

# Technical Data for Incineration Plant - ATLAS 600

Incinerator type	Component	Incinerator						Sludge oil mixing tank					Diesel oil transfer pump *			
		Control panel	Primary air blower	Primary diesel oil burner	Secondary diesel oil burner	Sludge oil dosing pump	Sludge oil burner	PLC control	Waste sluice, standard size	Waste sluice, big size	Integrated mixing tank * 1)	All tanks	Additional power for electrical heating of tanks *			
ATLAS 600 S WS	✓	✓	✓	✓	✓				✓					✓		
ATLAS 600 S B WS	✓	✓	✓	✓	✓				✓					✓		
ATLAS 600 SL P	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		
ATLAS 600 SL WS P	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
ATLAS 600 SL B WS P	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
ATLAS 600 SL M	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		
ATLAS 600 SL WS M	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
ATLAS 600 SL B WS M	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		
Voltage 3 x 400 V / 50 Hz	18.5	0.15	0.15	0.25					0.55	0.75	4.0	4.6	6.0	11.0	16.5	0.37
Voltage 3 x 440 V / 60 Hz	17.5	0.15	0.15	0.30					0.63	0.90	4.6	4.6	6.0	11.0	16.5	0.44
Voltage 3 x 690 V / 60 Hz	17.5	0.15	0.15	0.30					0.63	0.90	4.6	4.6	6.0	11.0	16.5	0.44

Installed power (kW) - add values for relevant components

The **total installed power consumption** for the incineration plant can be found, when adding the installed power values for all components for the specific incinerator type - depending on the technical agreement with ATLAS Incinerators A/S.

#### Annotations :

- \* If scope of supply from ATLAS Incinerators A/S.
- ✓ The component is available for the specific incinerator type.
- 1) Includes option of burning sludge oil with a water content of more than 50 %.
- 2) Includes circulation pump and mill pump. Heating by steam or thermal oil or electric heating elements.

#### Control panel

Protection class for cabinet : IP 54.

#### Primary air blower

Air consumption: 5200 m<sup>3</sup>/h.

Protection class for motor : IP 55.

#### Primary diesel oil burner

Capacity : 24.7 litres/h

Fuel : Marine diesel oil, viscosity : 1.3 - 10 cSt.

Protection class : IP 43.

Protection class for motor : IP 55.

#### Secondary diesel oil burner

Capacity : 17.1 litres/h

Fuel : Marine diesel oil, viscosity : 1.3 - 10 cSt.

Protection class : IP 43.

Protection class for motor : IP 55.

#### Sludge oil dosing pump

Operational capacity : 45 - 210 litres/h.

Dosing is PLC-controlled.

Head : 2 bar.

Protection class for motor : IP 55.

#### Sludge oil burner

Designed to handle sludge oil with impurities of max. 5 mm in size.

Compressed air consumption : Max. 32 m<sup>3</sup>/h.

#### Waste sluice

Compressed air consumption,

standard size : 0.2 m<sup>3</sup>/h.

big size : 0.3 m<sup>3</sup>/h.

#### Circulation pump

Capacity : 674 litres/h (at 60 Hz).

Head : 2 bar.

Protection class for motor : IP 55.

#### Mill pump

Capacity : 25800 litres/h (at 60 Hz).

Head : 0.4 bar.

Protection class for motor : IP 55.

#### Incinerator capacity - based on IMO specifications

Burning output : 500 000 kcal/h (581 kW).

Solid waste, class 2 : 100 kg/h, 400 kg/24h at max load.  
If no waste sluice : 250 litres/charge.

Sludge oil waste : 66 litres/h (water content 20 %).  
Max. limit : 100 litres/h (water content 50 %).

or any simultaneous combination within the max. capacity of 500 000 kcal/h (581 kW).

Flue gas temperature : Max. 350 °C.  
Flue gas volume at 350 °C : 12261 m<sup>3</sup>/h.

#### Flue gas funnel

Connection to the mixing chamber (flue gas outlet of the incinerator) must be designed for a **max. counter pressure of 590 Pa** (60 mm WC) incl. free outlet loss.

ATLAS strongly recommend :

- Pipe expansion to happen directly after mixing chamber.
- No sharp pipe bends, elbow bends or segmented bends.
- Pipe bends with centre radius = 1.5 x pipe diameter.

#### Compressed air

Pressure : 6-10 bar.

Consumption : Refer to sludge oil burner + waste sluice.  
Approx. 0.1 m<sup>3</sup>/h for remaining equipment.

#### Power details

Demand factor : 1.

Alarms : Normally closed circuit.

In case of power failure for approx. **5 minutes** or more, various minor components may be damaged.

If this is unacceptable, it is suggested that the control panel is connected to the emergency power supply.

#### Ambient temperature

Min. 0 °C and max. 45 °C for standard equipment.

NOTE : For additional electrical components, the protection class is IP 54 or more.