MOUSEN
Fuel Energy Catalyzer

Mousen Liquids Fuel Converter

Date: 2020/3/8
Version: 1

Product

Model number: DHS 9.6L

Introduction

Mousen Liquids Fuel Converter is suitable for boiler that can fully crack light and heavy oil molecule into indivisible particles to achieve complete combustion, so that fuel used in steam boilers, heat medium boilers and various light and heavy oil burners can be saved around 15-30% and exhaust gas (including black smoke) pollution can be reduced over 70%.

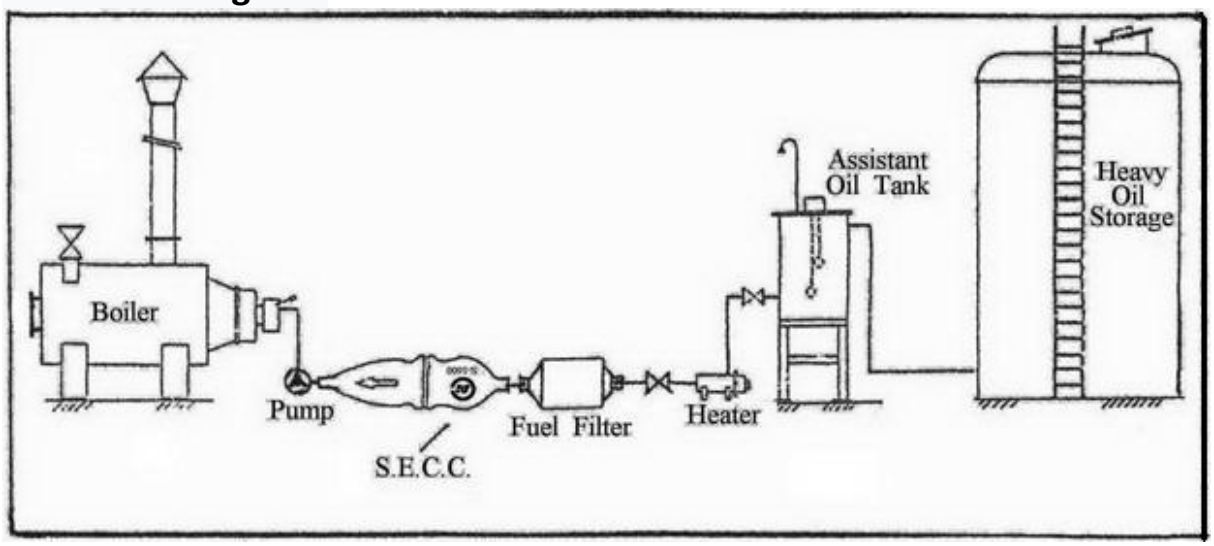
Product Feature

Mousen Liquids Fuel Converter is made of super alloys of several rare precious metals and minerals, which are melted into composite metals such as titanium, platinum, palladium, etc., and precision-cast by special processing technology. Its theoretical basis is derived from characteristic of electronic physics of superalloys, which makes light and heavy oil molecules fully cracked into inseparable particles. In addition to greatly improving fuel quality and stability, flammable surface area is also doubled, which achieves complete combustion effect, completely eliminates various combustion instability, and maximizes combustion efficiency. Consequently, the firepower can be strong, the temperature can be increased quickly, and the fuel saving rate can be as high as 15-30%, without risk of exhaust pollution. Carbon will not deposit in the combustion system; maintenance costs can be reduced accordingly.

Installation

The product is installed before the nozzle of diesel (heavy) oil burner and after the heavy oil preheater. Just remove the original fuel pipe from this section, connect the product, tighten the joint screws, and measure the section to ensure no leakage of fuel, then adjust the appropriate air intake.

Schematic diagram:



Product Specification

Model	Applicable Range
DHS 4.8L	Diesel / Heavy oil Maximum consumption: 4.8L/hr
DHS 9.6L	Diesel / Heavy oil Maximum consumption: 9.6L/hr
DHS 15L	Diesel / Heavy oil Maximum consumption: 15L/hr
DHS 21L	Diesel / Heavy oil Maximum consumption: 21L/hr
DHS 33L	Diesel / Heavy oil Maximum consumption: 33L/hr
DHS 107L	Diesel / Heavy oil Maximum consumption: 107L/hr
DHS 200L	Diesel / Heavy oil Maximum consumption: 200L/hr
DHS 500L	Diesel / Heavy oil Maximum consumption: 500L/hr

Once-through boiler – applicable specification and quantity

Evaporation Capacity kg/hr	Heat Output kcal/hr	Max. Fuel Consumption L/hr Nm³/hr kg/hr	Specification and Quantity	
			（D、B、H）Oil	GAS
100	53,900	D7.3 LNG7 LPG5	DHS 9.6L x 1	GSS 9.6L x 1
200	107,800	D14.6 LNG14.1 LPG9.9	DHS 15 L x 1	GSS 15 L x 1
300	161,700	D21.9 LNG21.1 LPG14.9	DHS 21 L x 1	GSS 21 L x 1
400	215,600	D29.2 LNG28.1 LPG19.9 B26.8 H25.7	DHS 33 L x 1	GSS 33 L x 1
600	323,400	D43.8 LNG42.2 LPG29.9 B40.3 H38.6	DHS 21 L x 2	GSS 21 L x 2 Parallel combined
1,000	539,000	D73 LNG70.4 LPG49.9 B67.2 H64.3	DHS 33 L x 2	GSS 33 L x 2 Parallel combined
1,500	808,500	D109 LNG105 LPG74.8 B100 H96.5	DHS 33 L x 3 DHS 107Lx1	GSS 33 L x 3 DHS 107Lx1 Straight
2,000	1,078,000	D146 LNG140 LPG99.8 B134 H128	DHS 33 L x 4	GSS 33 L x 4 Straight

Remark:

D. DIESEL OIL 10,300 kcal / kg x proportion 0.79 = 8,140 kcal / L

B. BOILER OIL 9,850 kcal / kg x proportion 0.9 = 8,865 kcal / L

H. HEAVY OIL 9,700 kcal / kg x proportion 0.96 = 9,300 kcal / L

G. GAS LNG Liquefied Natural Gas 8,500 kcal / Nm³

LPG Liquified Petroleum Gas 12,000 kcal / kg

Steam boiler – applicable specification and quantity

Evaporation Capacity kg/hr	Heat Output kcal/hr	Max. Fuel Consumption kg/hr	Specification and Quantity

1,200	647.000	76	DHS 33L x 3	Straight
1,800	970.000	115	DHS 33L x 4 DHS 107Lx1	Straight
2,400	1,294.000	152	DHS 33L x 5	Straight
3,000	1,617.000	190	DHS 33L x 6 DHS 200Lx1	Straight
3,600	1,940.000	228	DHS 33L x 7 DHS 107Lx2	Straight
4,200	2,264.000	266	DHS 33L x 8	Straight
4,800	2,587.000	304	DHS 33L x 9	Straight
5,400	2,911.000	342	DHS 33L x 10 DHS 107Lx3	Straight
6,000	3,234.000	380	DHS 33L x 12 DHS 200Lx2	Straight
7,200	3,881.000	456	DHS 33L x 14 DHS 107Lx4	Straight
8,400	4,528.000	532	DHS 33L x 16 DHS 500Lx1	Straight
9,600	5,174.000	608	DHS 33L x 19 DHS 200Lx3	Straight
10,800	5,821.000	684	DHS 33L x 21 DHS 107Lx6	Straight
12,000	6,468.000	760	DHS 33L x 23 DHS 107Lx7	Straight
15,000	8,085.000	950	DHS 33L x 29 DHS 500Lx2	Straight
18,000	9,702.000	1,140	DHS 33L x 35 DHS 200Lx6	Straight
20,000	10,780.000	1,324	DHS 33L x 40 DHS 500Lx3	Straight

Hot water boiler/Heat medium boiler– applicable specification and quantity

Rated Heating Value kcal/hr	kw	Max Fuel Consumption kg/hr	Specification and Quantity	
100,000	116	12	DHS 15L x 1	
200,000	232	24	DHS 21L x 1	
300,000	349	36	DHS 33L x 1	
400,000	465	48	DHS 21L x 2	Parallel combined
600,000	698	72	DHS 33L x 2	Parallel combined
800,000	930	96	DHS 33L x 3	Straight
1,000,000	1,163	120	DHS 33L x 4	Straight
1,250,000	1,455	150	DHS 33L x 5	Straight
1,500,000	1,744	180	DHS 33L x 6 DHS 200Lx1	Straight
2,000,000	2,326	240	DHS 33L x 7	Straight
2,500,000	2,907	300	DHS 33L x 9 DHS 107Lx3	Straight
3,000,000	3,488	360	DHS 33L x11 DHS 200Lx2	Straight

Remark:

- 1,000 kcal / hr = 1.163 kw
- 1 kw = 1,000 w

Precautions

1. Select the appropriate specifications and carefully check whether the following systems are normal.
   (1) Oil supply system:
   - Check whether the oil pipe and the oil filter are blocked or damaged, resulting in irregular or insufficient oil supply.
   - The S.E.C.C. products can completely burn the fuel and save around 15 ~ 30% of the fuel. Hence, the fuel supply volume should be reduced appropriately.
   - Check whether the fuel injection nozzle is worn, causing the fuel injection hole to be too large, and the fuel is not easy to spread.

   (2) Gas supply system:
   Check whether the diameter of the intake pipe and the size of the filter are sufficient, and if the filter is blocked or disabled.

   (3) Oil-air mixture ratio:
   Either too thick or thin ratio will cause incomplete combustion, which will cause insufficient explosive power, waste oil and pollution. Hence, it is necessary to adjust the oil-air mixture to appropriate ratio at any time until the expected effect is reached.

   (4) Exhaust system:
   Check whether the exhaust is normal. If there is still smoke or flame, further adjustment is needed.

2. Before installing the product, the fuel must go through coarse filtration and fine filtration process to prevent honeycomb type tiny holes inside the product blocked, which will affect fuel flow and efficiency.

3. The products should be placed at an angle of 30 to 90 ° to the horizontal plane to prevent air from trapping inside, which will affect fuel flow and efficiency.