

Diligent



TWIN CHAMBER
INCINERATOR
for Jewellery Industry



INCINERATOR

DESCRIPTION OF TWIN CHAMBER INCINERATOR

for Jewellery Industry

- Diligent अर्क Incinerator has been specially designed for incineration of waste material generated in jewellery industry. It burns dust, plastic waste, tissue papers, buffing wheels, graphite crucibles, graphite rods, filing dust, deburring waste, etc. This incinerator is designed with twin combustion chambers having individual gas burner. It uses LPG fired gas burners for raising the chamber temperature up to maximum of 1000 deg C as required for waste being incinerated.
- Certain type of waste such as plastic requires more oxygen for its complete combustion. Separate FD fan with is provided to make available the additional oxygen required for ensuring complete combustion. A Butter Fly Valve is provided to adjust the quantity of additional fresh air required for complete combustion.
- Cyclone Separator is provided to separate relatively heavier particulate that escape the combustion chamber. Wet Scrubber then follows. Here finer particulates are trapped by subjecting the flue gasses to water spray. Here water soluble effluent gasses are also dissolved in water. Flue gases travel further through DEMISTER which traps the water droplets and returns them to scrubber tank. Thus flue gasses released after this are free of excessive moisture. Flue gas temperature monitoring is done by dedicated Digital Temperature Controller. This enables monitoring of effectiveness of scrubbing.
- ID Fan is provided after Demister to ensure positive flow of flue gasses through out the cycle. Incinerator components are described below-
- SEW make Mono Block LPG fired gas burner is used to carry out combustion in each chamber. Mono block burner has in built air blower, provision for ignition with the help of ignition transformer & ignition electrode and combustion safety monitoring by using flame rod. Burner operation is controlled automatically by Diligent Autocon N1210N200Y according to the heat demand by Digital Temperature Controller of individual chamber. Loss of flame during operation or during Start up will lead to shut down of burner and will sound an Alarm. The burners are indigenous SEW make and are designed to be rugged and to perform reliably over long period in Local conditions. Heated parts are made in Stainless steel of adequate thickness.
- Diligent अर्क Incinerator is also available with Electric Heating. These are useful whenever, adequate space is not available to keep requisite Gas Cylinder bank as per the Safety Regulations. However, care has to be taken to prevent contaminations of electric heater elements due to pollutant & carbon in the combustion products. Usually such incinerators are provided with SS Muffle to guard the heating element.



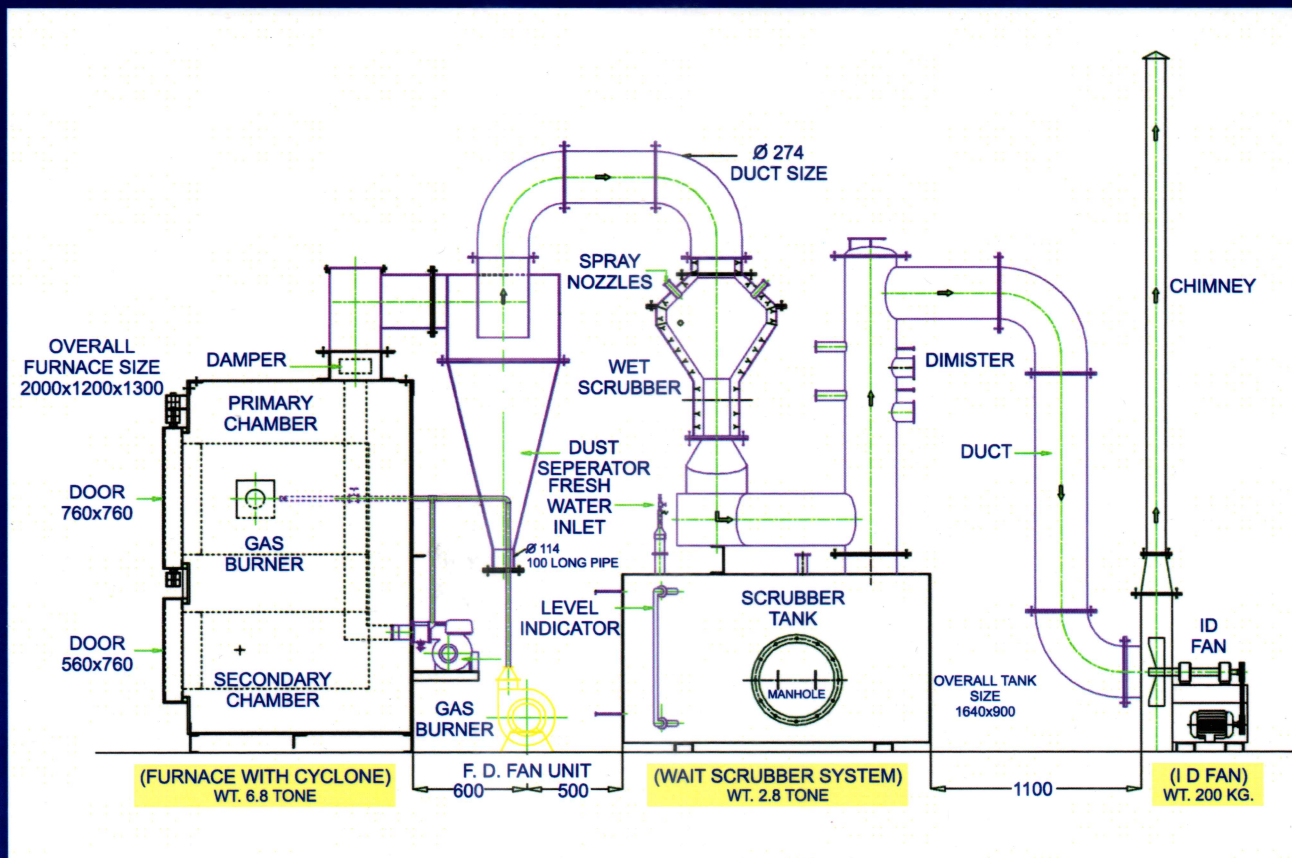


SPECIFICATIONS

MODEL: CGI –G-60/60/60-1000

SR. NO.	TYPE	UNIT	PRIMARY CHAMBER	SECONDARY CHAMBER
1.	Effective Dimensions			
	Width	mm	600	600
	Height	mm	600	500
	Depth	mm	600	600
2.	Charging Door			
	Width	mm	600	
	Height	mm	600	
3.	Discharge Door			
	Width	mm		600
	Height	mm		500
4.	No. of Control Zones	Nos.	1	1
5.	Fuel	--	LPG	LPG
6.	Burner Rating	Kgs/hr	5 - 6	5 - 6
7.	ID Fan	HP		2
8.	FD Fan	HP		2
9.	Spray Pump	HP		1
10.	Max. Operating Temp.	°C	1000	1050
11.	Mode of Temp. Control		ON/OFF	ON/OFF
12.	Electricity Supply		415V, 10V AC, 3ph. 50C/s. 4 wire	
13.	Power Requirement	KW		3.7
14.	Floor Space Requirement	meter	4.0 m (W) x 4 m (D) x 3 m (H)	
15.	Approx Weight	Kg	Main Furnace & Cyclone Separator – 6,000 Wet Scrubber & Demister with water – 1,500	

TWIN CHAMBER INCINERATOR SCHEMATIC DIAGRAM



MICRO CONTROLS

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