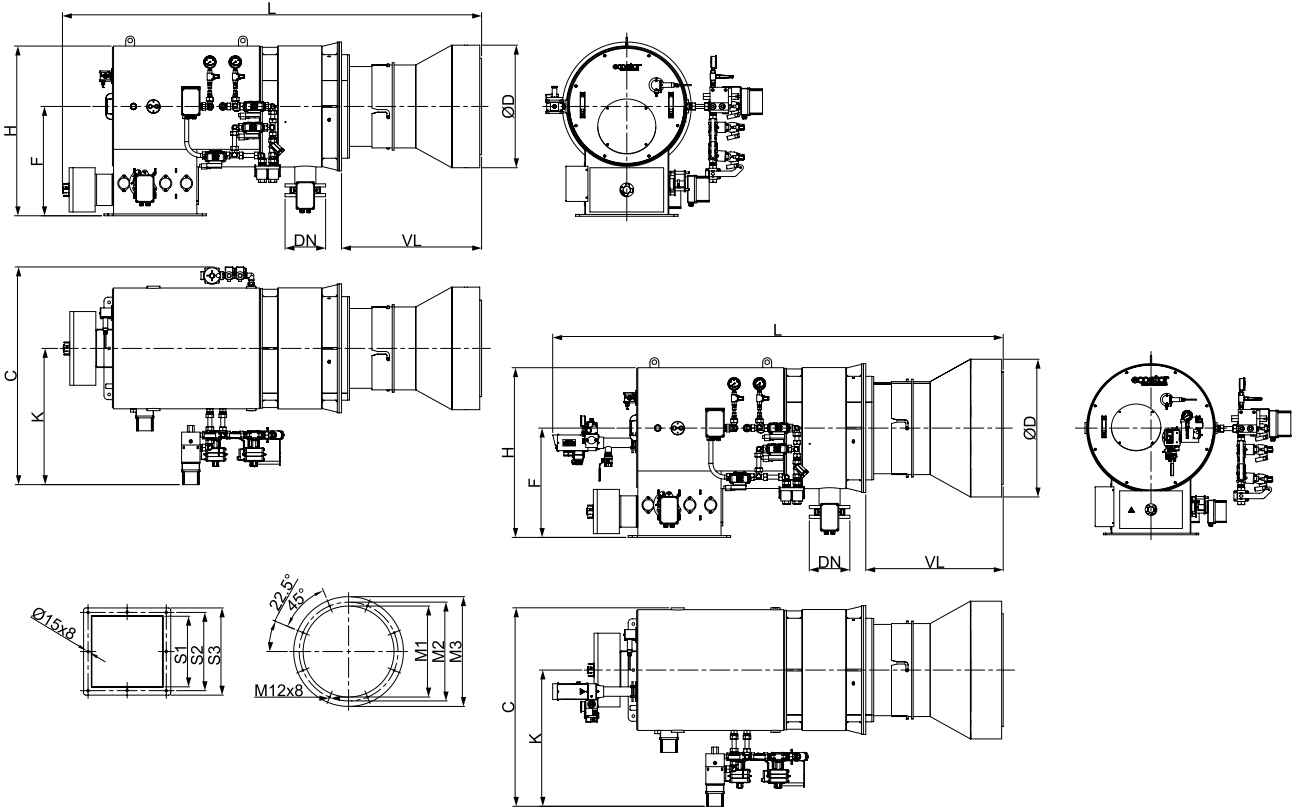
INDUSTRY DIB NEL STEAM



	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
DIB 300 NEL 1	Ø259	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
DIB 300 NEL 2	Ø295	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
DIB 350 NEL 1	Ø323	1700	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 350 NEL 2	Ø350	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 350 NEL 3	Ø365	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 400 NEL 1	Ø393	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 400 NEL 2	Ø401	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 400 NEL 3	Ø431	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 450 NEL 1	Ø450	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 450 NEL 2	Ø485	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 450 NEL 3	Ø499	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 500 NEL1	Ø542	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 500 NEL 2	Ø556	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 500 NEL 3	Ø568	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 600 NEL 1	Ø599	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 600 NEL 2	Ø619	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 600 NEL 3	Ø630	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 700 NEL 1														
DIB 700 NEL 2														
DIB 700 NEL 3														
DIB 800 NEL 1														
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DIB 900 NEL 3														

INDUSTRY DIB

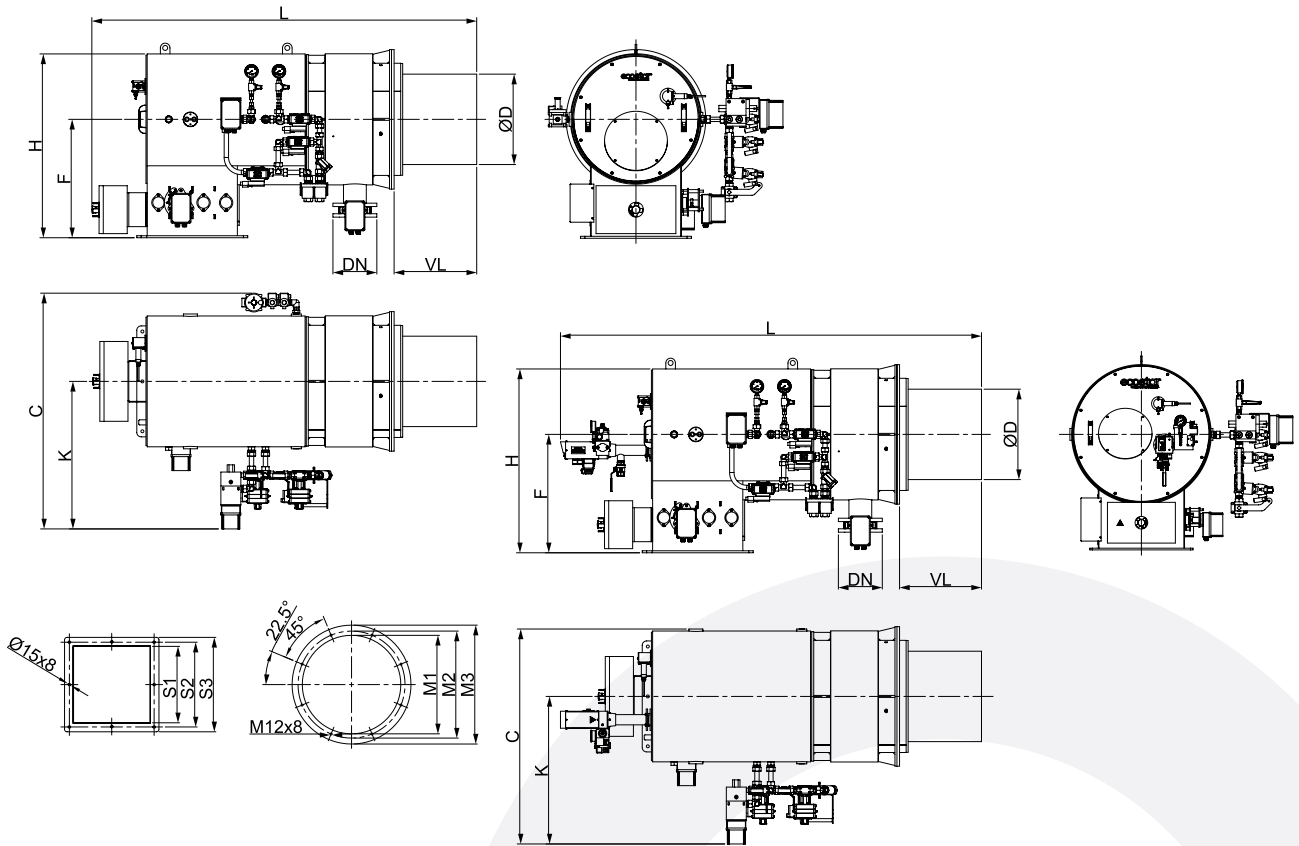
NMS ASPHALT



DIB 300 NMS 1	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
DIB 300 NMS 2	-	2000	875	550	700	325	300	350	385	Ø380	Ø430	Ø500	570	DN65
DIB 350 NMS 1	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 350 NMS 2	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 350 NMS 3	Ø520	2050	900	550	740	350	350	410	450	Ø430	Ø480	Ø550	670	DN80
DIB 400 NMS 1	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 400 NMS 2	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 400 NMS 3	Ø590	2050	920	550	900	500	400	450	510	Ø480	Ø530	Ø600	670	DN80
DIB 450 NMS 1	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 450 NMS 2	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 450 NMS 3	Ø665	2200	920	600	1000	500	450	500	556	Ø580	Ø630	Ø700	750	DN100
DIB 500 NMS1	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 500 NMS 2	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 500 NMS 3	Ø740	2875	1100	690	1000	500	500	550	608	Ø660	Ø710	Ø800	870	DN125
DIB 600 NMS 1	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 600 NMS 2	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 600 NMS 3	Ø890	2925	1100	690	1000	500	600	660	708	Ø740	Ø792	Ø860	870	DN125
DIB 700 NMS 1														
DIB 700 NMS 2														
DIB 700 NMS 3														
DIB 800 NMS 1														
DIB 800 NMS 2														
DIB 800 NMS 3														
DIB 900 NMS 1														
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DIB 900 NMS 3														

INDUSTRY DIB

NMS STEAM



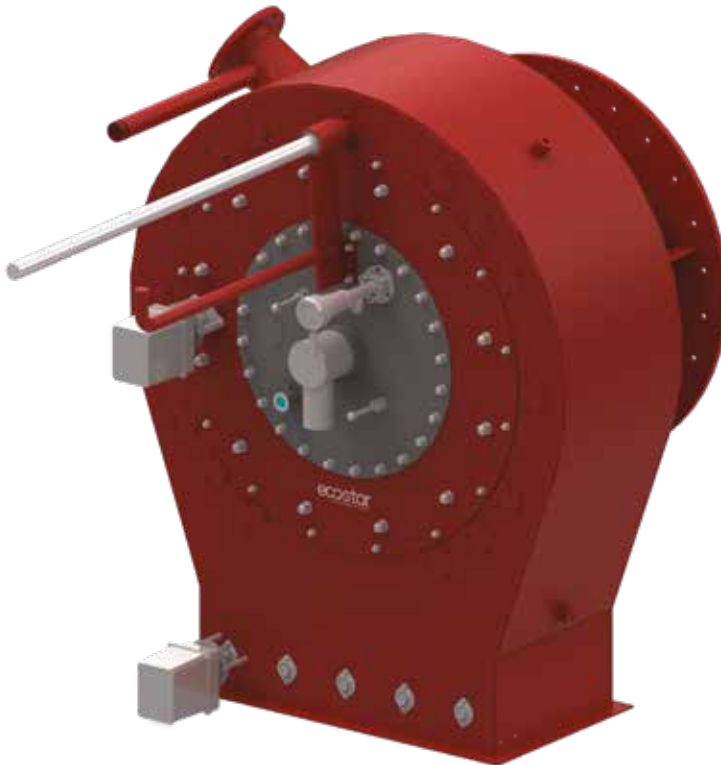
	Ø D	L	H	F	C	K	S1	S2	S3	Ø M1	Ø M2	Ø M3	VL	DN
DIB 300 NMS 1	Ø259	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
DIB 300 NMS 2	Ø295	1750	875	550	1100	725	300	350	385	Ø380	Ø430	Ø500	320	DN65
DIB 350 NMS 1	Ø323	1700	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 350 NMS 2	Ø350	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 350 NMS 3	Ø365	1550	900	550	1140	750	350	410	450	Ø430	Ø480	Ø550	320	DN80
DIB 400 NMS 1	Ø393	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 400 NMS 2	Ø401	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 400 NMS 3	Ø431	1750	920	550	1300	900	400	450	510	Ø480	Ø530	Ø600	370	DN80
DIB 450 NMS 1	Ø450	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 450 NMS 2	Ø485	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 450 NMS 3	Ø499	1800	920	600	1400	900	450	500	556	Ø580	Ø630	Ø700	350	DN100
DIB 500 NMS1	Ø542	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 500 NMS 2	Ø556	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 500 NMS 3	Ø568	2475	1100	690	1450	950	500	550	608	Ø660	Ø710	Ø800	475	DN125
DIB 600 NMS 1	Ø599	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 600 NMS 2	Ø619	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 600 NMS 3	Ø630	2525	1100	690	1450	950	600	660	708	Ø740	Ø792	Ø860	475	DN125
DIB 700 NMS 1														
DIB 700 NMS 2														
DIB 700 NMS 3														
DIB 800 NMS 1														
DIB 800 NMS 2														
DIB 800 NMS 3														
DIB 900 NMS 1														
DIB 900 NMS 2														
DIB 900 NMS 3														

INDUSTRIAL BURNERS

DSE

- ECOSTAR DSE series industrial burners with duoblock body structure are used in hot water boilers, steam boilers, hot oil boiler applications.
- Natural gas, LPG, Heavy Oil, Light Oil, Biogas and special fuels can be used.
- They have low flue gas emission values with their special body and combustion nozzle designs.
- It can operate in harmony with different flame tube lengths in different combustion chambers and modernized applications.
- According to the process needs, it is possible to control the liquid fuel lance with a movable structure in order to remove it from the hot area.
- Able to operate at combustion air fan suitable for the process and at 200°C combustion air temperatures. (It is painted with high temperature resistant paint; product capacity varies in hot air operation.)
- There is a secondary air control servo in the combustion chamber to intervene in flame diameter and length in line with the process needs.
- A specially designed pilot ignition burner (ECOSTAR PAL Burner is used as standard in DSE series products) is available for ignition.
- Energy saving with optional fan speed control,
- High fire safety thanks to flame control with photocell.
- Light oil filtering and pumping station is produced externally according to customer demand.
- Light oil filtering, heating and pumping station are produced externally according to customer demand.
- Remote management by connecting to PLC systems using BMS (Burner Management System) or software.
- Provides easy installation and maintenance thanks to its service carrying shaft.

* If Low NOx is required for DSE series products, it must be specified at the order stage.
The product extension must be selected as LE. (LE extension for LowNOx, SE extension for standard type)



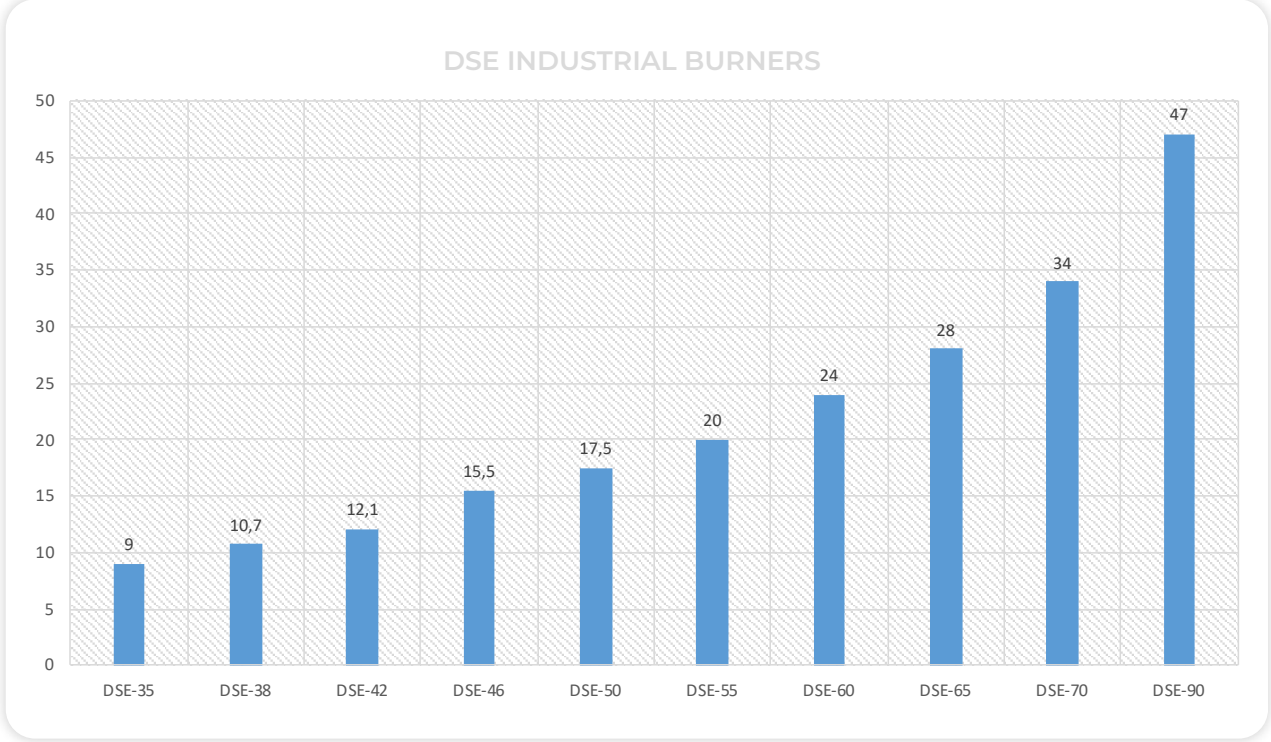
DSE

INDUSTRIAL BURNERS

CAPACITY TABLE

DSE SERIES INDUSTRIAL BURNERS CAPACITY TABLE					
BURNER TYPE	BURNER CAPACITY		NATURAL GAS CONSUMPTION	LIGHT OIL CONSUMPTION	HEAVY OIL CONSUMPTION
	Max. MW	Max. kcal/h	Max. Nm ³ /h	Max. kg/h	Max. kg/h
DSE-35	9	7.740.000	938	759	802
DSE-38	10,7	9.202.000	1.115	902	954
DSE-42	12,1	10.406.000	1.261	1.020	1.078
DSE-46	15,5	13.330.000	1.616	1.307	1.381
DSE-50	17,5	15.050.000	1.824	1.475	1.560
DSE-55	20	17.200.000	2.085	1.686	1.782
DSE-60	24	20.640.000	2.502	2.024	2.139
DSE-65	28	24.080.000	2.919	2.361	2.495
DSE-70	34	29.240.000	3.544	2.867	3.030
DSE-90	47	40.420.000	4.899	3.963	4.189
Mechanical Modulating Ratio: Natural Gas 5:1, Liquid Fuel 3:1 Electronic Modulating Ratio: Natural Gas 10:1, Liquid Fuel 5:1					

DSE INDUSTRIAL BURNERS BURNER SPECIFICATIONS

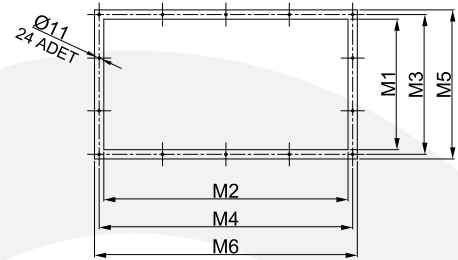
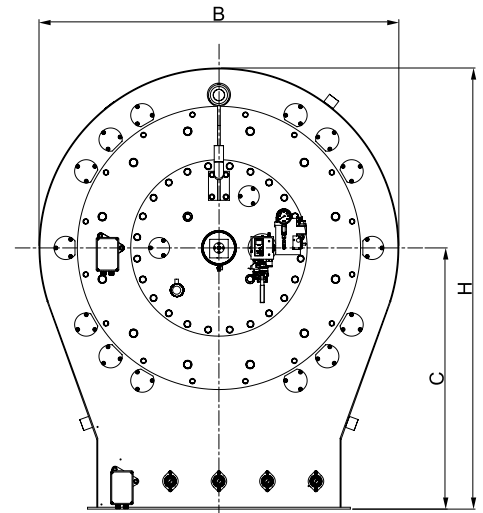
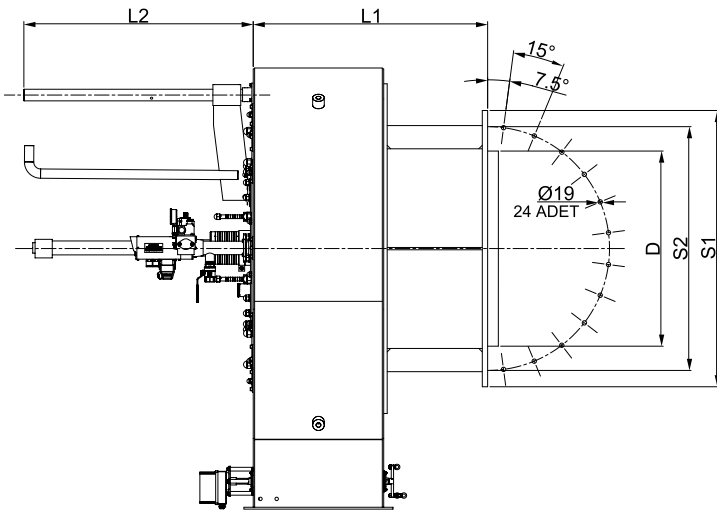


SPECIFICATIONS	DSE 35	DSE 38	DSE 42	DSE 46	DSE 50	DSE 55	DSE 60	DSE 65	DSE 70	DSE 90
Electronic modulating control option	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Photocell flame control	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ECOSTAR PAL pilot ignition burner	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pilot ignition gas valve	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Options of operating with Gas / Heavy Oil / Light Oil / Gas-Light Oil / Gas-Heavy Oil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
In liquid fuel products, high-pressure mechanic atomization lance or low-pressure air/steam-atomization lance,	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ability to operate with hot combustion air*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Different mounting options	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Serviceability without dismounting the burner from the boiler /service cover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Different flame tube length	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Control via PLC with BMS or software	○	○	○	○	○	○	○	○	○	○
O-2CO combustion management system connection	○	○	○	○	○	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○	○	○	○	○	○
Fuel preparation stations (Gas line/Heavy Oil Station/Light Oil Station)	○	○	○	○	○	○	○	○	○	○
TSE EN Declaration of Conformity	○	○	○	○	○	○	○	○	○	○
CE Declaration of Conformity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CE Uygunluk beyanı	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Not Included / N/A
 ✓ Included / Available
 ○ Optional
 ME Mechanical Modulating
 EL Electronic Modulating

INDUSTRY DSE

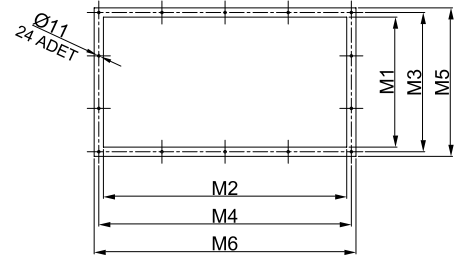
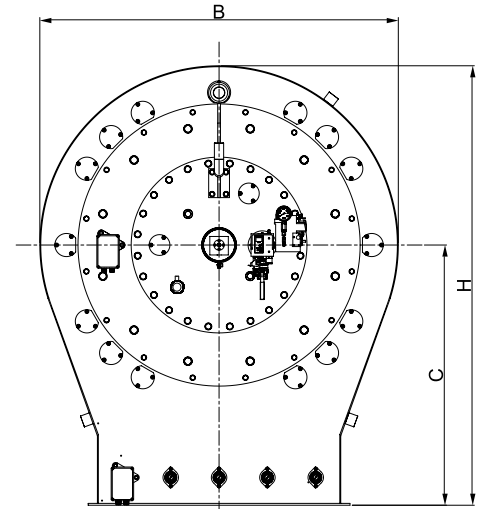
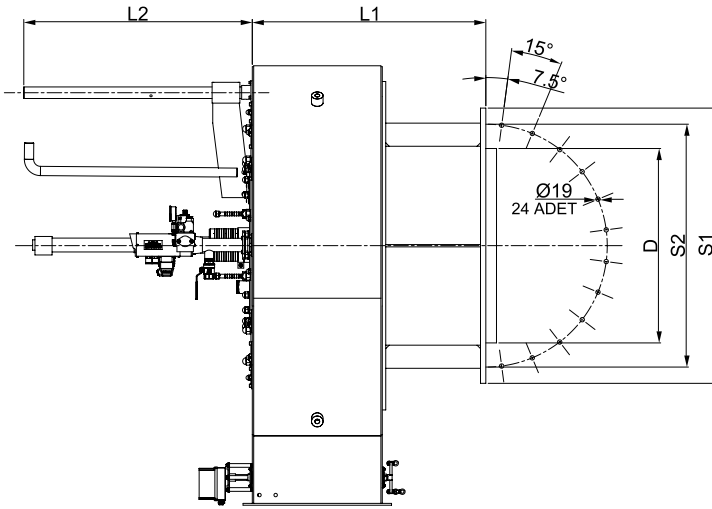
EL



	D	B	H	C	L1	L2	S1	S2
DSE-35 EL	Ø430	1051	1325	800	575	860	Ø790	Ø650
DSE-38 EL	Ø460	1051	1325	800	648	860	Ø790	Ø650
DSE-42 EL	Ø500	1051	1325	800	648	860	Ø790	Ø650
DSE-46 EL	Ø560	1051	1325	800	703	860	Ø790	Ø650
DSE-50 EL	Ø600	1250	1495	870	815	990	Ø990	Ø850
DSE-55 EL	Ø660	1250	1495	870	815	990	Ø990	Ø850
DSE-60 EL	Ø710	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-65 EL	Ø760	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-70 EL	Ø840	1550	1900	1125	1015	990	Ø1190	Ø1050
DSE-90 EL	Ø1150	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-95 EL	Ø1250	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-100 EL	Ø1350	1850	2250	1325	1250	1600	Ø1490	Ø1350
	M1	M2	M3	M4	M5	M6		
DSE-35 EL	335	610	375	650	415	690		
DSE-38 EL	410	610	450	650	490	690		
DSE-42 EL	410	610	450	650	490	690		
DSE-46 EL	410	610	450	650	490	690		
DSE-50 EL	512	815	552	855	592	895		
DSE-55 EL	512	815	552	855	592	895		
DSE-60 EL	562	1052	602	1092	642	1132		
DSE-65 EL	562	1052	602	1092	642	1132		
DSE-70 EL	562	1052	602	1092	642	1132		
DSE-90 EL	665	1250	705	1290	743	1328		
DSE-95 EL	665	1250	705	1290	743	1328		
DSE-100 EL	665	1250	705	1290	743	1328		

INDUSTRY DSE

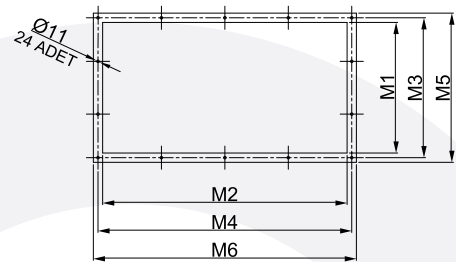
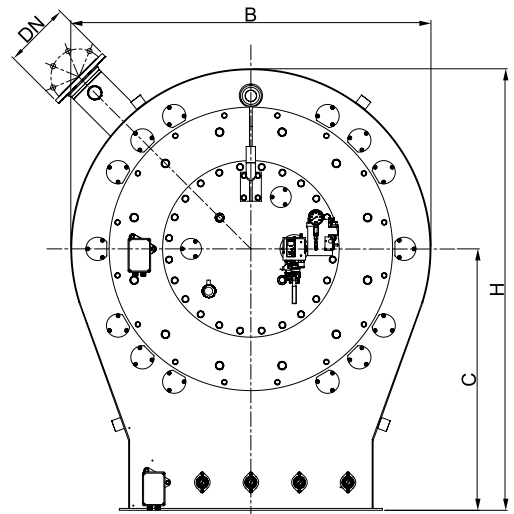
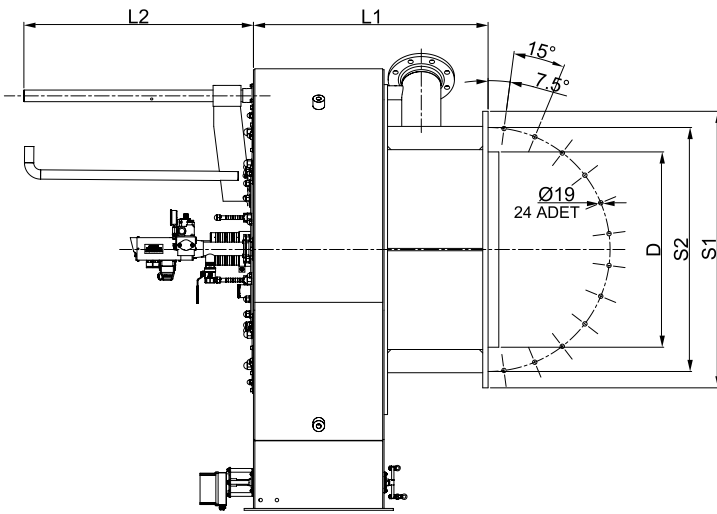
MS



	D	B	H	C	L1	L2	S1	S2
DSE-35 MS	Ø430	1051	1325	800	575	860	Ø790	Ø650
DSE-38 MS	Ø460	1051	1325	800	648	860	Ø790	Ø650
DSE-42 MS	Ø500	1051	1325	800	648	860	Ø790	Ø650
DSE-46 MS	Ø560	1051	1325	800	703	860	Ø790	Ø650
DSE-50 MS	Ø600	1250	1495	870	815	990	Ø990	Ø850
DSE-55 MS	Ø660	1250	1495	870	815	990	Ø990	Ø850
DSE-60 MS	Ø710	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-65 MS	Ø760	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-70 MS	Ø840	1550	1900	1125	1015	990	Ø1190	Ø1050
DSE-90 MS	Ø1150	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-95 MS	Ø1250	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-100 MS	Ø1350	1850	2250	1325	1250	1600	Ø1490	Ø1350
	M1	M2	M3	M4	M5	M6		
DSE-35 MS	335	610	375	650	415	690		
DSE-38 MS	410	610	450	650	490	690		
DSE-42 MS	410	610	450	650	490	690		
DSE-46 MS	410	610	450	650	490	690		
DSE-50 MS	512	815	552	855	592	895		
DSE-55 MS	512	815	552	855	592	895		
DSE-60 MS	562	1052	602	1092	642	1132		
DSE-65 MS	562	1052	602	1092	642	1132		
DSE-70 MS	562	1052	602	1092	642	1132		
DSE-90 MS	665	1250	705	1290	743	1328		
DSE-95 MS	665	1250	705	1290	743	1328		
DSE-100 MS	665	1250	705	1290	743	1328		

INDUSTRY DSE

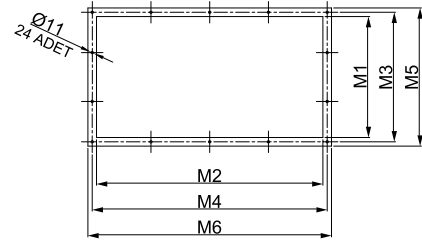
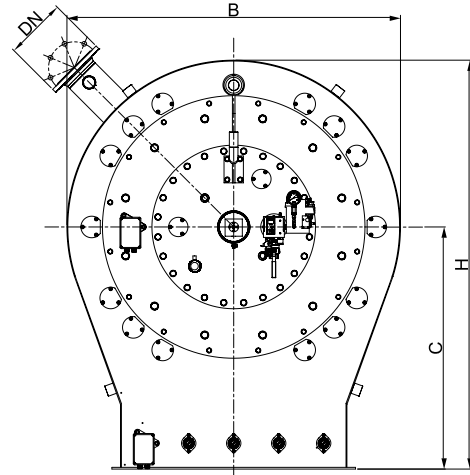
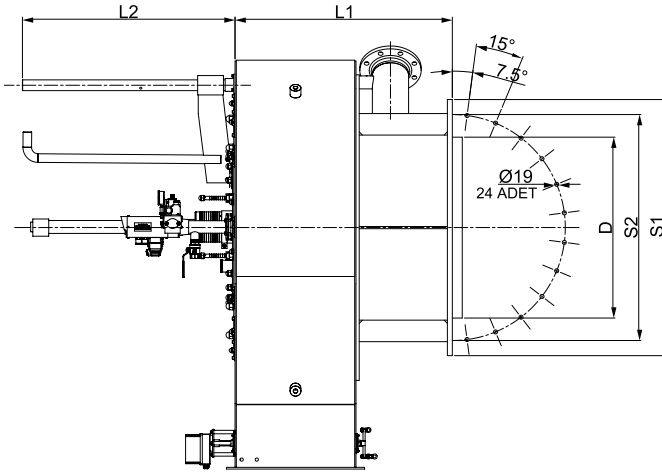
N



	D	B	H	C	L1	L2	S1	S2
DSE-35 N	Ø430	1051	1325	800	575	860	Ø790	Ø650
DSE-38 N	Ø460	1051	1325	800	648	860	Ø790	Ø650
DSE-42 N	Ø500	1051	1325	800	648	860	Ø790	Ø650
DSE-46 N	Ø560	1051	1325	800	703	860	Ø790	Ø650
DSE-50 N	Ø600	1250	1495	870	815	990	Ø990	Ø850
DSE-55 N	Ø660	1250	1495	870	815	990	Ø990	Ø850
DSE-60 N	Ø710	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-65 N	Ø760	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-70 N	Ø840	1550	1900	1125	1015	990	Ø1190	Ø1050
DSE-90 N	Ø1150	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-95 N	Ø1250	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-100 N	Ø1350	1850	2250	1325	1250	1600	Ø1490	Ø1350
	M1	M2	M3	M4	M5	M6	DN	
DSE-35 N	335	610	375	650	415	690	DN80	
DSE-38 N	410	610	450	650	490	690	DN80	
DSE-42 N	410	610	450	650	490	690	DN80	
DSE-46 N	410	610	450	650	490	690	DN100	
DSE-50 N	512	815	552	855	592	895	DN100	
DSE-55 N	512	815	552	855	592	895	DN100	
DSE-60 N	562	1052	602	1092	642	1132	DN150	
DSE-65 N	562	1052	602	1092	642	1132	DN150	
DSE-70 N	562	1052	602	1092	642	1132	DN150	
DSE-90 N	665	1250	705	1290	743	1328	DN250	
DSE-95 N	665	1250	705	1290	743	1328	DN250	
DSE-100 N	665	1250	705	1290	743	1328	DN250	

INDUSTRY DSE

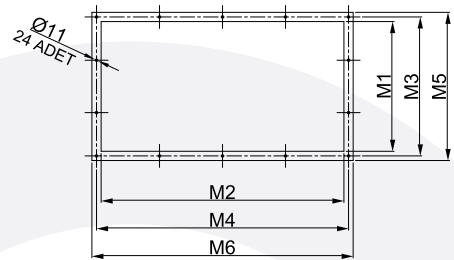
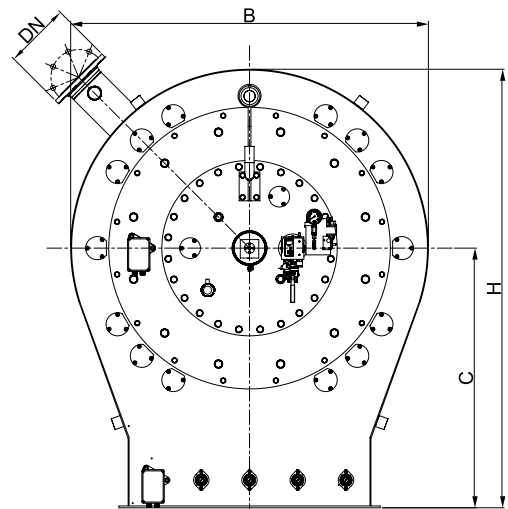
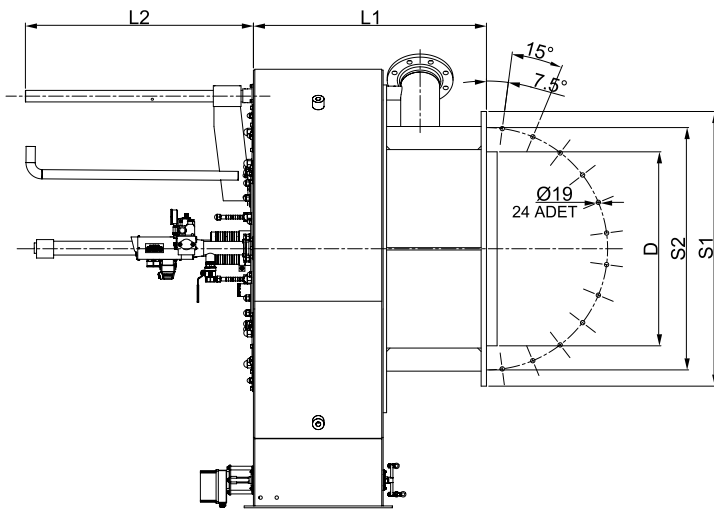
NEL



	D	B	H	C	L1	L2	S1	S2
DSE-35 NEL	Ø430	1051	1325	800	575	860	Ø790	Ø650
DSE-38 NEL	Ø460	1051	1325	800	648	860	Ø790	Ø650
DSE-42 NEL	Ø500	1051	1325	800	648	860	Ø790	Ø650
DSE-46 NEL	Ø560	1051	1325	800	703	860	Ø790	Ø650
DSE-50 NEL	Ø600	1250	1495	870	815	990	Ø990	Ø850
DSE-55 NEL	Ø660	1250	1495	870	815	990	Ø990	Ø850
DSE-60 NEL	Ø710	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-65 NEL	Ø760	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-70 NEL	Ø840	1550	1900	1125	1015	990	Ø1190	Ø1050
DSE-90 NEL	Ø1150	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-95 NEL	Ø1250	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-100 NEL	Ø1350	1850	2250	1325	1250	1600	Ø1490	Ø1350
	M1	M2	M3	M4	M5	M6	DN	
DSE-35 NEL	335	610	375	650	415	690	DN80	
DSE-38 NEL	410	610	450	650	490	690	DN80	
DSE-42 NEL	410	610	450	650	490	690	DN80	
DSE-46 NEL	410	610	450	650	490	690	DN100	
DSE-50 NEL	512	815	552	855	592	895	DN100	
DSE-55 NEL	512	815	552	855	592	895	DN100	
DSE-60 NEL	562	1052	602	1092	642	1132	DN150	
DSE-65 NEL	562	1052	602	1092	642	1132	DN150	
DSE-70 NEL	562	1052	602	1092	642	1132	DN150	
DSE-90 NEL	665	1250	705	1290	743	1328	DN250	
DSE-95 NEL	665	1250	705	1290	743	1328	DN250	
DSE-100 NEL	665	1250	705	1290	743	1328	DN250	

INDUSTRY DSE

NMS

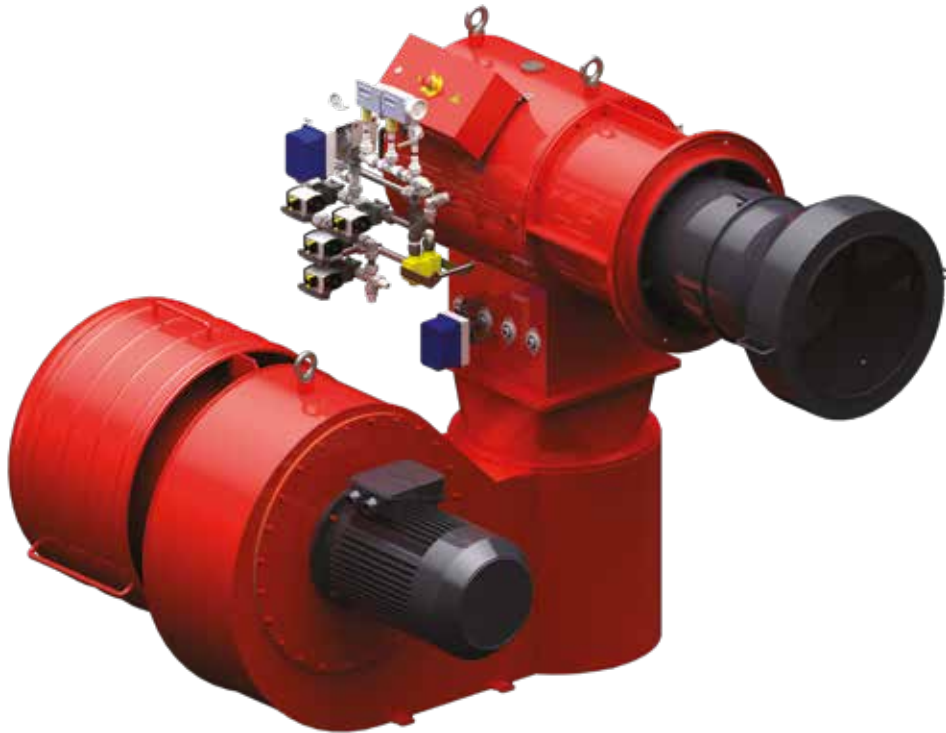


	D	B	H	C	L1	L2	S1	S2
DSE-35 NMS	Ø430	1051	1325	800	575	860	Ø790	Ø650
DSE-38 NMS	Ø460	1051	1325	800	648	860	Ø790	Ø650
DSE-42 NMS	Ø500	1051	1325	800	648	860	Ø790	Ø650
DSE-46 NMS	Ø560	1051	1325	800	703	860	Ø790	Ø650
DSE-50 NMS	Ø600	1250	1495	870	815	990	Ø990	Ø850
DSE-55 NMS	Ø660	1250	1495	870	815	990	Ø990	Ø850
DSE-60 NMS	Ø710	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-65 NMS	Ø760	1550	1900	1125	935	990	Ø1190	Ø1050
DSE-70 NMS	Ø840	1550	1900	1125	1015	990	Ø1190	Ø1050
DSE-90 NMS	Ø1150	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-95 NMS	Ø1250	1850	2250	1325	1250	1600	Ø1490	Ø1350
DSE-100 NMS	Ø1350	1850	2250	1325	1250	1600	Ø1490	Ø1350
	M1	M2	M3	M4	M5	M6	DN	
DSE-35 NMS	335	610	375	650	415	690	DN80	
DSE-38 NMS	410	610	450	650	490	690	DN80	
DSE-42 NMS	410	610	450	650	490	690	DN80	
DSE-46 NMS	410	610	450	650	490	690	DN100	
DSE-50 NMS	512	815	552	855	592	895	DN100	
DSE-55 NMS	512	815	552	855	592	895	DN100	
DSE-60 NMS	562	1052	602	1092	642	1132	DN150	
DSE-65 NMS	562	1052	602	1092	642	1132	DN150	
DSE-70 NMS	562	1052	602	1092	642	1132	DN150	
DSE-90 NMS	665	1250	705	1290	743	1328	DN250	
DSE-95 NMS	665	1250	705	1290	743	1328	DN250	
DSE-100 NMS	665	1250	705	1290	743	1328	DN250	

INDUSTRIAL BURNERS

GIB

- ECOSTAR GIB series industrial burners with monoblock body structure are used in hot water boilers, steam boilers, hot oil boilers and drying applications.
- Natural Gas, LPG, Heavy Oil, Light Oil, Biogas, Pulverized Coal and special fuels can be used in GIB series industrial burners.
- Thanks to the modular connection between the body and the air fan, it can be connected to 4 different air fan positions.
- With different combustion nozzle designs and flame pipe lengths suitable for the process, it can work in harmony in different combustion chambers, including modernized applications.
- They have wide usage area with turbulator designs developed for different types of flame forms.
- Efficient combustion is ensured with the high pressure fan option according to the process needs. (25mbar & 50mbar)
- High fire safety thanks to flame control with photocell.
- Special design pilot ignition burners are available for ignition (ECOSTAR PAL burner is standard in GIB-500 series and above).
- Light oil filtering and pumping station is produced externally according to customer demand.
- Light oil filtering, heating and pumping station are produced externally according to customer demand.
- The control panel of GIB series burners can be produced as integrated or external panel according to the process needs. In this way, it is possible to use on the process management room or local area.
- Electronic modulating control is possible with GIB burners.
- Thanks to its high pressure and low pressure liquid fuel lances, it offers various application according to special needs.



GIB

INDUSTRIAL BURNERS

CAPACITY TABLE

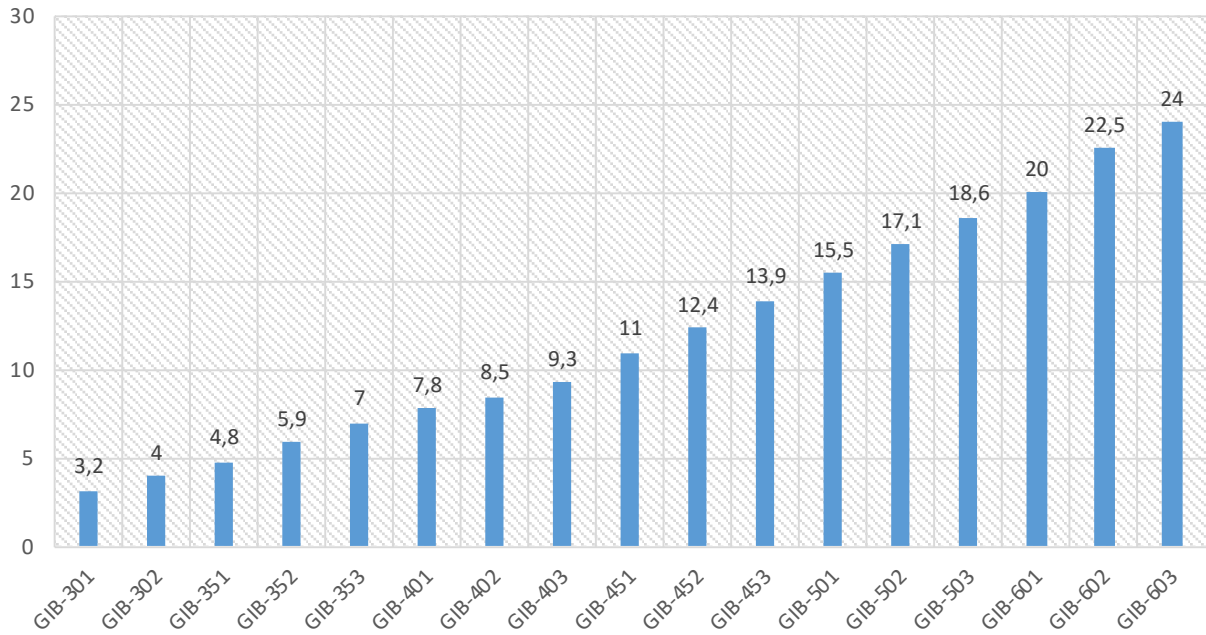
GIB SERIES INDUSTRIAL BURNERS CAPACITY TABLE					
BURNER TYPE	BURNER CAPACITY		NATURAL GAS CONSUMPTION	LIGHT OIL CONSUMPTION	HEAVY OIL CONSUMPTION
	Max. MW	Max. kcal/h	Max. kg/h	Max. kg/h	Max. kg/h
GIB-301	3,2	2.752.000	334	270	285
GIB-302	4	3.440.000	417	337	356
GIB-351	4,8	4.128.000	500	405	428
GIB-352	5,9	5.074.000	615	497	526
GIB-353	7	6.020.000	730	590	624
GIB-401	7,8	6.708.000	813	658	695
GIB-402	8,5	7.310.000	886	717	758
GIB-403	9,3	7.998.000	969	784	829
GIB-451	11	9.460.000	1147	927	980
GIB-452	12,4	10.664.000	1293	1045	1105
GIB-453	13,9	11.954.000	1449	1172	1239
GIB-501	15,5	13.330.000	1616	1307	1381
GIB-502	17,1	14.706.000	1783	1442	1524
GIB-503	18,6	15.996.000	1939	1568	1658
GIB-601	20	17.200.000	2085	1686	1782
GIB-602	22,5	19.350.000	2345	1897	2005
GIB-603	24	20.640.000	2502	2024	2139
Mechanical Modulating Ratio: Natural Gas 5:1, Liquid Fuel 3:1 Electronic Modulating Ratio: Natural Gas 10:1, Liquid Fuel 5:1					

GIB

INDUSTRIAL BURNERS

BURNER SPECIFICATIONS

GIB INDUSTRIAL BURNERS



SPECIFICATIONS	GIB 300 EL	GIB 350 EL	GIB 400 EL	GIB 450 EL	GIB 500 EL	GIB 600 EL
Electronic modulating control option	✓	✓	✓	✓	✓	✓
Photocell flame control	✓	✓	✓	✓	✓	✓
Internal pilot ignition	✓	✓	✓	✓	✗	✗
ECOSTAR PAL pilot ignition burner	✗	✗	✗	✗	✓	✓
Pilot ignition gas valve	✓	✓	✓	✓	✓	✓
Air pressure switch	✓	✓	✓	✓	✓	✓
Options of operating with Gas / Heavy Oil / Light Oil / Gas-Light Oil / Gas-Heavy Oil	✓	✓	✓	✓	✓	✓
In liquid fuel products, high-pressure mechanic atomization lance or low-pressure air/steam-atomization lance,	✓	✓	✓	✓	✓	✓
Different mounting options	✓	✓	✓	✓	✓	✓
Serviceability without dismantling the burner from the boiler /service cover	✓	✓	✓	✓	✓	✓
Different flame tube length	○	○	○	○	○	○
Control via PLC with BMS or software	○	○	○	○	○	○
O-2CO combustion management system connection	○	○	○	○	○	○
Combustion air fan inverter connection	○	○	○	○	○	○
Fuel preparation stations (Gas line/Heavy Oil Station/Light Oil Station)	○	○	○	○	○	○
TSE EN Declaration of Conformity						
CE Declaration of Conformity						

✗ Not Included / N/A

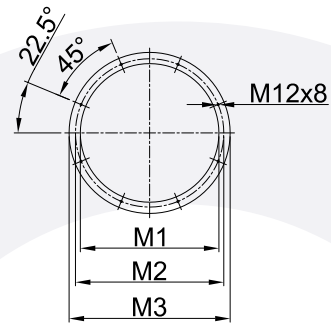
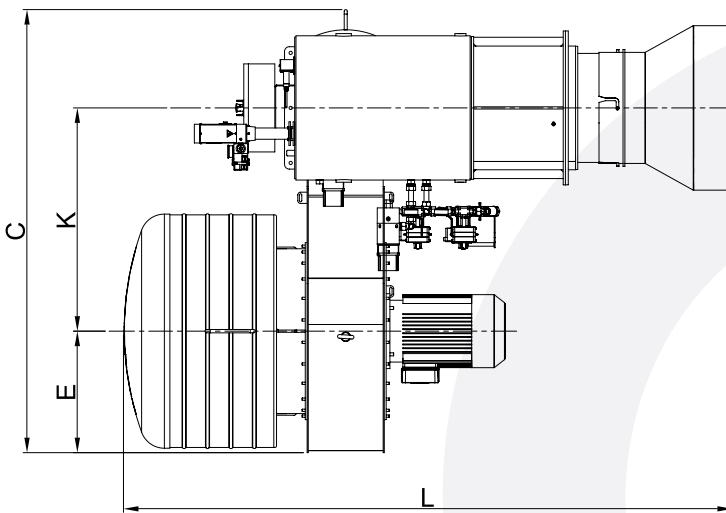
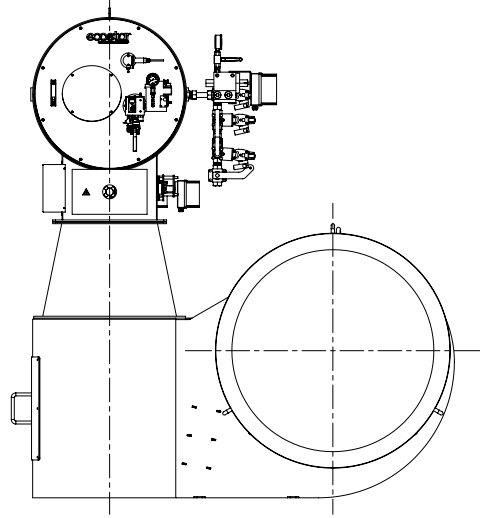
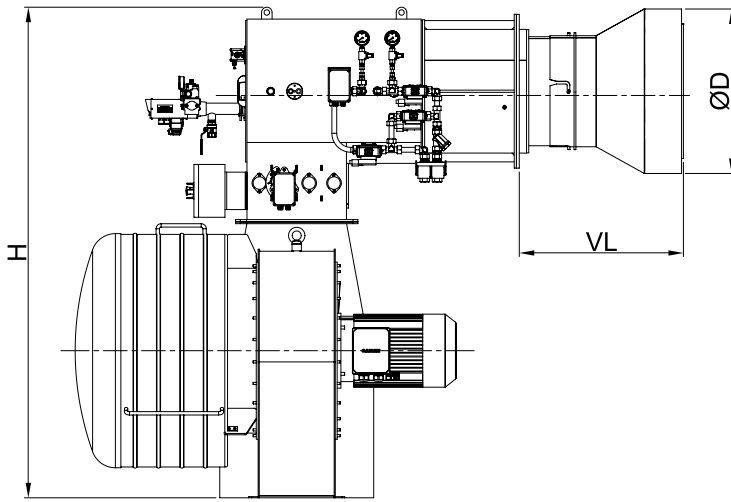
✓ Included / Available

○ Optional

ME Mechanical Modulating EL Electronic Modulating

INDUSTRY GIB

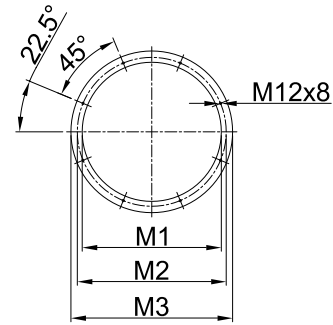
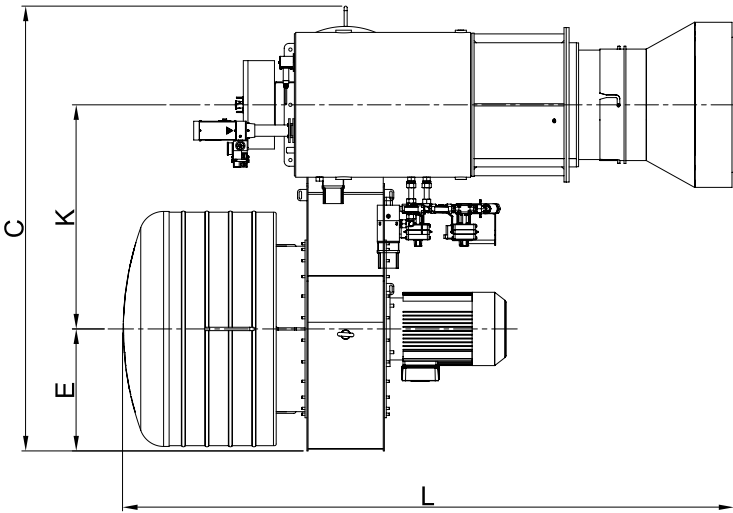
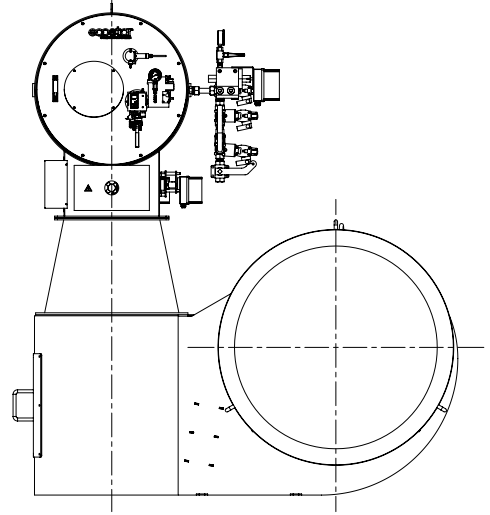
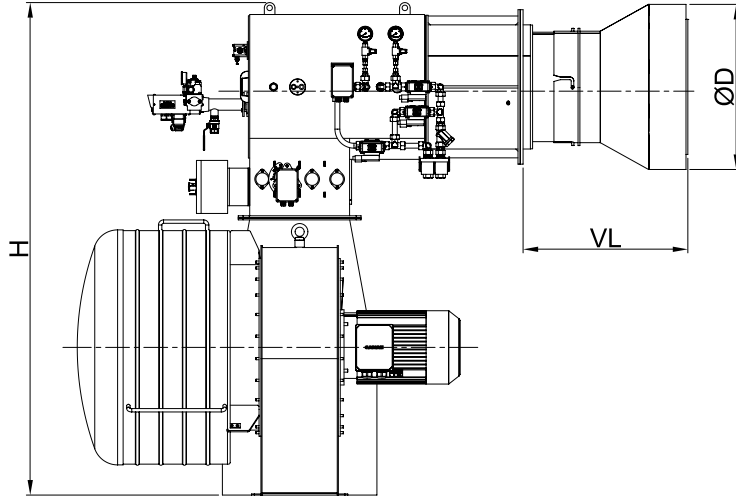
EL



	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL
GIB-301 EL	Ø268	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570
GIB-302 EL	Ø278	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570
GIB-351 EL	Ø298	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670
GIB-352 EL	Ø323	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670
GIB-353 EL	Ø343	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670
GIB-401 EL	Ø358	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670
GIB-402 EL	Ø373	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670
GIB-403 EL	Ø388	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670
GIB-451 EL	Ø408	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750
GIB-452 EL	Ø433	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750
GIB-453 EL	Ø453	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750
GIB-501 EL	Ø483	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870
GIB-502 EL	Ø503	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870
GIB-503 EL	Ø523	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870
GIB-601 EL	Ø553	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870
GIB-602 EL	Ø568	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870
GIB-603 EL	Ø588	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870

INDUSTRY GIB

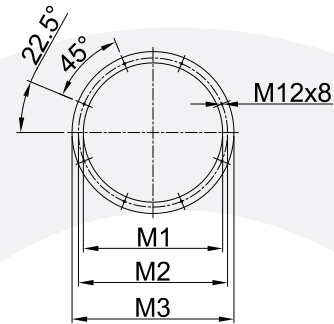
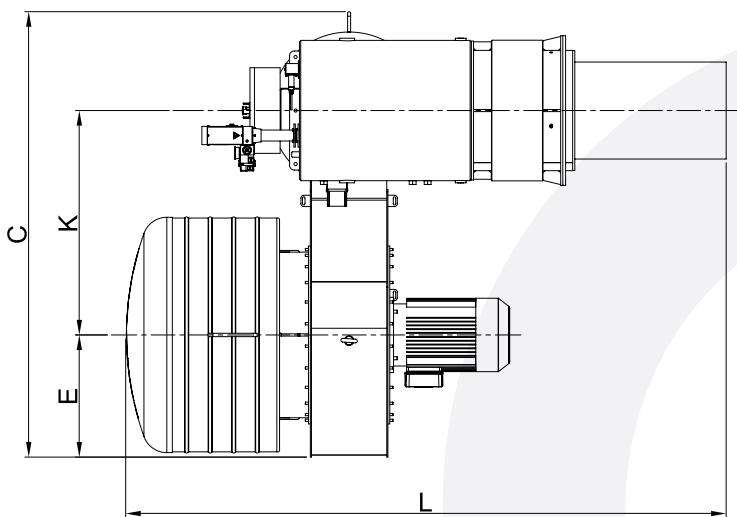
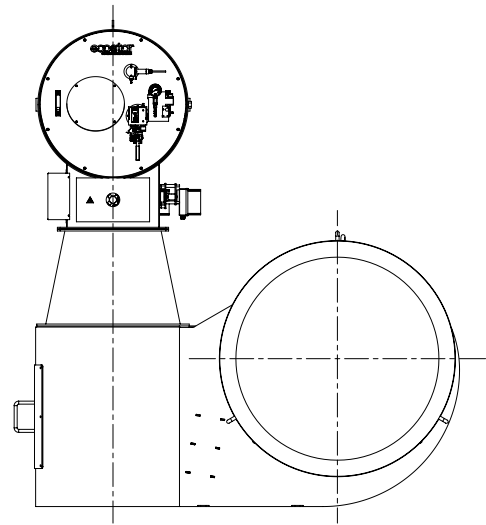
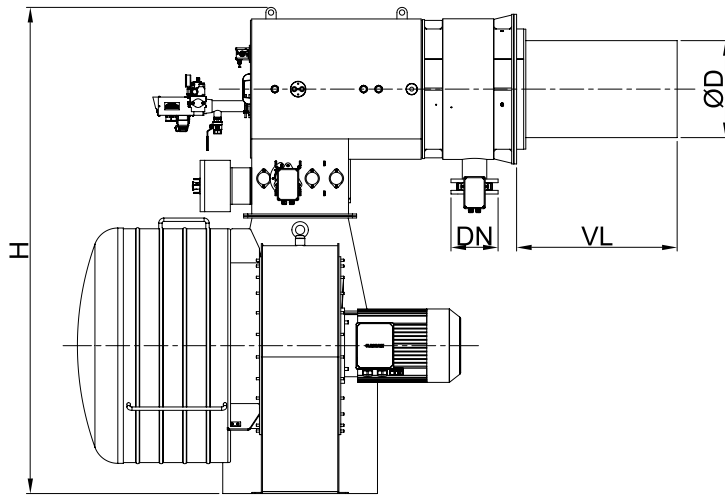
MS



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GIB-302 MS	Ø278	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570
GIB-351 MS	Ø298	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670
GIB-352 MS	Ø323	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670
GIB-353 MS	Ø343	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670
GIB-401 MS	Ø358	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670
GIB-402 MS	Ø373	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670
GIB-403 MS	Ø388	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670
GIB-451 MS	Ø408	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750
GIB-452 MS	Ø433	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750
GIB-453 MS	Ø453	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750
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GIB-502 MS	Ø503	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870
GIB-503 MS	Ø523	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870
GIB-601 MS	Ø553	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870
GIB-602 MS	Ø568	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870
GIB-603 MS	Ø588	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870

INDUSTRY GIB

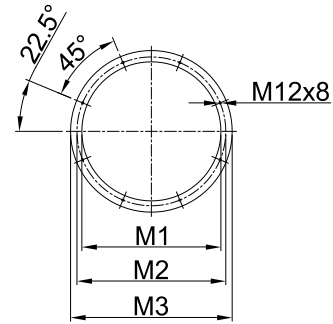
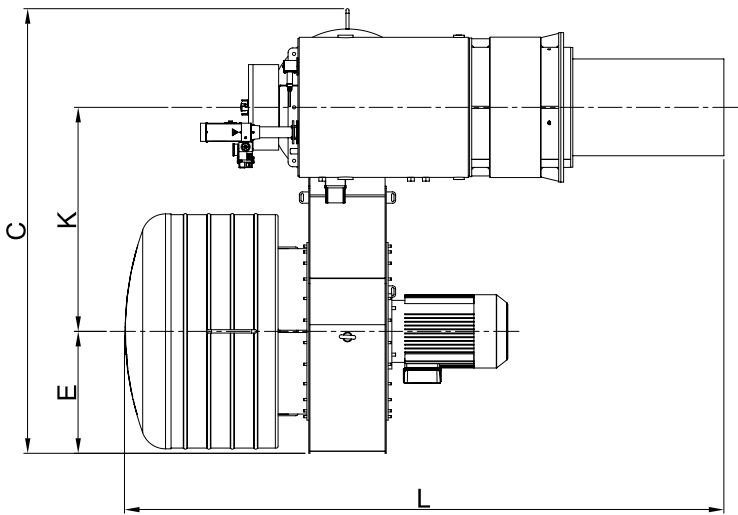
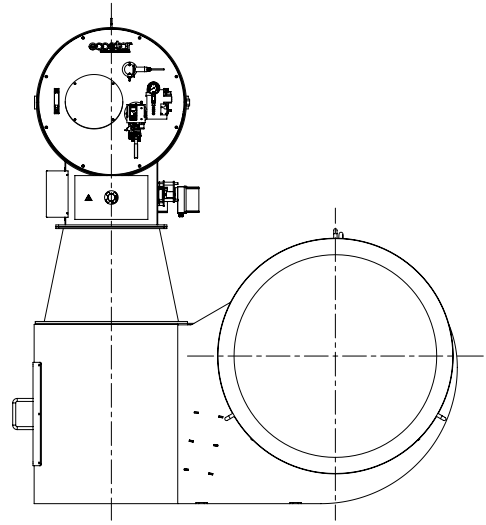
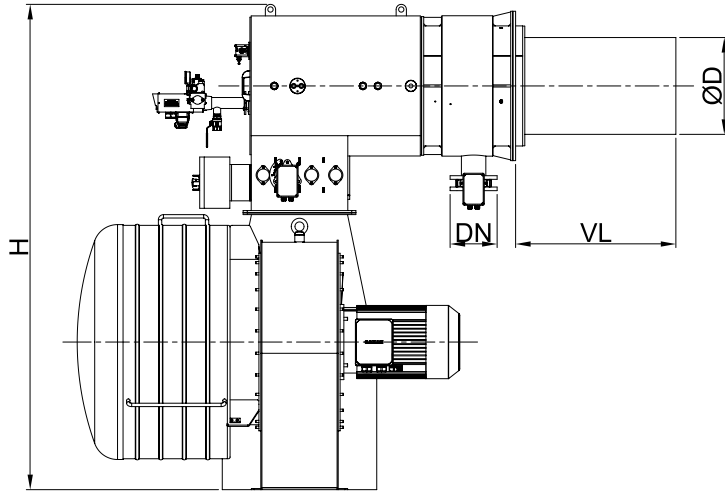
N



	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL	DN
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GIB-302 N	Ø278	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570	DN65
GIB-351 N	Ø298	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-352 N	Ø323	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-353 N	Ø343	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-401 N	Ø358	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670	DN80
GIB-402 N	Ø373	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670	DN80
GIB-403 N	Ø388	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670	DN80
GIB-451 N	Ø408	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-452 N	Ø433	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-453 N	Ø453	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-501 N	Ø483	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-502 N	Ø503	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-503 N	Ø523	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-601 N	Ø553	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125
GIB-602 N	Ø568	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125
GIB-603 N	Ø588	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125

INDUSTRY GIB

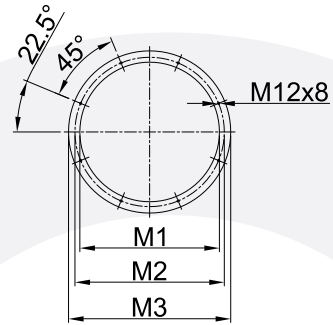
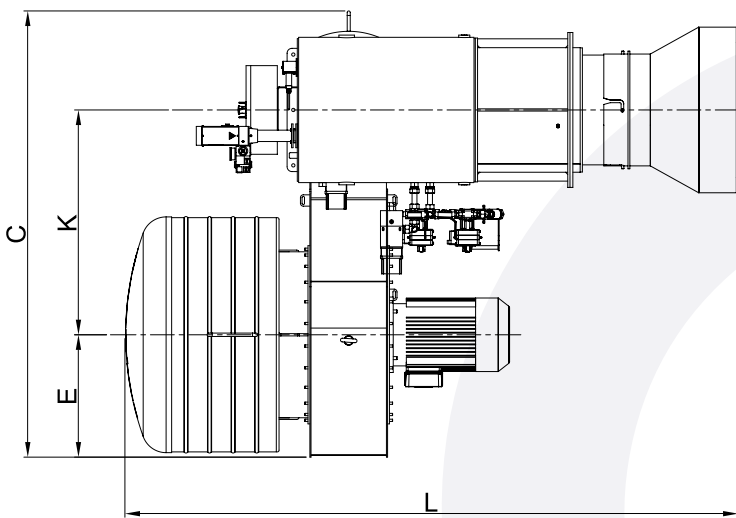
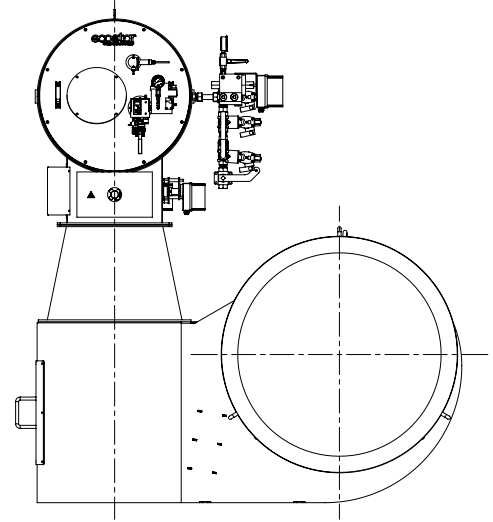
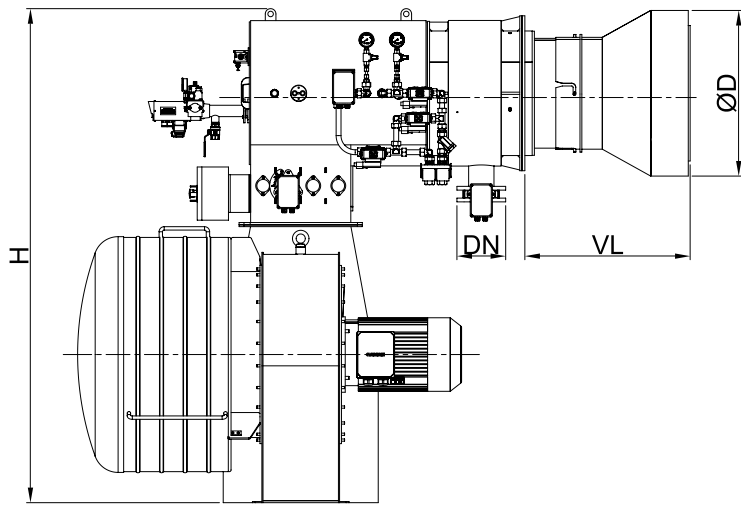
NEL



	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL	DN
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GIB-302 N	Ø278	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570	DN65
GIB-351 N	Ø298	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-352 N	Ø323	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-353 N	Ø343	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
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GIB-402 N	Ø373	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670	DN80
GIB-403 N	Ø388	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670	DN80
GIB-451 N	Ø408	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-452 N	Ø433	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-453 N	Ø453	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-501 N	Ø483	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-502 N	Ø503	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-503 N	Ø523	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-601 N	Ø553	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125
GIB-602 N	Ø568	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125
GIB-603 N	Ø588	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125

INDUSTRY GIB

NMS



	Ø D	L	C	K	E	H	Ø M1	Ø M2	Ø M3	VL	DN
GIB-301 NMS	Ø268	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570	DN65
GIB-302 NMS	Ø278	2600	1900	900	500	2500	Ø380	Ø430	Ø500	570	DN65
GIB-351 NMS	Ø298	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-352 NMS	Ø323	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
GIB-353 NMS	Ø343	2700	1900	900	500	2500	Ø430	Ø480	Ø550	670	DN80
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GIB-403 NMS	Ø388	2700	1900	900	500	2500	Ø480	Ø530	Ø600	670	DN80
GIB-451 NMS	Ø408	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-452 NMS	Ø433	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-453 NMS	Ø453	2750	1950	1000	500	2650	Ø580	Ø630	Ø700	750	DN100
GIB-501 NMS	Ø483	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-502 NMS	Ø503	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-503 NMS	Ø523	3250	2400	1200	650	2750	Ø660	Ø710	Ø800	870	DN125
GIB-601 NMS	Ø553	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125
GIB-602 NMS	Ø568	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125
GIB-603 NMS	Ø588	3250	2400	1200	650	2750	Ø740	Ø792	Ø860	870	DN125

INDUSTRIAL BURNERS

CIB

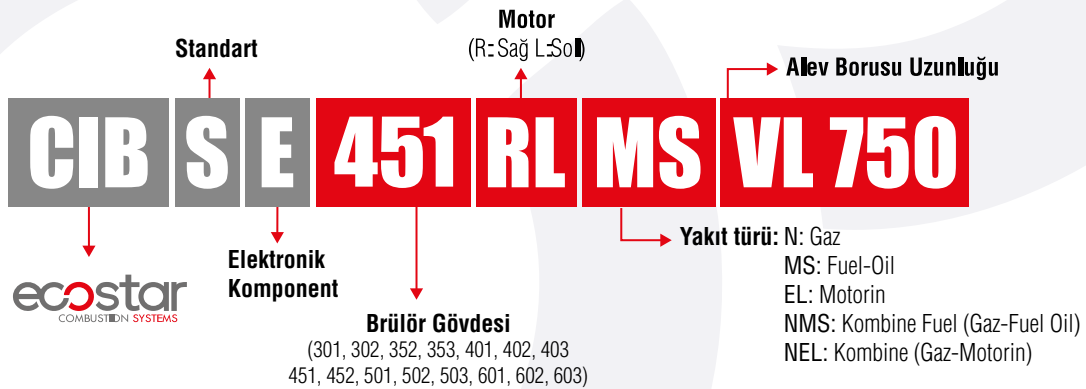
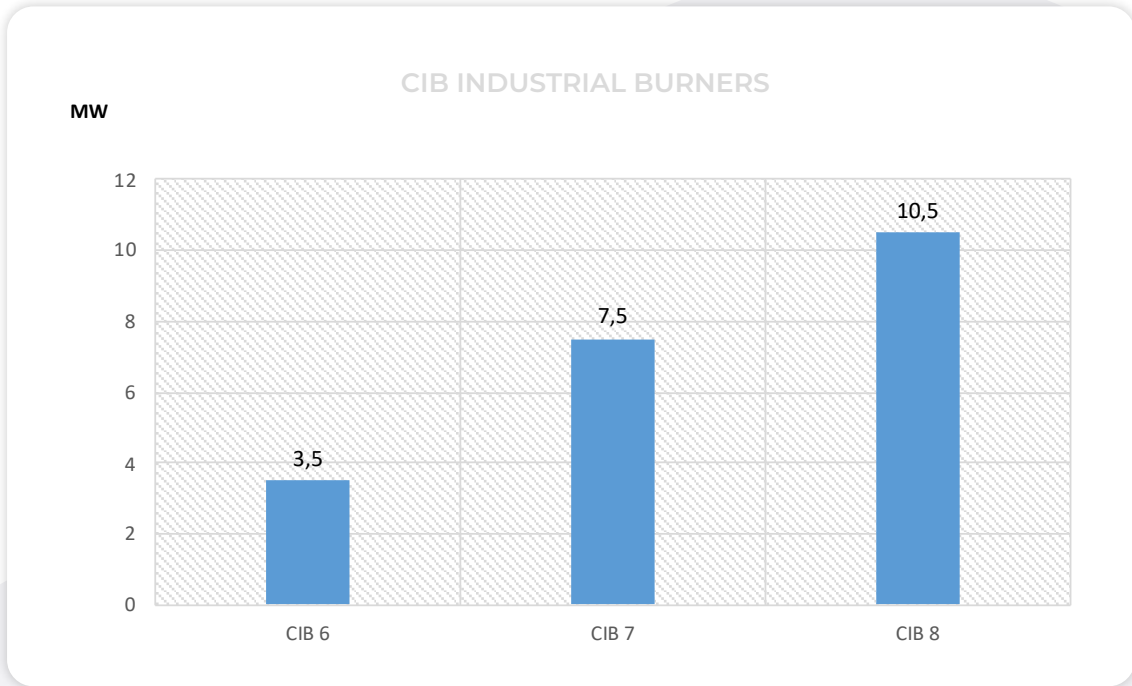
- ECOSTAR CIB series industrial burners with monoblock body structure are used in hot water boilers, steam boilers and hot oil boilers.
- Natural Gas, LPG, Light Oil and Biogas can be used in CIB series industrial burners.
- They have low flue gas emission values with their special body and combustion nozzle designs.
- Thanks to its hinged body design, it provides ease of service without dismounting the burner from the boiler.
- High fire safety thanks to flame control with photocell.
- It is ready to use with its integrated control panel on the body.
- Light oil filtering and pumping station is produced externally according to customer demand.
- Combustion optimization with O₂-CO trim system adaptation in electronic modulating burners, if demanded.
- Energy saving with fan speed control in electronic modulating burners, if demanded.
- Remote management by connecting to PLC systems using BMS (Burner Management System) or software.
- Suitable for use of high pressure mechanical atomization & low pressure air/steam atomization lance options in liquid fuel products.
- Operation at low noise levels with its specially designed muffler air cage design and axial fan. (<72dB)



CIB INDUSTRIAL BURNERS CAPACITY TABLE

CIB SERIES INDUSTRIAL BURNERS CAPACITY TABLE								
BURNER TYPE	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		LIGHT OIL CONSUMPTION	
	Min. MW	Max. MW	Min. Kcal/h	Max. Kcal/h	Min m ³ /h	Max m ³ /h	Min m ³ /h	Max m ³ /h
CIB 6	1,5	3,5	1.290.000	3.010.000	156,36	364,85	126,47	295,10
CIB 7	3,5	7,5	3.010.000	6.450.000	364,85	781,82	295,10	632,35
CIB 8	6,5	10,5	5.590.000	9.030.000	677,58	1094,55	548,04	885,29

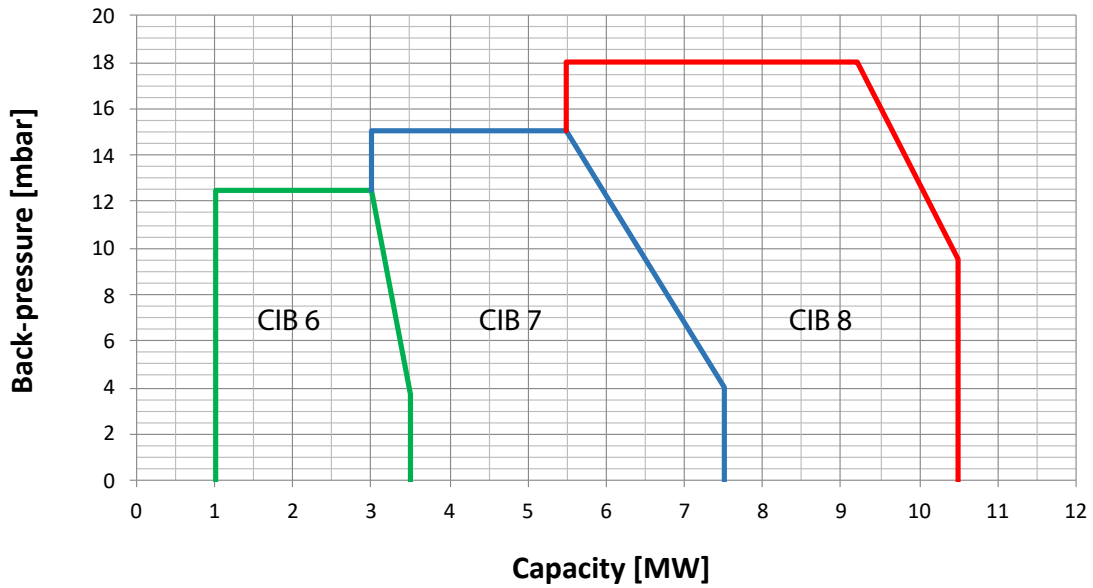
Mechanical Modulating Modulation Ratio: Natural Gas 5:1, Liquid Fuel 3:1
Electronic Modulating Natural Gas 10:1, Liquid Fuel 5:1



CIB

INDUSTRIAL BURNERS

BURNER SPECIFICATIONS



SPECIFICATIONS	CIB 6	CIB 7	CIB 8
Electronic modulating control option	✓	✓	✓
Photocell flame control	✓	✓	✓
Operation at low noise levels with its specially designed muffler air cage design and axial fan (<72 Db)	✓	✓	✓
Option of external and internal recirculation, low Nox emissions	✓	✓	✓
Pilot ignition	✓	✓	✓
Option of use with gas / light oil / gas-light oil	✓	✓	✓
In liquid fuel products, high-pressure mechanic atomization lance or low-pressure air/steam-atomization lance,	✓	✓	✓
Different mounting options	✓	✓	✓
Serviceability without dismantling the burner from the boiler /hinged body	✓	✓	✓
Different flame tube length	○	○	○
Control via PLC with BMS or software	○	○	○
O-2CO combustion management system connection	○	○	○
Combustion air fan inverter connection	○	○	○
Fuel preparation stations (Gas line/ Diesel Station)	○	○	○

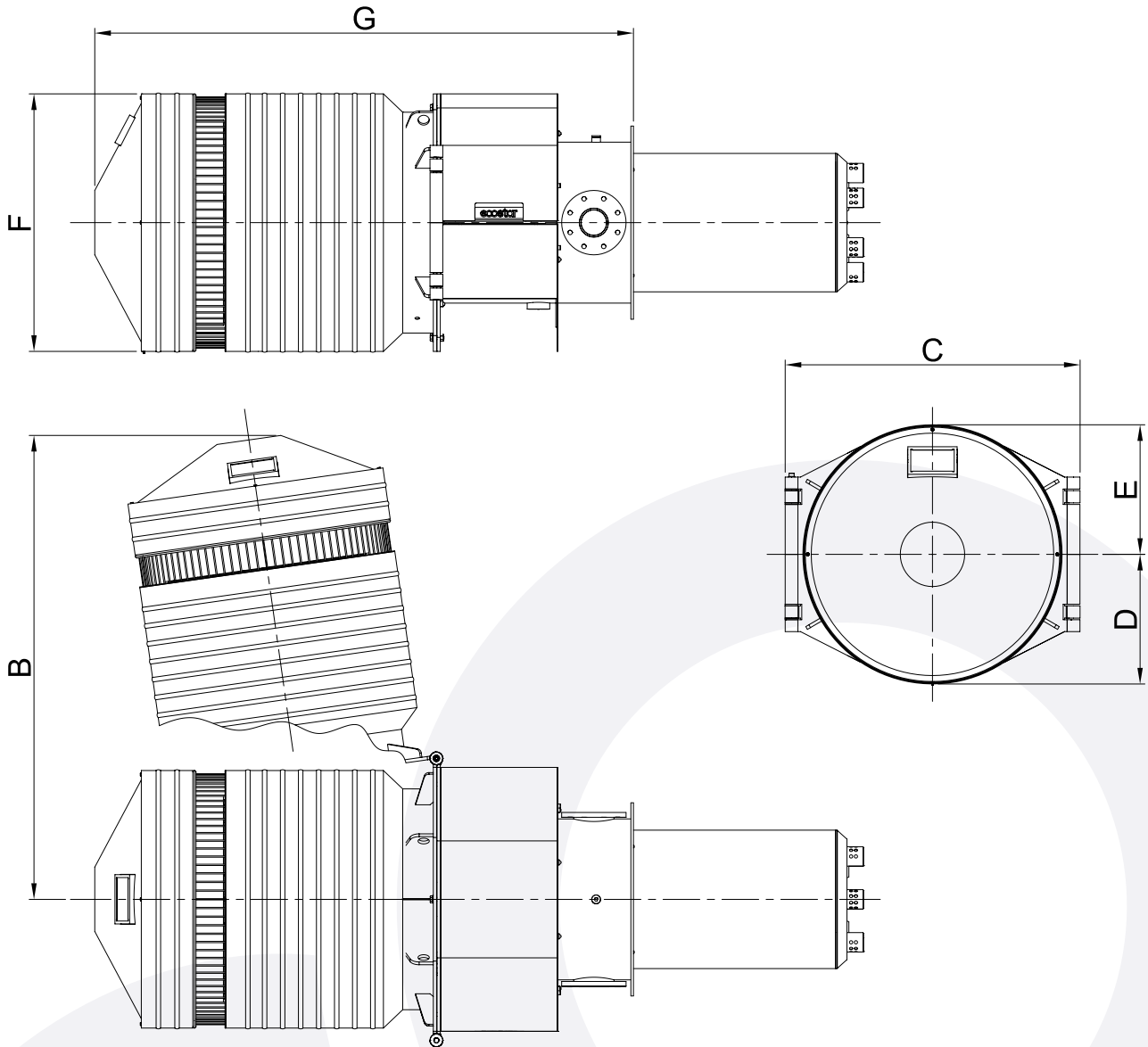
✘ Not Included / N/A

✓ Included / Available

○ Optional

ME Mechanical Modulating EL Electronic Modulating

INDUSTRY CIB



	B	C	D	E	F	G
CIB 6	1150	800	450	350	700	1380
CIB 7	1480	900	550	400	800	1660
CIB 8	1580	1000	600	450	900	1760

INDUSTRIAL BURNERS PROCESS

Thanks to its high energy efficiency and application-specific design that allows meeting different types of combustion applications, Ecostar process burners can operate with natural gas, LPG, heavy oil, light oil and dual fuels and are used in many different areas in sectors where thermal energy is needed such as industrial boilers, hot water boilers, steam boilers, industrial boilers, heat treatment furnaces, foundry furnaces, hot oil boilers, boilers with premix burners. They can also be used successfully in a wide range of heavy industry applications such as hot air generators, industrial furnaces, melting pots, ram machines in the textile industry, metal, food, ceramics, paint industry, many sensitive drying processes, and high temperature burners.



FPB

14 PRODUCTS

[Detailed Information ▶](#)



GAZORAM BURNERS

7 PRODUCTS

[Detailed Information ▶](#)



FUSE

4 PRODUCTS

[Detailed Information ▶](#)



DUCT BURNERS

1 PRODUCTS

[Detailed Information ▶](#)



ECOFLUE BURNERS

14 PRODUCTS

[Detailed Information ▶](#)



IMMERSION TYPE BURNER SERIES

7 PRODUCTS

[Detailed Information ▶](#)



SPECIAL BURNERS

4 PRODUCTS

[Detailed Information ▶](#)

INDUSTRIAL BURNERS

FPB

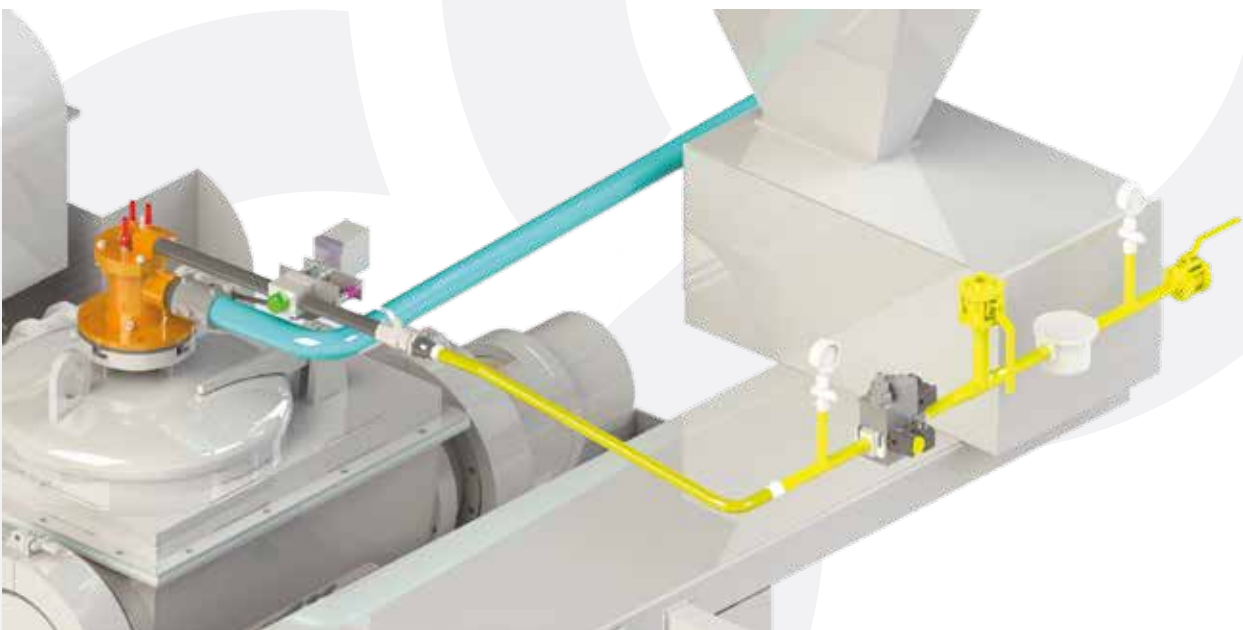
ECOSTAR FPB series Process Burners are compatible even with heavy industry applications thanks to its superior design. Easy connection with the connecting flange and the optional flame tube length allow easy adaptation to the rendered systems. System-specific designed control and command panels meet the requirements of single and multi-zone control systems.

SPECIFICATIONS

- 4 - 5800 kW wide capacity range
- Operation with Natural Gas, LPG, Light Oil and Heavy Oil
- Flame tube and turbulator made of high temperature resistant Chromium-Nickel material
- High efficiency and smooth operation in applications with high temperatures
- Single stage, two stage, manually modulating, mechanically modulating, pneumatically modulating (Natural gas) and electronically modulating control options; depending on the needs and demand
- Single and multi-zone control systems
- Control panel attached to, or detached from, the body, depending on the application's requirement
- Direct or pilot ignition option (pilot ignition is optional for certain models.)
- Ionization or photocell flame control (Photocell flame control is optional for certain models.)
- Easy assembly and disassembly thanks to its design
- Easy operation and maintenance
- Different installation options that allow compatibility with various industrial applications
- Optional long flame tube option which allows adaptation to new and modernized legacy applications.

AREAS OF APPLICATION

- It is used in furnaces and salt baths where treatment processes are carried out by annealing, recrystallization, normalization, carburization, hardening,
- In furnaces with crucible and similar ones where alloys like aluminum, magnesium and copper are melted down,
- In dye cabinets where dyed metal products are kiln-dried in dyeing sector,
- In indirect hot air gas generators manufactured to dry various foodstuff,
- In cabin, tunnel and cart type furnaces that are used in firing similar materials like porcelain and ceramic.



FPB

PROCESS BURNERS

CAPACITY TABLE

FPB PROCESS BURNERS													
	Capacity		Capacity		Natural Gas Consumption		LPG Consumption		Light Oil Consumption		Heavy Oil Consumption		FAN
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Flow Rate
	Kcal/h		kW		Nm ³ /h		Nm ³ /h		kg/h		kg/h		Nm ³ /h
GIB-302	4.000	17.200	3,9	20,0	0,48	2,08	0,17	0,75	-	-	-	-	30
GIB-351	8.000	40.000	9,3	46,5	1,0	4,8	0,4	1,8					70
GIB-352	16.000	80.000	18,6	93,0	1,9	9,7	0,7	3,6	-	-	-	-	150
GIB-353	40.000	200.000	46,5	232,6	4,8	24,2	1,8	8,9	3,9	19,6	4,1	20,7	350
GIB-401	60.000	300.000	69,8	348,8	7,3	36,4	2,7	13,3	5,9	29,4	6,2	31,1	500
GIB-402	80.000	400.000	93,0	465,1	9,7	48,5	3,6	17,8	7,8	39,2	8,3	41,5	650
GIB-403	110.000	550.000	127,9	639,5	13,3	66,7	4,9	24,4	10,8	53,9	11,4	57,0	900
GIB-451	174.000	870.000	202,3	1011,6	21,1	105,5	7,7	38,7	17,1	85,3	18,0	90,2	1.400
GIB-452	240.000	1.200.000	279,1	1395,3	29,1	145,5	10,7	53,3	23,5	117,6	24,9	124,4	2.000
GIB-453	320.000	1.600.000	372,1	1860,5	38,8	193,9	14,2	71,1	31,4	156,9	33,2	165,8	2.500
GIB-501	400.000	2.000.000	465,1	2325,6	48,5	242,4	17,8	88,9	39,2	196,1	41,5	207,3	3.100
GIB-502	500.000	2.500.000	581,4	2907,0	60,6	303,0	22,2	111,1	49,0	245,1	51,8	259,1	4.000
GIB-503	700.000	3.500.000	814,0	4069,8	84,8	424,2	31,1	155,6	68,6	343,1	72,5	362,7	5.500
GIB-601	1.000.000	5.000.000	1162,8	5814,0	121,2	606,1	44,4	222,2	98,0	490,2	103,6	518,1	7.800

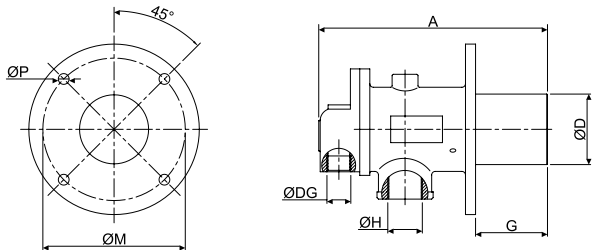
SPECIFICATIONS	FPB 20	FPB 80	FPB 200	FPB 300	FPB 400	FPB 550	FPB 870	FPB 1200	FPB 1600	FPB 2000	FPB 2500	FPB 3500	FPB 5000
Control Type	1K	○	○	○	○	○	○	○	○	○	○	○	○
Capacity flow adjustment	M	○	○	○	○	○	○	○	○	○	○	○	○
Ignition	DA	DA	DA	DA	DA	DA	DA	DA	○	○	○	○	○
Flame control	io	io	io	io	io	io	io	io	○	○	○	○	○
Handling Shaft for Servicing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Different flame tube lengths	○	○	○	○	○	○	○	○	○	○	○	○	○
Complies with TS EN +676A2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Electrical protection class	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54

- ✘ Not Included / N/A
- Opsiyonel
- ✓ Included / Available
- 1K Single Stage
- 2K Two Stage
- Modulating
- M Manual
- SM Servomotor
- io Ionization
- F Photocell
- DA Direct Ignition
- PA Pilot Ignition

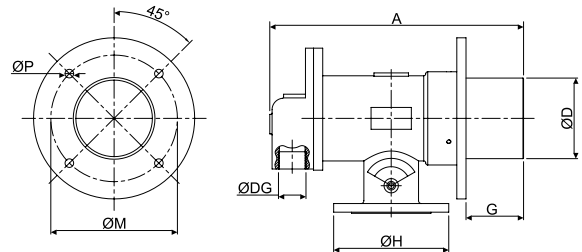
PROCESS BEK

GAS

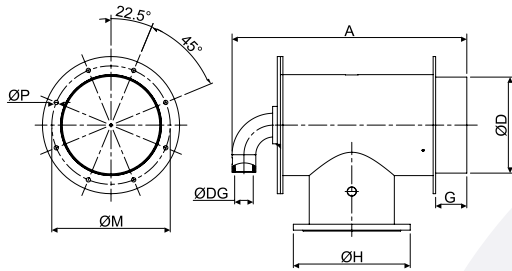
FPB 20 - 80 - 200



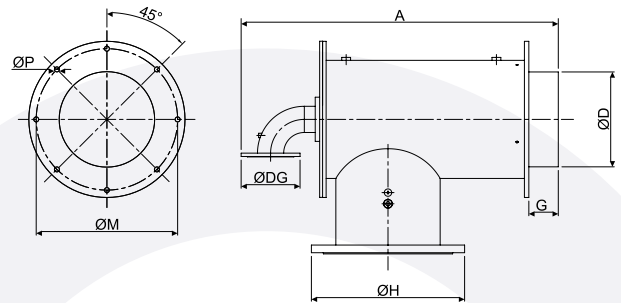
FPB 300 - 400 - 550 - 870 - 1200* - 1600* - 2000*



FPB 1200 - 1600 - 2000 - 2500



FPB 3500 - 5000

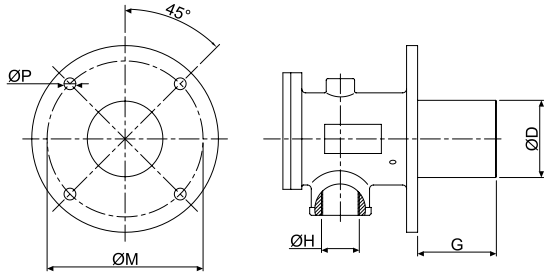


FPB	A	G	ØD	ØH	ØDG	ØM	ØP	
	mm	mm	mm	-	-	mm	mm	
CASTING BODY	FPB 20	270	100	41	R 3/4"	R 1/2"	90	9
	FPB 80	350	100	69	R 1 1/2"	R 1"	108	12
	FPB 200	365	100	100	R 2"	R 1"	198	12
	FPB 300	490	100	140	NW 80	R 1 1/2"	220	15
	FPB 400	490	100	140	NW 80	R 1 1/2"	220	15
	FPB 550	545	100	175	NW 100	R 1 1/2"	243	15
	FPB 870	620	100	220	NW 150	R 2"	330	17
	FPB 1200*	620	100	220	NW 150	R 2"	330	17
	FPB 1600*	620	100	220	NW 150	R 2"	330	17
	FPB 2000*	620	100	220	NW 150	R 2"	330	17
SHEET BODY	FPB 1200	800	100	308	NW 250	R 2"	380	14
	FPB 1600	800	100	308	NW 250	R 2"	380	14
	FPB 2000	800	100	308	NW 250	R 2"	380	14
	FPB 2500	800	100	308	NW 250	R 2 1/2"	380	14
	FPB 3500	1080	100	322	NW 350	NW 80	480	17
	FPB 5000	1235	100	322	NW 350	NW 100	480	17

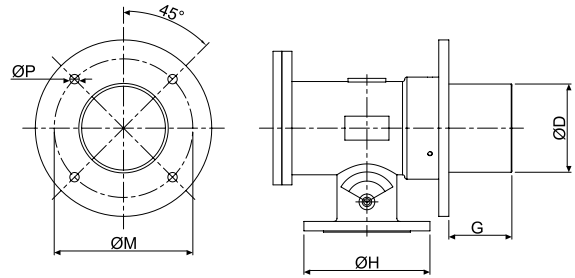
PROCESS BEK

FUEL-OIL

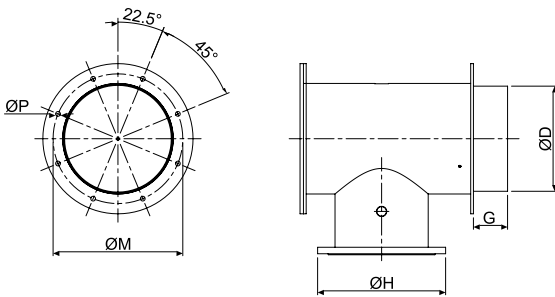
FPB 200



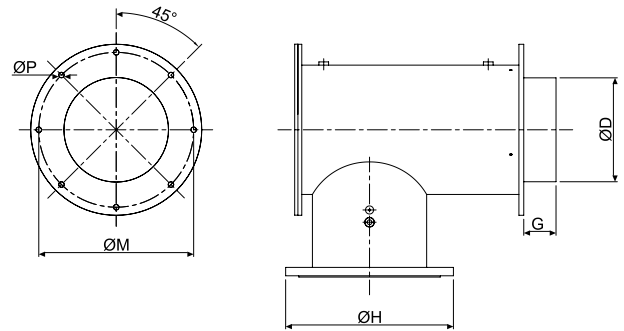
FPB 300 - 400 - 550 - 870 - 1200 - 1600 - 2000



FPB 2500



FPB 3500 - 5000



FPB		ØD	ØH	ØM	ØP
		mm	-	mm	mm
CASTING BODY	FPB 200	100	R 2"	198	12
	FPB 300	140	NW 80	220	15
	FPB 400	140	NW 80	220	15
	FPB 550	175	NW 100	243	15
	FPB 870	220	NW 150	330	17
	FPB 1200	220	NW 150	330	17
SHEET BODY	FPB 1600	220	NW 150	330	17
	FPB 2000	220	NW 150	330	17
	FPB 2500	240	NW 250	380	14
	FPB 3500	322	NW 350	480	17
	FPB 5000	322	NW 350	480	17

INDUSTRIAL BURNERS

GAZORAM BURNERS

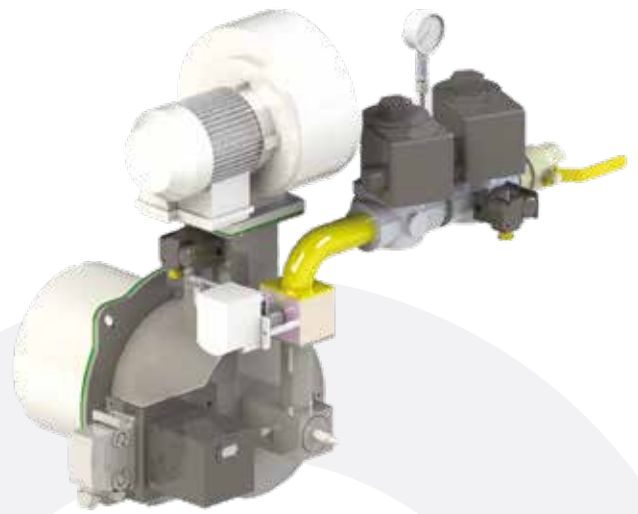
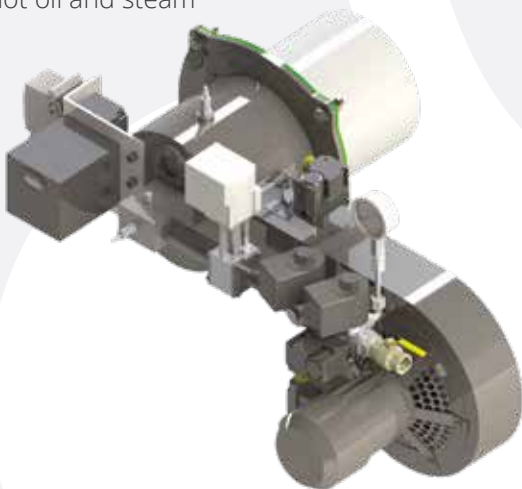
GAZORAM burners are nozzle-mixed burners and used in industrial direct-heating furnaces and drying applications. These furnaces usually have a balanced pressure in the combustion chamber and require burners with wide operating ranges. GAZORAM burners have a simple operating logic and easily adapt to many applications with different installation options. Gazoram burners operate at gas pressure of 21 to 50 mbar.

SPECIFICATIONS

- Operation in wide modulation range
- 7 different capacity options in the range of 5-1160 kW
- Operation with Natural gas and LPG
- Flame control with ionization or photocell (optional)
- Easy assembly and disassembly thanks to its design
- Easy operation and maintenance

AREAS OF USE

- Textile machinery
- Printing machines
- Drying and hardening furnaces
- Combustion furnaces
- Indirect air heating
- Textile drying
- Food processing/cooking
- Tempering
- Aluminum homogenization
- Conversion of ram-dryers working with hot oil and steam



STANDARD EQUIPMENT

- **Electromagnetic safety and operating valve:** An electromagnetic valve that ensures fully safe operation of the burner.
- **Servo motor air/fuel adjustment:** Precise air-fuel adjustment is provided by mechanically modulating klappes.
- **Control Relay:** Provides safe combustion control.
- **Gas Pressure Switch:** The gas pressure switch on the operating valve controls the gas pressure and prevents any problems that may occur due to pressure drops in the system.
- **Air Pressure Switch:** Ensures safety by checking for the availability of minimum combustion air required for safe combustion.
- **Ionization:** Provides flame control for safe combustion.
- **Manometer:** Ensures proper combustion settings and measuring of gas pressure.
- **Spherical Gas Shut-Off Valve:** Allows cutting off the gas for safety and maintenance purposes.

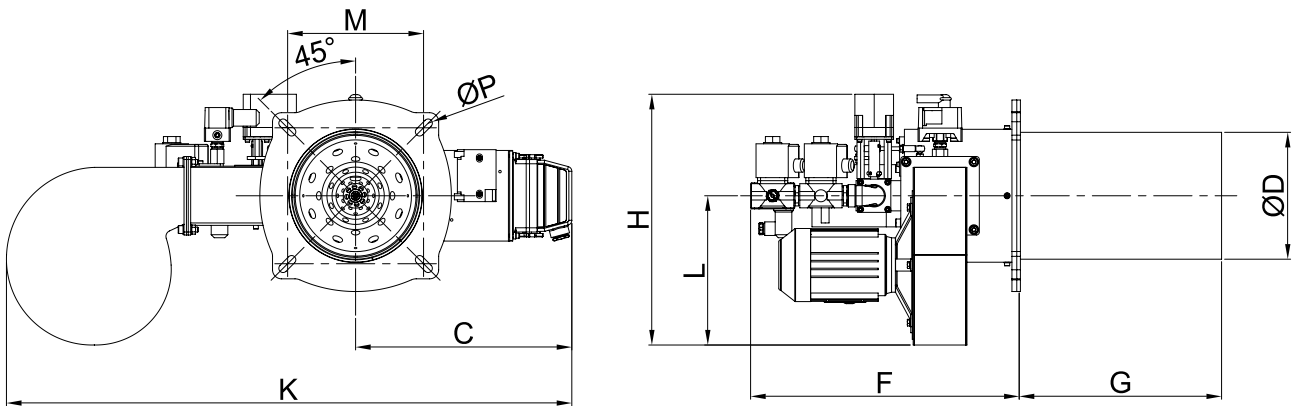
GAZORAM BURNERS

CAPACITY TABLE

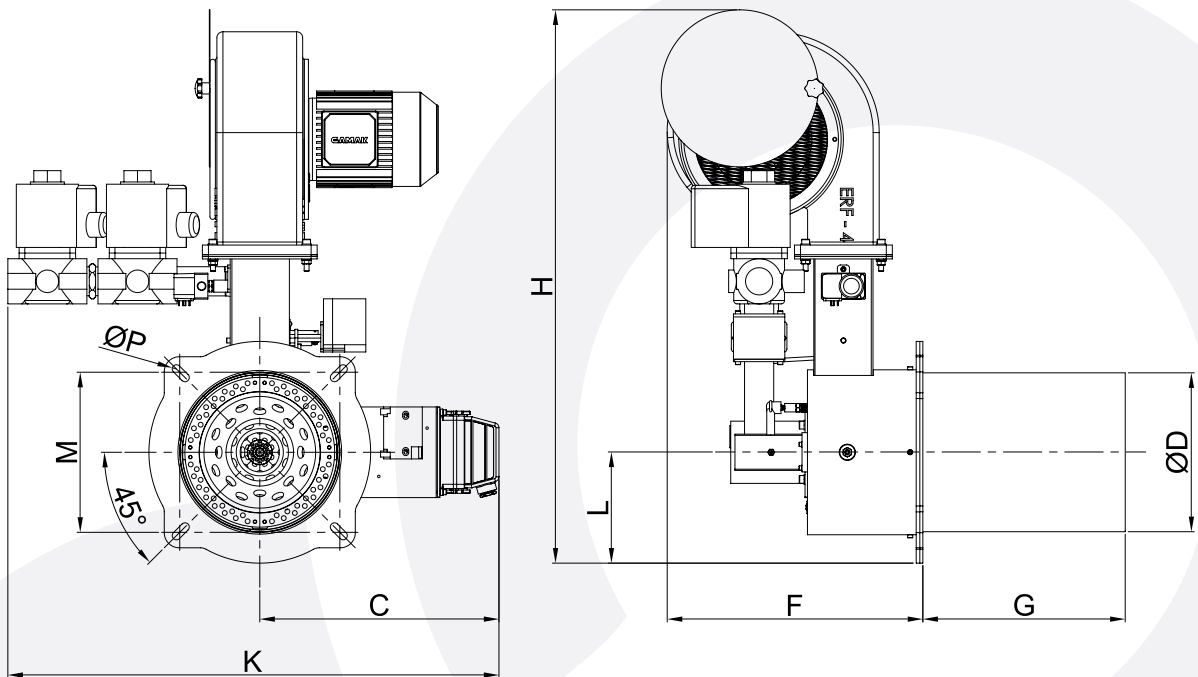
GAZORAM BURNER CAPACITY TABLE							
BURNER TYPE	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE AT 50 Hz
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm ³ /h	Max. Nm ³ /h	VAC
GRM 15	4.500	150.000	5,18	174,42	0,54	18,18	1N 230/3N 400
GRM 30	8.500	300.000	9,88	348,84	1,03	36,36	1N 230/3N 400
GRM 40	11.500	400.000	13,33	465,12	1,39	48,48	1N 230/3N 400
GRM 60	15.000	550.000	17,44	639,53	1,82	66,67	1N 230/3N 400
GRM 70	20.000	700.000	23,21	814,11	2,42	84,85	1N 230/3N 400
GRM 80	21.500	750.000	25,03	872,09	2,61	90,91	1N 230/3N 400
GRM 100	28.500	1.000.000	33,19	1162,79	3,46	121,21	1N 230/3N 400

PROCESS GRM

GRM 15 - GRM 30



GRM 40 - GRM 60 - GRM 70 - GRM 80 - GRM 100



	ØD	G	H	L	F	C	K	M	ØP
GRM 15	158	200	420	260	450	350	900	185	R7x34
GRM 30	210	200	420	250	450	360	950	225	R7x34
GRM 40	210	200	420	250	450	360	950	225	R7x34
GRM 60	263	200	950	185	450	400	820	265	R7x34
GRM 70	263	200	950	185	450	400	820	265	R7x34
GRM 80	263	200	950	185	450	400	820	265	R7x34
GRM 100	308	200	1150	200	500	450	900	305	R7x34

INDUSTRIAL BURNERS

FUSE INDUSTRIAL PROCESS BURNERS

HIGH SPEED GAS BURNER SERIES

FUSE | FUSE SS

SS Stainless Steel

Stainless Steel Combustion Nozzle

- Fuse series products have a compact design, easy assembly and smooth body structure.
- Products designated with the SS code are stainless steel nozzles, while the products with the SC code are high-speed burners with silicon carbide heads.

SC Silicon Carbide

Silicon Carbide Combustion Nozzle

1. Fuse series products have a compact design, easy assembly and smooth body structure.
2. Products designated with the SS code are stainless steel nozzles, while the products with the SC code are high-speed burners with silicon carbide heads.

RR Circular Refractory

Circular Section Refractory Combustion Nozzle

1. Thanks to its patented special design, the conical bowl turbulator provides an excellent combustion performance.
2. With the help of a special mechanism placed on the turbulator, the air that will join combustion can be directed to the center of the turbulator or its surroundings, and thus achieving optimum combustion performance.
3. Emission values are obtained at desired levels with the help of fresh air integrated into the gas line from special points.
4. In addition, the amount of fresh air mixed with the gas can be adjusted with the help of a special mechanism located in one of the pre-mixing zones.
5. RR code refers to circular section refractory nozzle.

RS Square Refractory

Square Section Refractory Combustion Nozzle

1. Refractory hood models are also available in Ecostar Fuse series products.
2. There are two different types of refractory nozzles in the Ecostar product range.
3. These products are circular section and square section refractory nozzle models.
4. The RS code refers to a rectangular refractory nozzle.

PROPERTIES

- Capacity range of 12-6000 kW
- Gas fired combustion
- Ability to operate with ambient air or preheated air
- Excess air capacity
- Square and circular section refractory nozzle options for fiber and concrete walls
- Direct ignition
- Photocell and ionization options as flame detectors
- Elegant and functional design

ADVANTAGES

- Economical fuel consumption
- Short cycle times
- Homogeneous heat distribution in the furnace
- Excellent flame stabilization
- High modulation
- Option to operate as a one stage at high capacities
- Low NOx and CO emission values

AREAS OF USE

- Forging processes
- Reheat processes
- Pot heating processes
- Casting vessel heating processes
- Scrap preheating processes
- Stress relief processes
- Aluminum melting processes
- Thermal fluid heaters
- Thermal oxidizers
- Refractory drying units
- Glass tank heating systems
- Fiber blanket processing furnaces are used in all other heat treatments and processes that require high temperature and flame stability, tunnel or car furnaces, stretching furnaces, ceramic furnaces, fiber insulated furnaces, etc. used in industrial processes.



FUSE

PROCESS BURNERS

CAPACITY TABLE

HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	SS SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Stainless Steel Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-1	FUSE-SS0012-HI	5	12	4300	10320	0,52	1,25	1N 230/3N 400
	FUSE-SS0020-HI	8	20	6880	17200	0,83	2,08	1N 230/3N 400
	FUSE-SS0030-HI	12	30	10320	25800	1,25	3,13	1N 230/3N 400
	FUSE-SS0050-HI	20	50	17200	43000	2,08	5,21	1N 230/3N 400
FUSE-2	FUSE-SS0150-HI	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-SS0200-HI	80	200	68800	172000	8,34	20,85	1N 230/3N 400

ULTRA HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	SS SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Stainless Steel Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-1	FUSE-SS0012-UL	5	12	4300	10320	0,52	1,25	1N 230/3N 400
	FUSE-SS0020-UL	8	20	6880	17200	0,83	2,08	1N 230/3N 400
	FUSE-SS0030-UL	12	30	10320	25800	1,25	3,13	1N 230/3N 400
	FUSE-SS0050-UL	20	50	17200	43000	2,08	5,21	1N 230/3N 400
	FUSE-SS0100-UL	40	100	34400	86000	4,17	10,42	1N 230/3N 400
FUSE-2	FUSE-SS0150-UL	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-SS0200-UL	80	200	68800	172000	8,34	20,85	1N 230/3N 400
	FUSE-SS0250-UL	100	250	86000	215000	10,42	26,06	1N 230/3N 400

HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	SC SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Silicon Carbide Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-1	FUSE-SC0012-HI	5	12	4300	10320	0,52	1,25	1N 230/3N 400
	FUSE-SC0020-HI	8	20	6880	17200	0,83	2,08	1N 230/3N 400
	FUSE-SC0030-HI	12	30	10320	25800	1,25	3,13	1N 230/3N 400
	FUSE-SC0050-HI	20	50	17200	43000	2,08	5,21	1N 230/3N 400
FUSE-2	FUSE-SC0150-HI	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-SC0200-HI	80	200	68800	172000	8,34	20,85	1N 230/3N 400
FUSE-3	FUSE-SC0400-HI	160	400	137600	344000	16,68	41,70	1N 230/3N 400
	FUSE-SC0500-HI	200	500	172000	430000	20,85	52,12	1N 230/3N 400
	FUSE-SC0600-HI	240	600	206400	516000	25,02	62,55	1N 230/3N 400

FUSE

INDUSTRIAL BURNERS

CAPACITY TABLE

ULTRA HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	SC SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Silicon Carbide Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-1	FUSE-SC0012-UL	5	12	4300	10320	0,52	1,25	1N 230/3N 400
	FUSE-SC0020-UL	8	20	6880	17200	0,83	2,08	1N 230/3N 400
	FUSE-SC0030-UL	12	30	10320	25800	1,25	3,13	1N 230/3N 400
	FUSE-SC0050-UL	20	50	17200	43000	2,08	5,21	1N 230/3N 400
	FUSE-SC0100-UL	40	100	34400	86000	4,17	10,42	1N 230/3N 400
FUSE-2	FUSE-SC0150-UL	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-SC0200-UL	80	200	68800	172000	8,34	20,85	1N 230/3N 400
	FUSE-SC0250-UL	100	250	86000	215000	10,42	26,06	1N 230/3N 400
FUSE-3	FUSE-SC0400-UL	160	400	137600	344000	16,68	41,70	1N 230/3N 400
	FUSE-SC0500-UL	200	500	172000	430000	20,85	52,12	1N 230/3N 400
	FUSE-SC0600-UL	240	600	206400	516000	25,02	62,55	1N 230/3N 400
	FUSE-SC1000-UL	400	1000	344000	860000	41,70	104,24	1N 230/3N 400

HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	RR SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Circular Section Refractory Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-2	FUSE-RR0150-HI	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-RR0200-HI	80	200	68800	172000	8,34	20,85	1N 230/3N 400
FUSE-3	FUSE-RR0400-HI	160	400	137600	344000	16,68	41,70	1N 230/3N 400
	FUSE-RR0500-HI	200	500	172000	430000	20,85	52,12	1N 230/3N 400
	FUSE-RR0600-HI	240	600	206400	516000	25,02	62,55	1N 230/3N 400
FUSE-4	FUSE-RR1200-HI	480	1200	412800	1032000	50,04	125,09	1N 230/3N 400
	FUSE-RR1600-HI	640	1600	550400	1376000	66,72	166,79	1N 230/3N 400
FUSE-5	FUSE-RR3500-HI	1500	3500	1290000	3010000	156,36	364,85	1N 230/3N 400
	FUSE-RR4250-HI	1800	4250	1548000	3655000	187,64	443,03	1N 230/3N 400
	FUSE-RR5000-HI	2100	5000	1806000	4300000	218,91	521,21	1N 230/3N 400

ULTRA HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	RR SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Circular Section Refractory Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-2	FUSE-RR0150-UL	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-RR0200-UL	80	200	68800	172000	8,34	20,85	1N 230/3N 400
	FUSE-RR0250-UL	100	250	86000	215000	10,42	26,06	1N 230/3N 400
FUSE-3	FUSE-RR0400-UL	160	400	137600	344000	16,68	41,70	1N 230/3N 400
	FUSE-RR0500-UL	200	500	172000	430000	20,85	52,12	1N 230/3N 400
	FUSE-RR0600-UL	240	600	206400	516000	25,02	62,55	1N 230/3N 400
	FUSE-RR1000-UL	400	1000	344000	860000	41,70	104,24	1N 230/3N 400
FUSE-4	FUSE-RR1200-UL	480	1200	412800	1032000	50,04	125,09	1N 230/3N 400
	FUSE-RR1600-UL	640	1600	550400	1376000	66,72	166,79	1N 230/3N 400
	FUSE-RR2000-UL	900	2000	774000	1720000	93,82	208,48	1N 230/3N 400
FUSE-5	FUSE-RR3500-UL	1500	3500	1290000	3010000	156,36	364,85	1N 230/3N 400
	FUSE-RR4250-UL	1800	4250	1548000	3655000	187,64	443,03	1N 230/3N 400
	FUSE-RR5000-UL	2100	5000	1806000	4300000	218,91	521,21	1N 230/3N 400
	FUSE-RR6000-UL	2600	6000	2236000	5160000	271,03	625,45	1N 230/3N 400

FUSE

PROCESS BURNERS

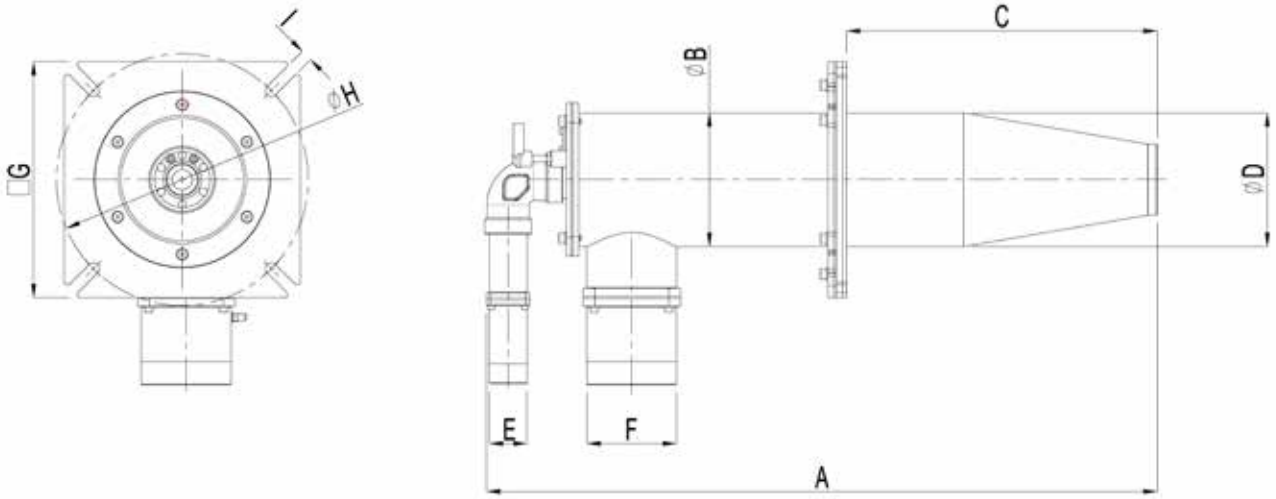
CAPACITY TABLE

HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	RS SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Square Section Refractory Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-2	FUSE-RS0150-HI	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-RS0200-HI	80	200	68800	172000	8,34	20,85	1N 230/3N 400
FUSE-3	FUSE-RS0400-HI	160	400	137600	344000	16,68	41,70	1N 230/3N 400
	FUSE-RS0500-HI	200	500	172000	430000	20,85	52,12	1N 230/3N 400
	FUSE-RS0600-HI	240	600	206400	516000	25,02	62,55	1N 230/3N 400
FUSE-4	FUSE-RS1200-HI	480	1200	412800	1032000	50,04	125,09	1N 230/3N 400
	FUSE-RS1600-HI	640	1600	550400	1376000	66,72	166,79	1N 230/3N 400
FUSE-5	FUSE-RS3500-HI	1500	3500	1290000	3010000	156,36	364,85	1N 230/3N 400
	FUSE-RS4250-HI	1800	4250	1548000	3655000	187,64	443,03	1N 230/3N 400
	FUSE-RS5000-HI	2100	5000	1806000	4300000	218,91	521,21	1N 230/3N 400

ULTRA HIGH SPEED FUSE SERIES BURNER PRODUCT FAMILY								
BODY TYPE	RS SERIES	BURNER CAPACITY		BURNER CAPACITY		NATURAL GAS CONSUMPTION		VOLTAGE
	Square Section Refractory Combustion Nozzle	MIN. (kW)	MAX. (kW)	MIN. (kcal/h)	MAX. (kcal/h)	MIN. (Nm ³ /h)	MAX. (Nm ³ /h)	VAC
FUSE-2	FUSE-RS0150-UL	60	150	51600	129000	6,25	15,64	1N 230/3N 400
	FUSE-RS0200-UL	80	200	68800	172000	8,34	20,85	1N 230/3N 400
	FUSE-RS0250-UL	100	250	86000	215000	10,42	26,06	1N 230/3N 400
FUSE-3	FUSE-RS0400-UL	160	400	137600	344000	16,68	41,70	1N 230/3N 400
	FUSE-RS0500-UL	200	500	172000	430000	20,85	52,12	1N 230/3N 400
	FUSE-RS0600-UL	240	600	206400	516000	25,02	62,55	1N 230/3N 400
	FUSE-RS1000-UL	400	1000	344000	860000	41,70	104,24	1N 230/3N 400
FUSE-4	FUSE-RS1200-UL	480	1200	412800	1032000	50,04	125,09	1N 230/3N 400
	FUSE-RS1600-UL	640	1600	550400	1376000	66,72	166,79	1N 230/3N 400
	FUSE-RS2000-UL	900	2000	774000	1720000	93,82	208,48	1N 230/3N 400
FUSE-5	FUSE-RS3500-UL	1500	3500	1290000	3010000	156,36	364,85	1N 230/3N 400
	FUSE-RS4250-UL	1800	4250	1548000	3655000	187,64	443,03	1N 230/3N 400
	FUSE-RS5000-UL	2100	5000	1806000	4300000	218,91	521,21	1N 230/3N 400
	FUSE-RS6000-UL	2600	6000	2236000	5160000	271,03	625,45	1N 230/3N 400

PROSES ECO FUSE

SS HI/UL



FUSE SS HIGH SPEED BOILER SIZE TABLE

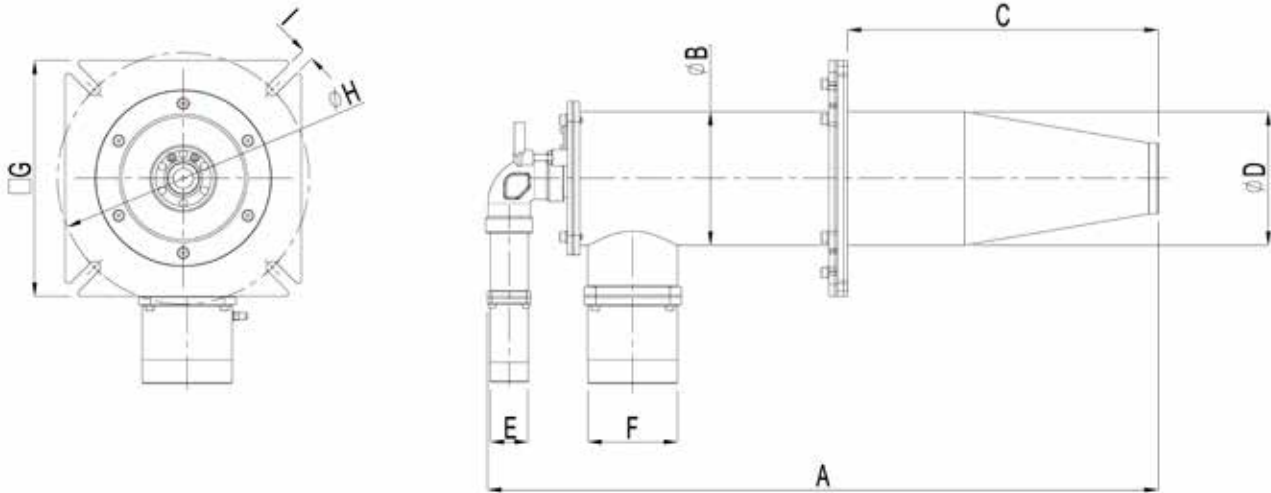
BODY TYPE	SS SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Stainless Steel Combustion Nozzle									
FUSE-1	FUSE-SS0012-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0020-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0030-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0050-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
FUSE-2	FUSE-SS0150-HI	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
	FUSE-SS0200-HI	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15

FUSE SS ULTRA HIGH SPEED BOILER SIZE TABLE

BODY TYPE	SS SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Stainless Steel Combustion Nozzle									
FUSE-1	FUSE-SS0012-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0020-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0030-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0050-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SS0100-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
FUSE-2	FUSE-SS0150-UL	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
	FUSE-SS0200-UL	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
	FUSE-SS0250-UL	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15

PROCESS ECO FUSE

SC HI/UL



FUSE SC HIGH SPEED BOILER SIZE TABLE

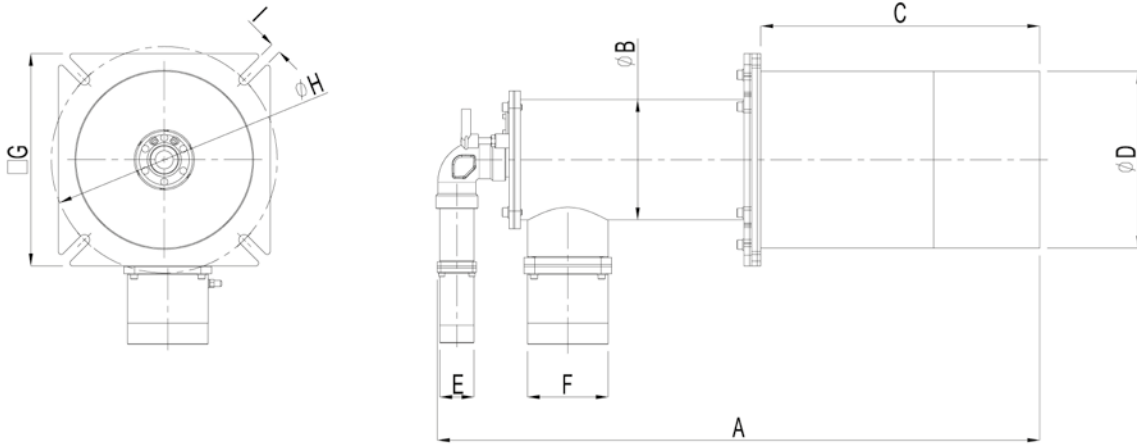
BODY TYPE	SC SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Silicon Carbide Combustion Nozzle									
FUSE-1	FUSE-SC0012-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0020-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0030-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0050-HI	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
FUSE-2	FUSE-SC0150-HI	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
	FUSE-SC0200-HI	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
FUSE-3	FUSE-SC0400-HI	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15
	FUSE-SC0500-HI	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15
	FUSE-SC0600-HI	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15

FUSE SC ULTRA HIGH SPEED BOILER SIZE TABLE

BODY TYPE	SC SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Silicon Carbide Combustion Nozzle									
FUSE-2	FUSE-SC0012-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0020-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0030-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0050-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
	FUSE-SC0100-UL	630	Ø98	335	Ø98	DN15	DN40	200	Ø200	15
FUSE-2	FUSE-SC0150-UL	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
	FUSE-SC0200-UL	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
	FUSE-SC0250-UL	680	Ø110	335	Ø110	DN25	DN50	230	Ø230	15
FUSE-3	FUSE-SC0400-UL	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15
	FUSE-SC0500-UL	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15
	FUSE-SC0600-UL	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15
	FUSE-SC1000-UL	860	Ø170	385	Ø170	DN40	DN100	260	Ø260	15

PROCESS ECO FUSE

RR HI/UL



FUSE RR HIGH SPEED BOILER SIZE TABLE

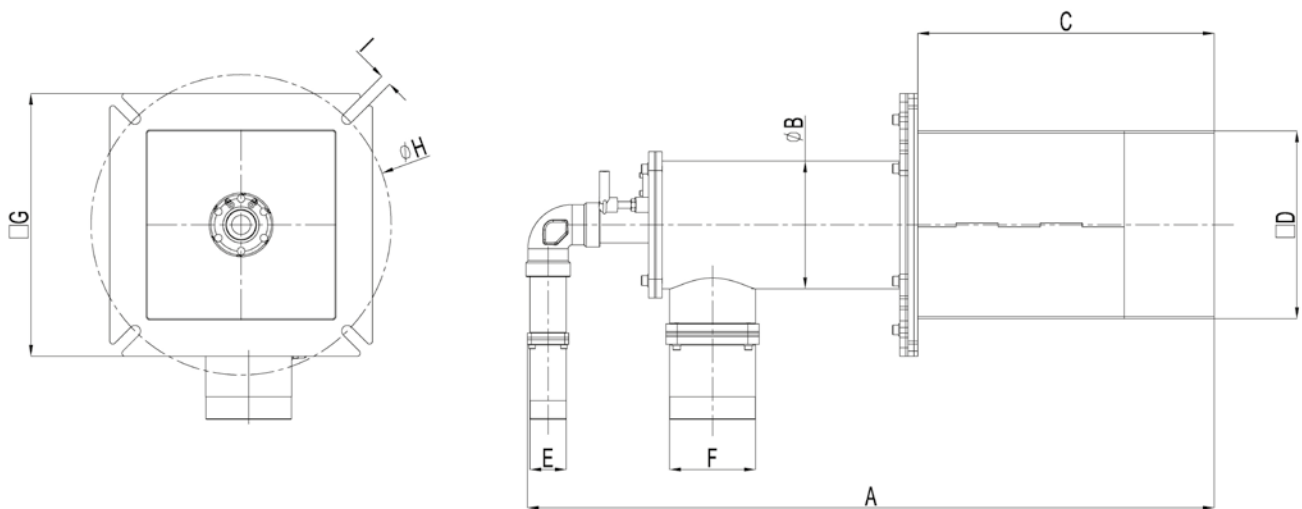
BODY TYPE	RR SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Circular Section Refractory Combustion Nozzle									
FUSE-2	FUSE-RR0150-HI	680	Ø110	345	Ø190	DN25	DN50	230	Ø230	15
	FUSE-RR0200-HI	680	Ø110	345	Ø190	DN25	DN50	230	Ø230	15
FUSE-3	FUSE-RR0400-HI	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
	FUSE-RR0500-HI	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
	FUSE-RR0600-HI	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
FUSE-4	FUSE-RR1200-HI	855	Ø250	395	Ø330	DN50	DN150	450	Ø450	15
	FUSE-RR1600-HI	855	Ø250	395	Ø330	DN50	DN150	450	Ø450	15
FUSE-5	FUSE-RR3500-HI	About the dimensions of our products with FUSE-5 body You can contact our Ecostar sales team for information.								
	FUSE-RR4250-HI									
	FUSE-RR5000-HI									

FUSE RR ULTRA HIGH SPEED BOILER SIZE TABLE

BODY TYPE	RR SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Circular Section Refractory Combustion Nozzle									
FUSE-1	FUSE-RR0100-UL	645	Ø100	345	Ø190	DN15	DN40	230	Ø230	15
FUSE-2	FUSE-RR0150-UL	680	Ø110	345	Ø190	DN25	DN50	230	Ø230	15
	FUSE-RR0200-UL	680	Ø110	345	Ø190	DN25	DN50	230	Ø230	15
	FUSE-RR0250-UL	680	Ø110	345	Ø190	DN25	DN50	230	Ø230	15
FUSE-3	FUSE-RR0400-UL	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
	FUSE-RR0500-UL	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
	FUSE-RR0600-UL	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
	FUSE-RR1000-UL	895	Ø170	395	Ø250	DN40	DN100	300	Ø320	15
FUSE-4	FUSE-RR1200-UL	855	Ø250	395	Ø330	DN50	DN150	450	Ø450	15
	FUSE-RR1600-UL	855	Ø250	395	Ø330	DN50	DN150	450	Ø450	15
	FUSE-RR2000-UL	855	Ø250	395	Ø330	DN50	DN150	450	Ø450	15
FUSE-5	FUSE-RR3500-UL	About the dimensions of our products with FUSE-5 body You can contact our Ecostar sales team for information.								
	FUSE-RR4250-UL									
	FUSE-RR5000-UL									
	FUSE-RR6000-UL									

PROCESS ECO FUSE

RS HI/UL



FUSE RS HIGH SPEED BOILER SIZE TABLE

BODY TYPE	RS SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Square Section Refractory Combustion Nozzle									
FUSE-2	FUSE-RS0150-HI	680	Ø110	345	Ø190	DN25	DN50	300	Ø300	15
	FUSE-RS0200-HI	680	Ø110	345	Ø190	DN25	DN50	300	Ø300	15
FUSE-3	FUSE-RS0400-HI	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
	FUSE-RS0500-HI	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
	FUSE-RS0600-HI	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
FUSE-4	FUSE-RS1200-HI	880	Ø250	395	Ø330	DN50	DN150	450	Ø500	15
	FUSE-RS1600-HI	880	Ø250	395	Ø330	DN50	DN150	450	Ø500	15
FUSE-5	FUSE-RS3500-HI	About the dimensions of our products with FUSE-5 body You can contact our Ecostar sales team for information.								
	FUSE-RS4250-HI									
	FUSE-RS5000-HI									

FUSE RS ULTRA HIGH SPEED BOILER SIZE TABLE

BODY TYPE	RS SERIES	A	ØB	C	ØD	E	F	G	ØH	I
	Square Section Refractory Combustion Nozzle									
FUSE-2	FUSE-RS0150-UL	680	Ø110	345	Ø190	DN25	DN50	300	Ø300	15
	FUSE-RS0200-UL	680	Ø110	345	Ø190	DN25	DN50	300	Ø300	15
	FUSE-RS0250-UL	680	Ø110	345	Ø190	DN25	DN50	300	Ø300	15
FUSE-3	FUSE-RS0400-UL	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
	FUSE-RS0500-UL	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
	FUSE-RS0600-UL	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
	FUSE-RS1000-UL	915	Ø170	395	Ø250	DN40	DN100	350	Ø400	15
FUSE-4	FUSE-RS1200-UL	880	Ø250	395	Ø330	DN50	DN150	450	Ø500	15
	FUSE-RS1600-UL	880	Ø250	395	Ø330	DN50	DN150	450	Ø500	15
	FUSE-RS2000-UL	880	Ø250	395	Ø330	DN50	DN150	450	Ø500	15
FUSE-5	FUSE-RS3500-UL	About the dimensions of our products with FUSE-5 body You can contact our Ecostar sales team for information.								
	FUSE-RS4250-UL									
	FUSE-RS5000-UL									
	FUSE-RS6000-UL									

INDUSTRIAL BURNERS

DUCT BURNERS

T/HI 300

ECOSTAR duct burners are used in hot air generation without any need for special combustion chamber. During the process, the burner bodies supply fuel to the center of the air wings and control the air/fuel mixtures. In this way, it optimizes efficiency.

Burner is mounted directly in air ducts. The process air to be heated is mixed with combustion gases to reach the desired temperature.

With reliable modular design, optimum mixing of the flame with the process air is ensured. The greatest feature of those burners, though has the broadest operation range, has to supply simple controlled and high efficiency. With the duct burners used in air heating, short flame and low flame temperature can be obtained even at high capacities.

SPECIFICATIONS

- Operation in wide modulation range
- One stage, two stage and modulating control
- Mechanically and electronically control for modulating devices
- Different design and wide capacity range that allows easy adaptation to many systems
- Easy operation and maintenance
- Easy assembly thanks to its design
- Industry standard and modular line type burner
- Wide variety of configurations available depending on application requirements
- Robust and reliable operation based on extensive history and experience



AREAS OF USE

Textile industry;

- Carpet and similar drying operations
- Paint and press operations

Wood Industry;

- Plywood, MDF and coating drying

Food Industry;

- Drying of products such as corn, wheat, semolina, etc.

Metal Industry;

- Paint drying

Ceramics and Glass Industry;

- Cooling and decoration processes

Other;

In processes involving furnaces, dryers, smoke incinerators and similar industrial equipment, intended to produce clean and hot air in large volumes

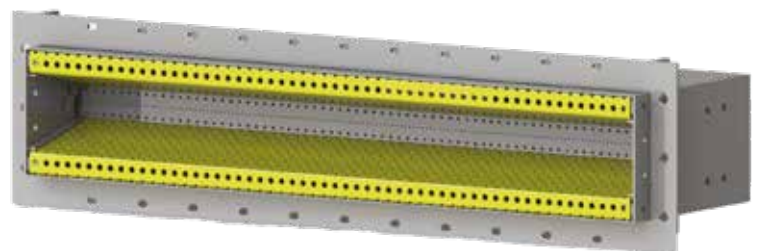
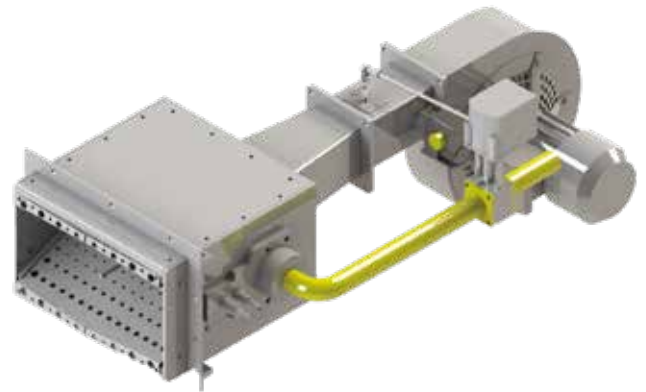
Drywall drying processes

Preheating processes

Paper drying processes

Distillation process

Clay grinding processes



DUCT BURNERS

PROCESS BURNERS

CAPACITY TABLE



ECOSTAR DUCT BURNER									
BURNER TYPE	CAPACITY		CAPACITY		NATURAL GAS CONSUMPTION		LPG CONSUMPTION		FAN
	Min. kcal/h	Max. kcal/h	Min. kW	Max. kW	Min. Nm ³ /h	Max. Nm ³ /h	Min. Nm ³ /h	Max. Nm ³ /h	Capacity Nm ³ /h
T/HI 300	60.000	300.000	69,8	348,8	7,3	36,4	2,7	13,3	500



INDUSTRIAL BURNERS

ECOFLUE BURNERS

Ecostar EcoFlue burner has become an industry standard for complementary ignition in co-generation and combined cycle installations. EcoFlue is an in-duct burner that can be directly placed into exhaust ducts between turbine and waste heat boiler. Burner is also suitable for fresh air operation or combustion applications. EcoFlue optimizes the system efficiency by meeting its oxygen need from the exhaust gases.

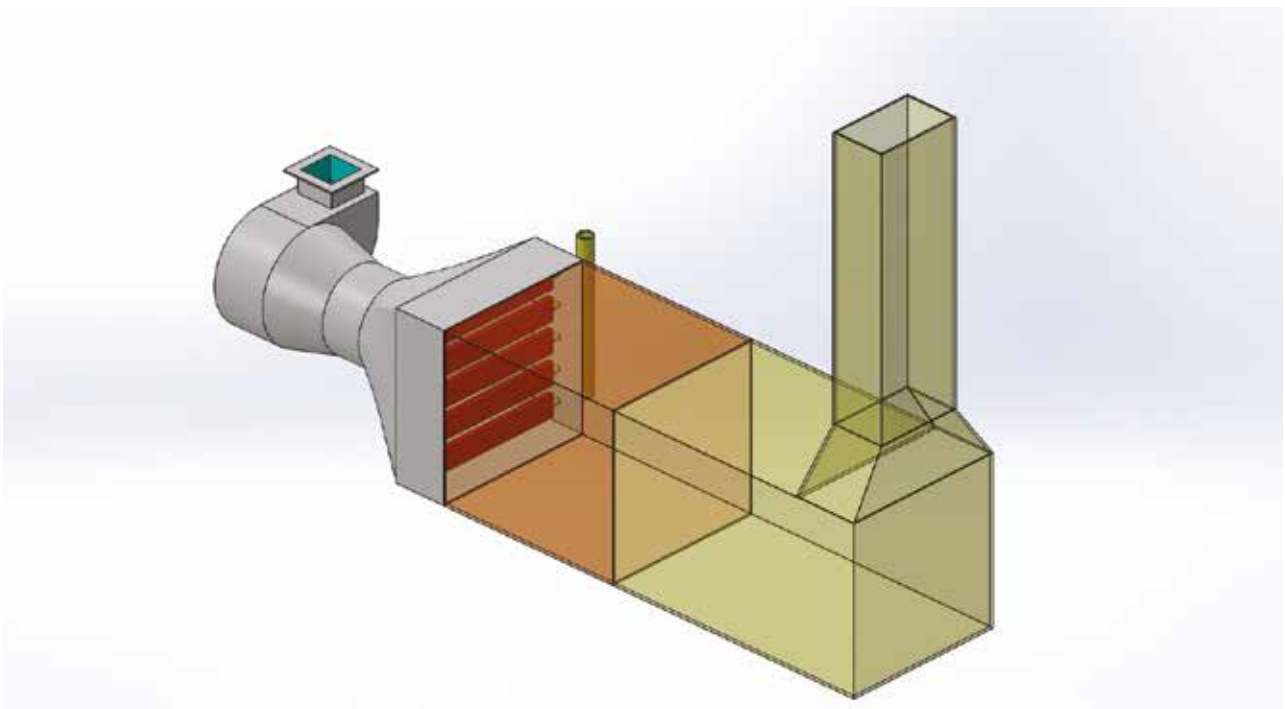
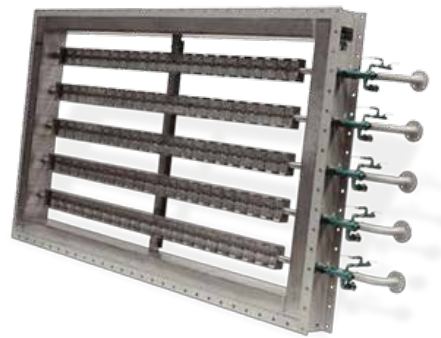
Burners may be installed directly to the exhaust ducts with high temperatures as well as to the duct inlet for the purpose of use of fresh air. They can also be used by providing an additional inlet to the duct with a spare opening or to the inside of the duct in order to increase the turbine exhaust gas temperature.

CHARACTERISTICS AND BENEFITS:

- Flame stability and emission values
- Clean combustion
- Flame vortex, balancing of combustion right in front of the burner
- Create a mixture of turbine exhaust gases close to fuel.

AREAS OF USE:

- Fresh Air Heating
- In Co-generation Plants:
 - Heat Recovery Steam Generator Auxiliary Burner
 - Dried Distillers Grains (DDG) Output
- Auxiliary Burner to Joint Steam Generator After Gas Motors
- Combined Cycle Processes Auxiliary Burner



INDUSTRIAL BURNERS

IMMERSION TYPE BURNER SERIES

- Minimum switching times with high mixing performance and flame stability
- One stage, two stage and modulating options
- Body options with coupled fan, external discharge fan and suction fan
- Capacity range of 36-1000 kW
- Radiant tube options in the range of 2"-8"
- Quiet and high performance, patented turbulator design
- Radiant tube length up to a diameter of 150:1 DN
- Low body pressure losses
- Compact design for easy installation and maintenance
- Minimized tank dimensions thanks to an efficient combustion performance of up to 80%
- Special design that prevents formation of dead gas layer and chemicals on the walls

APPLICATIONS

- Parts Cleaning
- Extinguishing Tanks
- Acid Bath Heaters
- Salt Bath Heaters
- Vaporizers
- Spray Washers
- Water Heating
- Bottle Washers
- Storage Tanks
- Platinum Magnesium Tanks
- Liquid Tank Heating

AREAS OF USE

- Metalworking
- Product Finishing
- Food & Beverage
- Automotive
- Brewing Tanks
- Chemical Processes



INDUSTRIAL BURNERS

SPECIAL BURNERS

- Special design burners aimed at providing high efficiency combustion and reducing energy costs, by taking into account the process requirements. The priority in their designs is safety, easy operation and maintenance.
- They are designed as turnkey projects with their control panels, fuel preparation and operating stations.

Areas of Use

- Combustion using oxygen
- Chips combustion burner
- Pilot nozzles and gas lances specially designed for drying furnaces
- Brick furnace process burner
- Premix process burner,
- Torch process burner
- Grate process burner
- Electric air heaters



INDUSTRIAL BURNERS

HOT AIR GENERATORS

Able to operate with natural gas, heavy oil, light oil and dual fuels, Ecostar hot air generators serve in a wide temperature range according to process needs. With its energy capacities suitable for the application, it can be used successfully in different fields such as soil industry, air conditioning industry, fertilizer industry, sugar industry, paper industry, metal industry, drying furnaces, cement industry applications.



HOT AIR GENERATOR DIRECT TYPE

13 PRODUCTS

[Detailed Information ▶](#)

INDUSTRIAL BURNERS

HOT AIR GENERATOR

DIRECT TYPE

SHG

CHARACTERISTICS

- Durable, solid construction,
- Thermal capacity option of 290 kW- 8750 kW,
- Operates with gas, heavy oil, light oil and dual fuel burners
- Direct, indirect and brick type design according to process needs,
- Output temperature from 110 °C to 450 °C in direct and indirect hot air generators,
- Output temperature from 450 °C to 800 °C in bricked hot air generators,
- Designs suitable for the process according to different heat capacity values and outlet temperature,
- In direct type hot air generators, minimum heat transfer losses and maximum thermal efficiency increase by direct mixing of burnt gases with air in the mixing chamber, without any heat transmission medium,
- Brick or brick-free combustion chamber design depending on the process, thermal capacity and outlet temperature,
- In brick hot air generators, the refractory brick covered in the combustion chamber and the heating of the air passing around the combustion chamber are resistant to high temperature and temperature stresses,
- Design resistant to high temperature and temperature stresses in brick-free hot air generators, achieved with a combustion chamber manufactured from Chromium-Nickel material, and by heating the mixture air passing around the combustion chamber,
- Special design pilot ignition burner for ignition,
- Reduced operating costs by providing low pressure losses of combustion and mixing air,
- Total increase in efficiency with low flue loss,

- Minimization of heat losses between the body coated with insulation material and the environment,
- Allows exhausting from the explosion cap on the mixture chamber in case of gas entrapment, and also provides easy access into the generator by service personnel for maintenance-inspection,
- Remote management by connecting to PLC systems using BMS (Burner Management System) or software,
- High operating safety,
- Easy installation & operation and low maintenance,

AREAS OF USE

Soil Industry: Artificial drying chambers of brick plants, Sand drying rotary furnaces, gypsum block-gypsum panel drying furnaces,

Chemical Industry: Detergent manufacturing towers,

Fertilizer Industry: Rotary fertilizer drying kilns,

Sugar Industry: Pulp drying kilns,

Paper Industry: Paper drying,

Packaging Industry: Print paste drying,

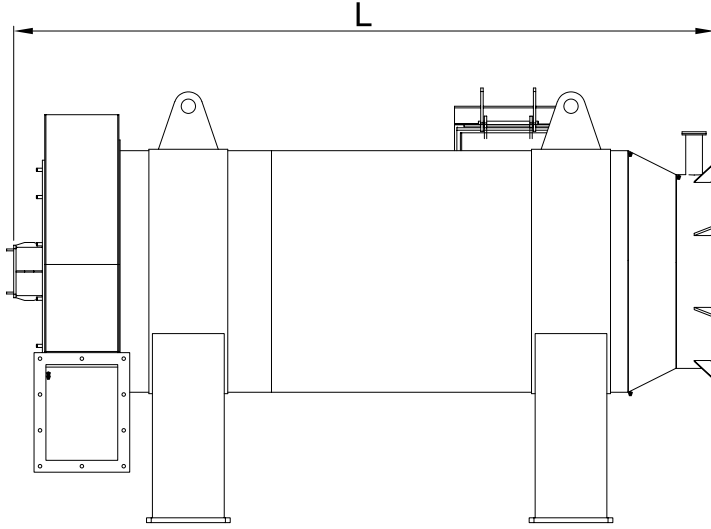
Metal Industry: Stress relief furnaces,

Cement Industry: Raw meal drying, coal and slag drying.



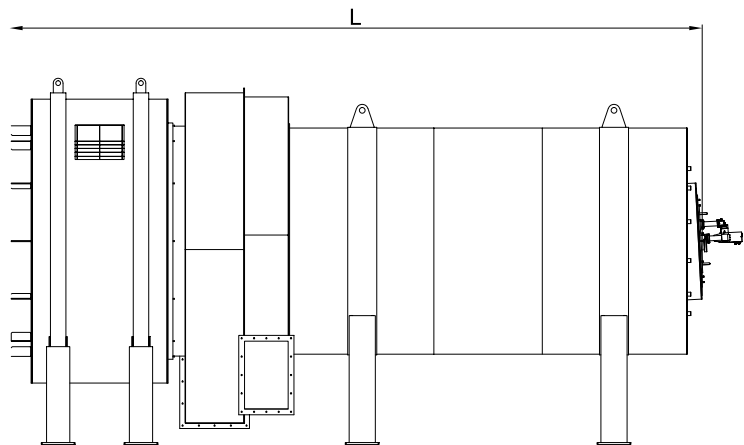
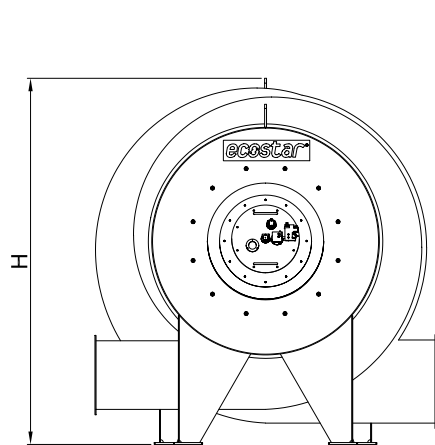
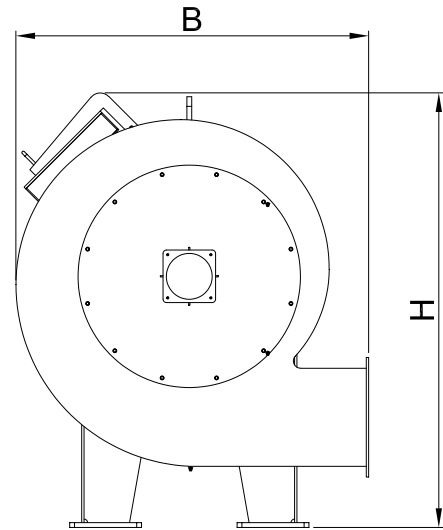
HOT AIR GENERATORS

SHG



BODY TYPE	Capacity	Capacity
	MW	kcal/h
SHG 25	0,29075	250.000
SHG 50	0,5815	500.000
SHG 75	0,87225	750.000
SHG 100	1,163	1.000.000
SHG 150	1,7445	1.500.000
SHG 200	2,326	2.000.000

TIP	KAPASİTE (kcal/h)	ÖLÇÜLER (m)		
		L	B	H
SHG 25	250.000	2.5	1.45	2.25
SHG 50	500.000	2.75	1.7	2.5
SHG 75	750.000	3	1.95	2.75
SHG 100	1.000.000	3.25	2.2	3
SHG 150	1.500.000	3.5	2.7	3.5
SHG 200	2.000.000	3.75	3.2	4
SHG 250	2.500.000	4	3.45	4.25
SHG 500	5.000.000	5	3.7	4.5
SHG 750	7.500.000	6	3.95	4.75



TIP	KAPASİTE (kg/h)	ÖLÇÜLER (m)	
		L	H
SHG 10	10,000,000	6,9	3
SHG 15	15,000,000	8,3	3,2
SHG 20	20,000,000	9,9	3,45
SHG 25	25,000,000	10,9	3,7

INDUSTRIAL BURNERS

BURNER SYSTEM EQUIPMENT



GAS LINE

1 PRODUCTS

[Detailed Information ▶](#)



DIESEL FUEL STATION

1 PRODUCTS

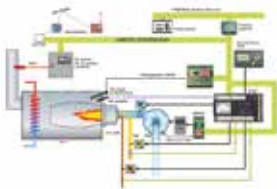
[Detailed Information ▶](#)



FUEL OIL STATION

1 PRODUCTS

[Detailed Information ▶](#)



ELECTRONIC AIR FUEL CONTROL

1 PRODUCTS

[Detailed Information ▶](#)



O2-CO COMBUSTION MANAGEMENT SYSTEM

1 PRODUCTS

[Detailed Information ▶](#)



FAN SPEED CONTROL

1 PRODUCTS

[Detailed Information ▶](#)



BURNER SYSTEM EQUIPMENT

1 PRODUCTS

[Detailed Information ▶](#)

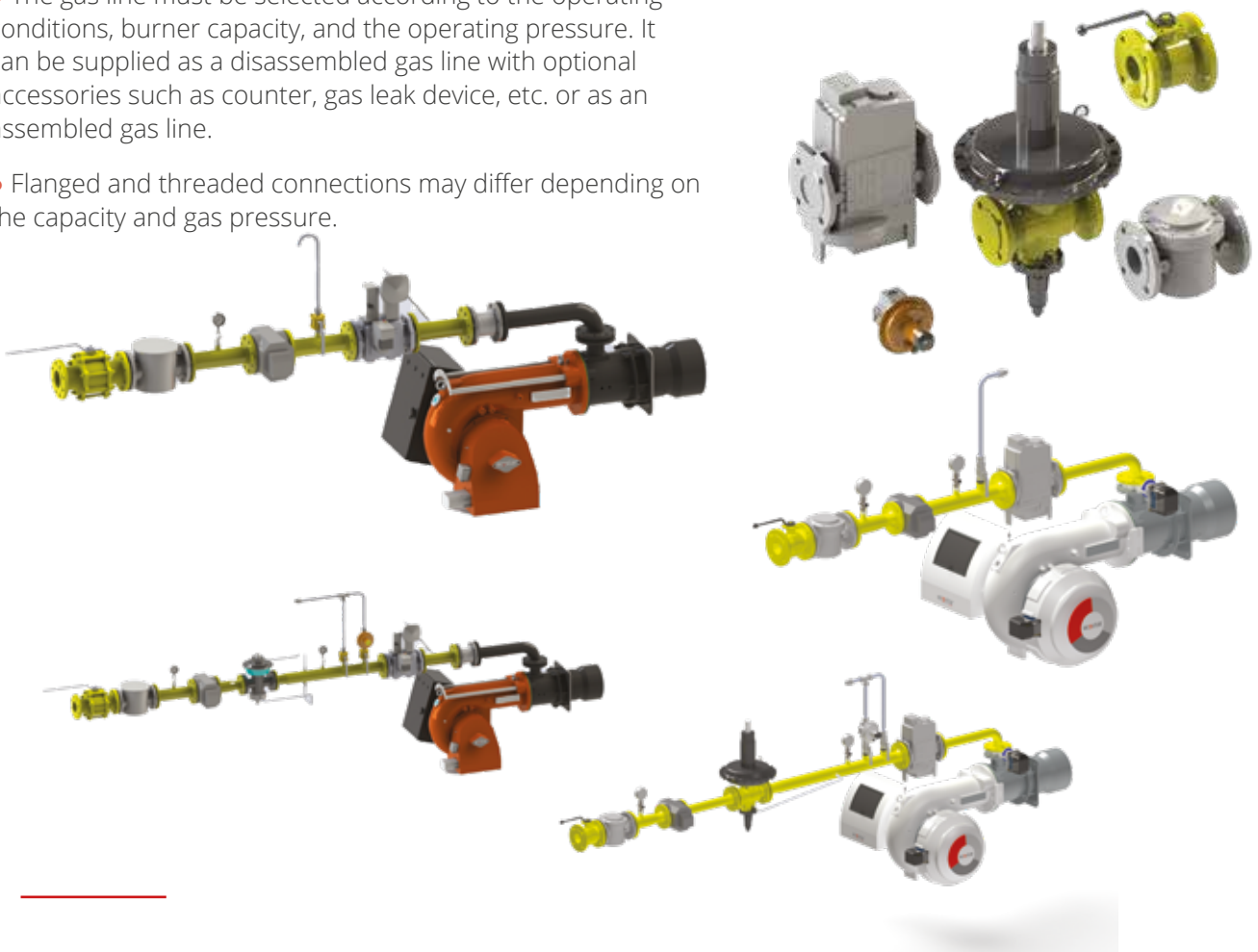
INDUSTRIAL BURNERS

BURNER SYSTEM EQUIPMENT

GAS LINE



- The gas line must be selected according to the operating conditions, burner capacity, and the operating pressure. It can be supplied as a disassembled gas line with optional accessories such as counter, gas leak device, etc. or as an assembled gas line.
- Flanged and threaded connections may differ depending on the capacity and gas pressure.



INDUSTRIAL BURNERS

BURNER SYSTEM EQUIPMENT

LIGHT OIL STATION

Light Oil Transfer Station: The fuel transfer unit that provides the transfer of fuel from the main tank to the daily tank or from the daily tank to the light oil preparation station.

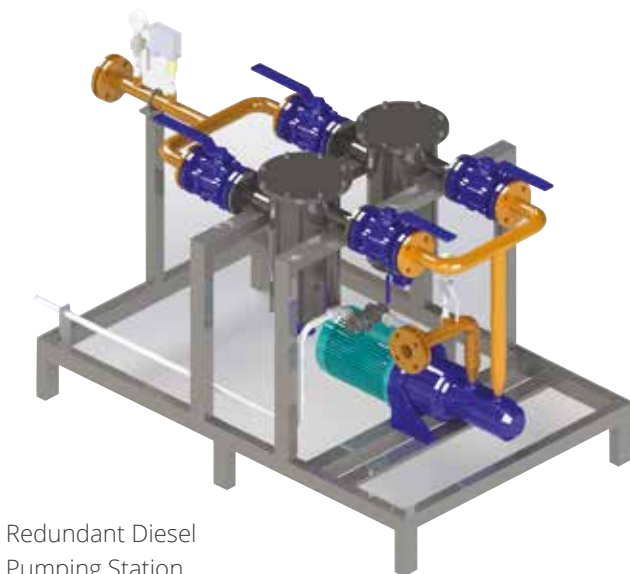
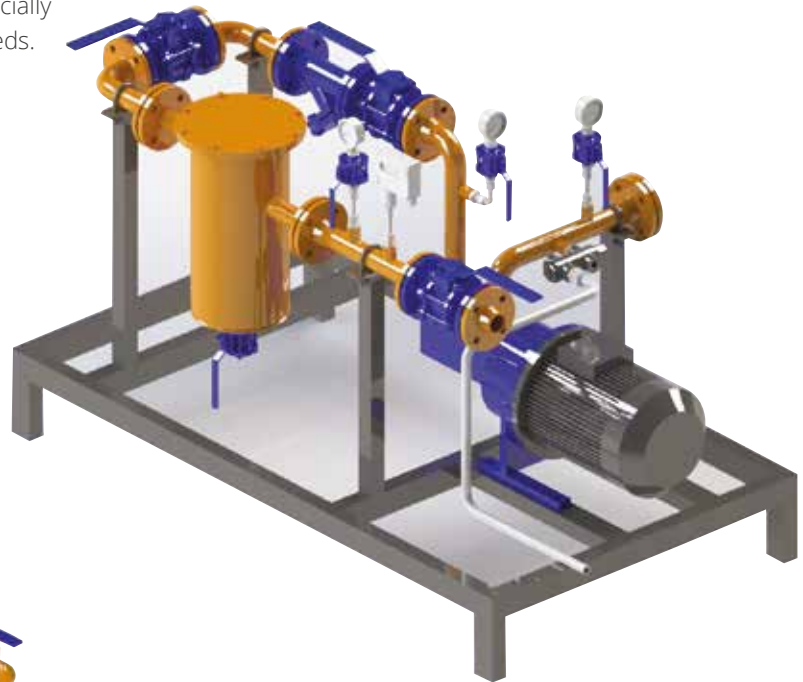
Light Oil Pumping Station: The fuel transfer unit that ensures fuel transfer to the burner at the appropriate pressure, flow rate, and cleanliness.

- Optionally, there may be single or spare filter-pump systems. The systems with spares provide maintenance and operation advantages.
- Please contact our sales department for specially designed fuel stations suitable for process needs.

Light oil station components;

- Liquid fuel filter
- Ball valve
- Oil pump
- Constant pressure valve
- Manometer
- Pressure transmitter
- Control panel

Single Diesel Pumping Station



Redundant Diesel Pumping Station

LIGHT OIL TRANSFER STATION CAPACITY TABLE			
TYPE	CAPACITY	TYPE	CAPACITY
	lt/h		lt/h
MPI 200	200	MPI 1800	1800
MPI 400	400	MPI 2000	2000
MPI 600	600	MPI 2500	2500
MPI 800	800	MPI 3000	3000
MPI 1000	1000	MPI 3500	3500
MPI 1200	1200	MPI 4000	4000
MPI 1400	1400	MPI 4500	4500
MPI 1600	1600	MPI 5000	5000

INDUSTRIAL BURNERS

BURNER SYSTEM EQUIPMENT

HEAVY OIL STATION

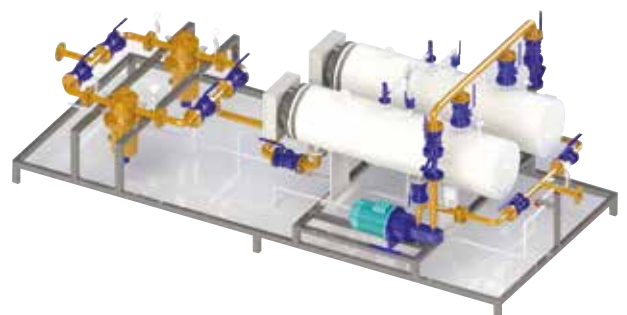
Heavy Oil Transfer Station: The fuel transfer unit that provides the transfer of fuel from the main tank to the daily tank or from the daily tank to the fuel preparation station.

Heavy Oil Heating Pumping Station: The filtering-heating-pumping unit that ensures that the fuel at 50-60°C from transfer line reaches a temperature necessary to achieve the combustion viscosity value required for its smooth combustion (120-135°C), and then ensures its transmission in the burner to use the fuel at the required pressure.

- Optionally, there may be single or spare filter-pump-heat exchanger systems. The systems with spares provide maintenance and operation advantages.
- Please contact our sales department for specially designed fuel stations suitable for process needs.

Heavy oil station components;

- Electric or steam heat exchanger
- Oil filter with steam wash, steam jacket or electrical heating,
- Ball valve,
- Oil pump,
- Constant pressure valve,
- Manometer,
- Thermometer,
- Pressure transmitter
- Temperature transmitter
- Control panel



HEAVY OIL TRANSFER STATION CAPACITY TABLE			
TYPE	CAPACITY	TYPE	CAPACITY
	lt/h		lt/h
FTI 200	200	FTI 1800	1800
FTI 400	400	FTI 2000	2000
FTI 600	600	FTI 2500	2500
FTI 800	800	FTI 3000	3000
FTI 1000	1000	FTI 3500	3500
FTI 1200	1200	FTI 4000	4000
FTI 1400	1400	FTI 4500	4500
FTI 1600	1600	FTI 5000	5000

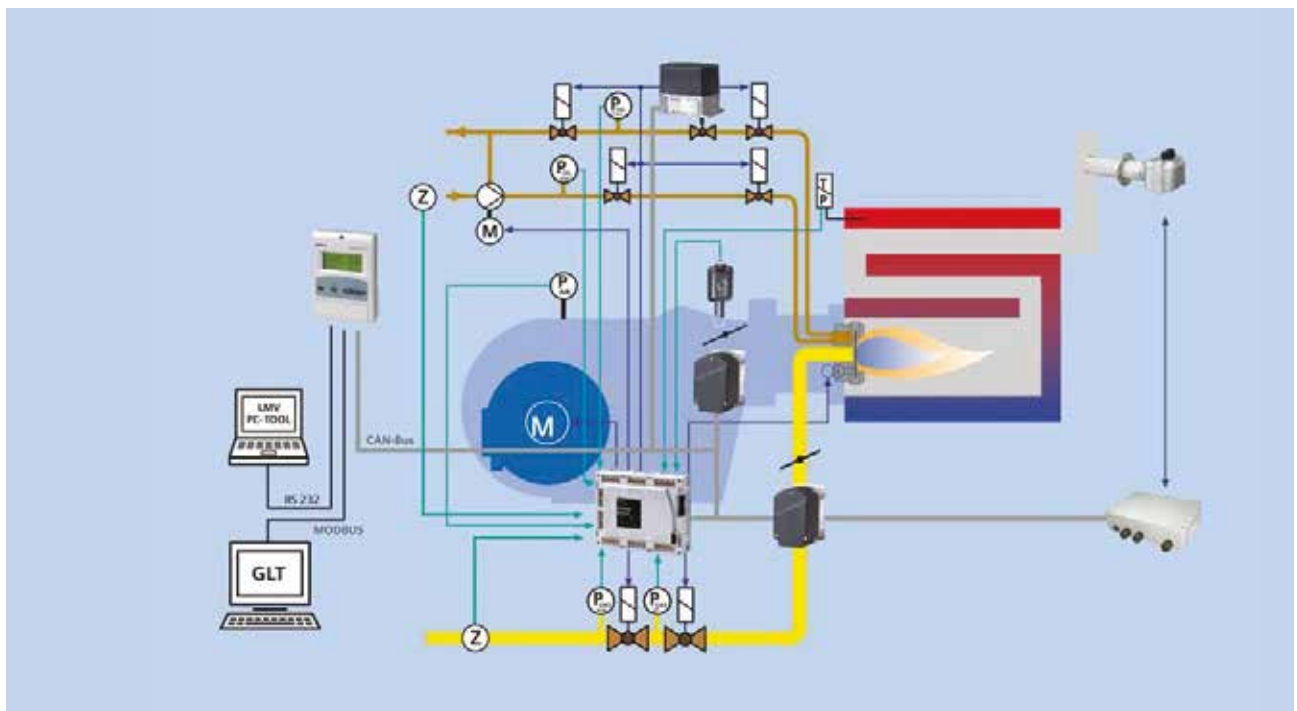
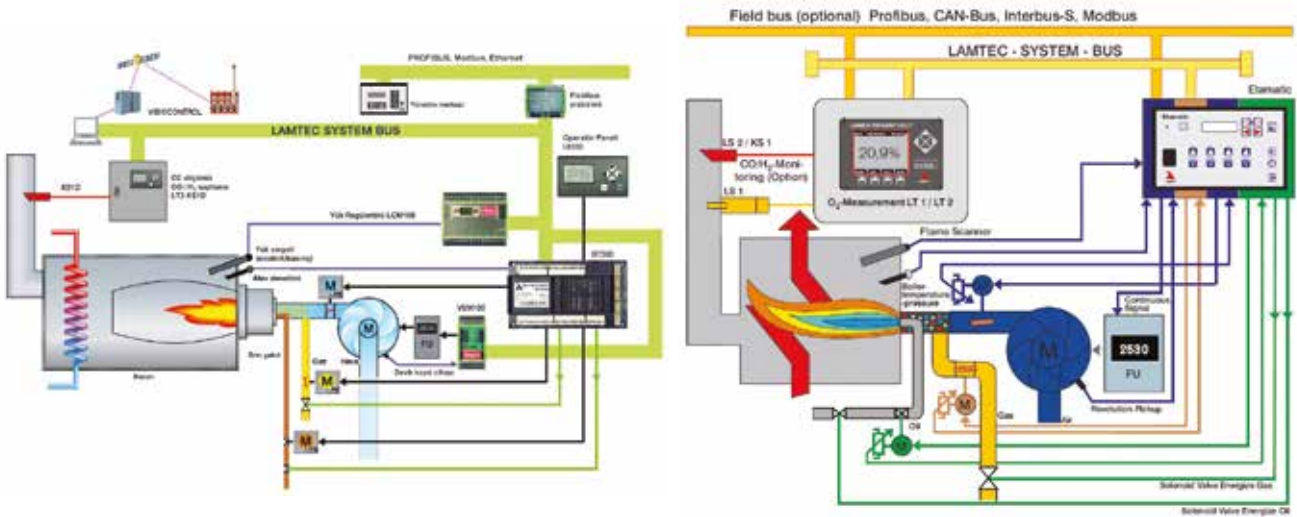
HEAVY OIL FPI CAPACITY TABLE			
TYPE	CAPACITY	TYPE	CAPACITY
	lt/h		lt/h
FPI 200	200	FPI 1800	1800
FPI 400	400	FPI 2000	2000
FPI 600	600	FPI 2500	2500
FPI 800	800	FPI 3000	3000
FPI 1000	1000	FPI 3500	3500
FPI 1200	1200	FPI 4000	4000
FPI 1400	1400	FPI 4500	4500
FPI 1600	1600	FPI 5000	5000

INDUSTRIAL BURNERS

BURNER SYSTEM EQUIPMENT

ELECTRONIC AIR FUEL CONTROL

- Allows controlling maximum 3 air, fuel actuators depending on the application
- Gas emission improved with precise air-fuel adjustment
- Energy saving
- Automatic improvement against combustion failures caused by varying barometric conditions with CO/O2 sensor connectivity
- Fan motor inverter connection
- Profibus/Modbus interface connection
- User-friendly menu with easy adjustment and the ability to view error histories.



INDUSTRIAL BURNERS

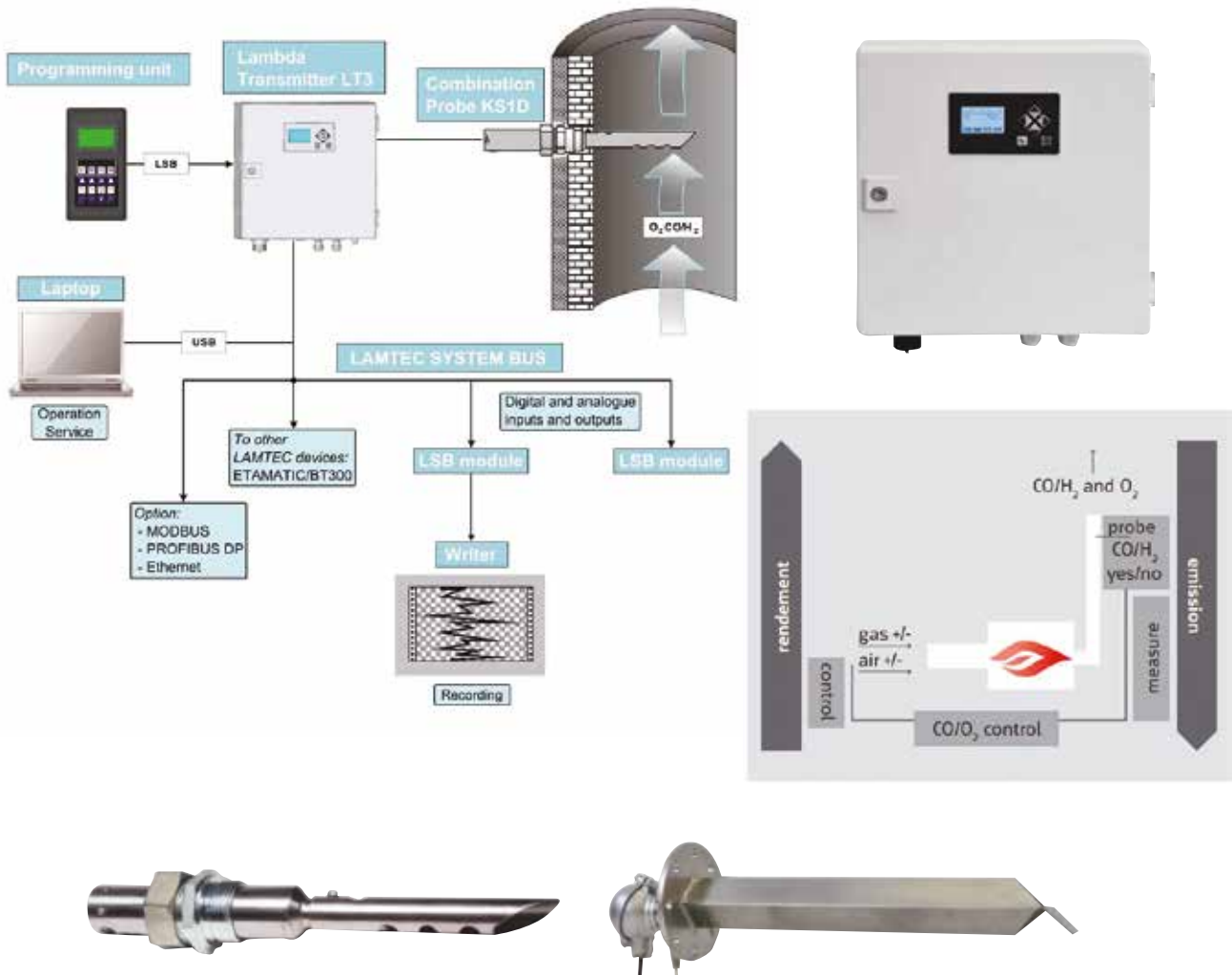
BURNER SYSTEM EQUIPMENT

O₂-CO COMBUSTION MANAGEMENT SYSTEM

- Micro-processor based combustion management system is a complicated system that optimizes the most suitable air/fuel ratio with oxygen and/or carbon monoxide trim controlled, closed control logic mechanism.
- O₂-CO combustion management system aims at maximum combustion efficiency and minimum emission values. With the aid of flue-mount flue gas sensor and transmitters, it measures the O₂ and CO amounts, and optimizes the combustion by taking into account the permitted emission values according to the boiler's heat demand.

Advantages of the O₂-CO combustion method system:

- Optimized combustion not affected by seasonally changing barometric conditions,
- Automatically controlled combustion with a combustion curve that is optimized in all operating conditions,
- Provides more fuel savings with high combustion efficiency.



INDUSTRIAL BURNERS

BURNER SYSTEM EQUIPMENT

FAN SPEED CONTROL

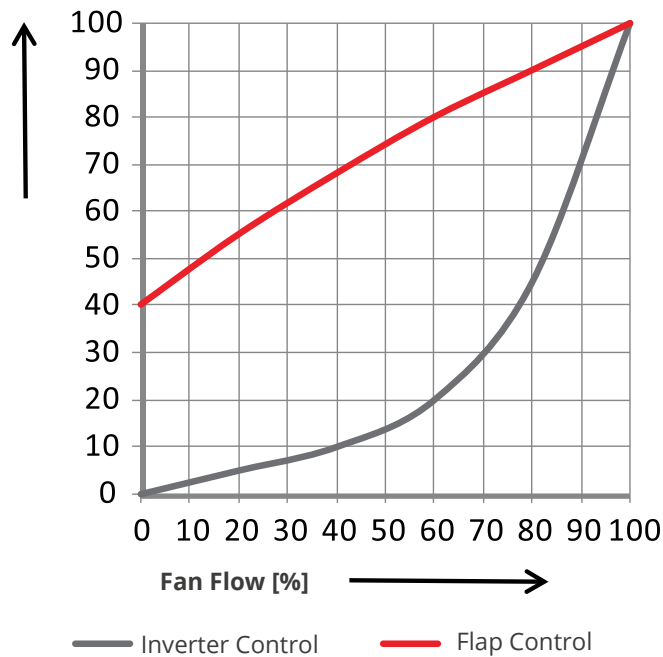
- The inverter installed to the combustion air fan motor of the burner generates air as required by controlling the power supply frequency of the fan motor, and provides savings in energy costs. The frequency controlled systems pay for themselves within a few years.

Advantages of the speed-controlled systems:

- Electric power savings,
- Extension of motor life with adjustable acceleration and deceleration,
- Low noise operation.



Back Pressure Curve



INDUSTRIAL BURNERS

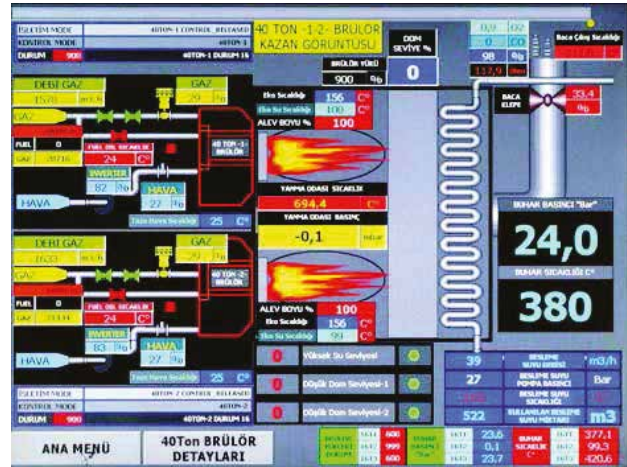
BURNER SYSTEM EQUIPMENT

CONTROL AUTOMATION

Burner control and automation systems to monitor, measure and control the necessary values for efficient operation of a combustion system. Allow monitoring, storage of information and accessing the stored information retrospectively.

Digital combustion control system provides:

- Control of all burner program times,
- Fan motor control,
- Fuel valves control,
- Gas leak control,
- Ignition control,
- Flame control,
- Fuel/air mixture adjustment and modulation control.



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COMBUSTION SYSTEMS



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