

AUXILIARY BOILER BURNERS



Steam Atomizing Type SFV
VENTURI BURNER
A stable, properly formed flame as well as improved combustion performance under surprisingly wide turndown range



Steam Atomizing Type SFC
ENERGY-SAVING BURNER
Today's engineering challenge is to push energy savings beyond all limits.



Steam Atomizing Type SFU
STEAM ATOMIZING BURNER
Stable combustion assured for fuels of varying viscosity.



Oil Pressure Type MJ
MINI JET FULLY AUTOMATIC OIL BURNER
Lightweight, compact and yet high performing, easy to handle and economical.



Oil Pressure Type VJ
FULLY AUTOMATIC GUN TYPE OIL BURNER
Even more compact and higher performing



Rotary Type VR
ROTARY BURNER
Stable combustion with low grade fuel or water-contained waste oil.

MAIN BOILER BURNERS FOR LNG CARRIERS



TYPE SFFG
OIL / GAS COMBINATION BURNER FOR LNG CARRIER
High response to load variation with premix / outermix gas nozzle arrangement.

TECHNICAL SPECIFICATION

STEAM ATOMIZING BURNERS TYPE SFU, SFC, SFV

BOILER EVAPORATION	T/h	1.0/1.5	2	3	4	5	6	8	10	20	25	30	35	40/45	50/55						
Boiler Type		SFU-150/160	SFU-180	SFU-210	SFU-230	SFU-260	SFU-305	SFU-330	SFU-355	SFU-400M	SFC-475	SFU-400	SFC-505	SFU-425	SFC-575	SFU-450	SFC-625	SFU-500	SFC-650	SFU-550	SFC-730
Combustion Rate	kg/h	90/140	180	260	345	430	520	690	850	1750	1660	2150	2060	2650	2600	3150	3050	3900	3750	4750	4650
Combustion System		Marine Diesel Oil-Heavy Oil Firing																			
Oil Pressure	MPa	0.15-0.78										0.26-2.0	0.15-2.0	0.26-2.0	0.15-2.0	0.26-2.0	0.15-2.0	0.26-2.0	0.15-2.0	0.26-2.0	0.15-2.0
Steam Pressure	MPa	0.39 (Constant)																			
Turn Down Ratio		2:1		5:1			6:1			10:1	15:1	10:1	15:1	10:1	15:1	10:1	15:1	10:1	15:1	10:1	15:1
Control System		3-Position (HI/LOW, ON/OFF)			Proportional Control And ON/OFF																
Draft System		Forced Draft																			
Register Draft Loss at M.C.R	kPa	0.98	1.23	1.57	1.72	1.47	1.52	1.76	2.55	2.45	3.33	2.84	3.43	2.74	3.28	2.45	2.99	3.09	3.14	3.04	
Air Temperature	°C	Normal (20°C)																			
Excess Air Ratio		1.15										1.1-1.15									

GUN TYPE OIL BURNERS TYPE MJ & VJ

BOILER EVAPORATION	T/h	1	1.5	2	3
Boiler Type		VJ-90	VJ-140	MJ-180	MJ-250
Combustion Rate	kg/h	90	140	180	250
Combustion System		Marine Diesel oil - Heavy Oil Firing			
Oil Pressure	MPa	1.86	1.86	2.16	2.16
Control System		ON/OFF	ON/OFF+HI/LOW		
Draft System		Forced Draft System			
Air Temperature	°C	Normal (20°C)			
F.D.F & Pump Motor	kW	2.2	3.7	5.5	7.5
Oil Heater	kW	4	6	8	10
Control	VA	500			

ROTARY BURNER TYPE VR

BOILER EVAPORATION	T/h	1	1.5	2	2.5	3	3.5
Boiler Type		VR-10	VR-15	VR-20	VR-25	VR-30	VR-35
Combustion Rate	kg/h	90	140	180	220	260	320
Combustion System		Fuel Oil (700cst/50°C) / Waste Oil Change-Over Firing System					
Oil Pressure	MPa	Max 0.29					
Control System		Full Auto ON/OFF+HI/LOW					
Draft System		Forced Draft System					
Register Draft Loss-Pri.	kPa	Max 7.84					
Register Draft Loss-SEC.	kPa	Max 1.47					
Air Temperature	°C	Normal (20°C)					
Excess Air Ratio		1.15 (F.O.Firing)					
Pilot Burner Type		Diesel Oil Electric Spark Ignition					
F.O Atomiz. Viscosity	Cst	60					
Rotary Cup Revolution	R.P.M	Ab.6000					
Burner & Primary Air Fan Motor	kW x P	2.2 x 2					
F.D. Fan (Secondary)		Turbo Fan					
Capacity	Nm ³ /min	30	40	50	65	70	90
Static Pressure	kPa	2.45 (Estimate Furnace Pressure Max.50mmAq)					
Motor	kW x P	2.2 x 2	3.7 x 2	3.7 x 2	5.5 x 2	5.5 x 2	7.5 x 2

OIL/GAS COMBINATION BURNER TYPE SFFG

BOILER EVAPORATION/one Bur.	T/h	16	17	20	22	25	28
Boiler Type		SFFG-355	SFFG-380	SFFG-405	SFFG-430	SFFG-455	SFFG-480
Combustion Rate (OIL)	kg/h	1150	1250	1400	1650	1850	2050
Combustion Rate (GAS)	Nm ³ /h	924	1005	1125	1325	1487	1648
Combustion System		Marine Diesel Oil-Heavy Oil & LNG Gas Firing					
Oil Pressure	MPa	0.15-2.0					
Steam Pressure	MPa	0.78					
Turn Down Ratio		15:1					
Control System		Proportional Control And ON / OFF					
Draft System		Forced Draft					
Register Draft Loss at M.C.R	kPa	2.94	2.84	2.89	2.99	2.94	2.94
Air Temperature	°C	120					
Excess Air Ratio		1.07-1.10					

BILGE CONCENTRATOR TYPE IREV

Throughput	kg/Day	1000	2000	3000	
Type		IREV-1000	IREV-2000	IREV-3000	
Heat Source	Steam	kg/h	80-130	150-250	200-370
	Hot Water	m ³ /h	8-13	15-25	22-37

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