

WET SCRUBBER UNITS SASU Series



KITCHEN SCRUBBING UNITS

SASU Series

Leading manufacturer of technologically Advanced Air Handling Systems specifically designed and developed for high performance, reliability and energy efficiency.



Introducing Sagar Air Kitchen Scrubbers

Energised Scrubbing for all applications

The term wet scrubber describes a variety of devices that remove pollutants from a furnace flue gas or from other gas streams. In a wet scrubber, the polluted gas stream is brought into contact with the scrubbing liquid, by spraying it with the liquid, by forcing it through a pool of liquid, or by some other contact method, so as to remove the pollutants.

Kitchen Wet Scrubber is an air washer with refinement device which is used for cleaning kitchen fumes. The kitchen fumes are drawn from the kitchen hood through duct and enter the scrubber and flow horizontally. Considering the other scrubber designs, SAGAR AIR scrubbers have very low pressure drop and has maximum scrubbing efficiency.

SAGAR AIR manufactures the wet type kitchen scrubbers, which are available in single skin metallic housing, accommodating aluminum/GI pre metallic filter, intake louvers, double bank GI spray headers with brass/PVC spray nozzles and PVC water eliminator. The unit is further complimented by SISW / DIDW centrifugal fan (fan section) to draw fumes through the scrubber and letting out relatively clean air. The water is re circulated by a pump through sump strainer. The scrubber internals can also be fixed in the masonry housings along with centrifugal.

Applications:

- Metal Finishing industries
- Food Processing
- Refineries
- Pesticides
- Pulp and Paper
- Tanning
- Battery Manufacturing
- Foundries
- Breweries
- Textile
- > Chemical

Highly Compact High Operational Performance Low Maintenance High Durability Wide Range Tailor Made units

Advantages:

- > SAGAR AIR Wet scrubbers have the ability to handle high temperatures and moisture.
- > In SAGAR AIR wet scrubbers, flue gases are cooled, resulting in smaller overall size of equipment.
- > SAGAR AIR Wet scrubbers can remove both gases and particulate matter.
- > SAGAR AIR Wet scrubbers can neutralize corrosive gases and have almost zero emissions.
- > SAGAR AIR Wet scrubbers occupy small space and are very easy to install.

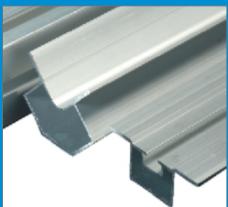
Construction Features

High Durability Guaranteed

Framework and Panels

- Rigid Framework made of hollow, anodized and extruded aluminum profile held together by high profile nylon joints.
- ➤ The Double Skin sandwiched panels with inner skin made of 24G GI conforming to IS-277 standards. Outside panel is made of pre-painted 24 G galvanized sheet.
- ➤ Double Skin panel of 24 mm or 46 mm can be provided depending on customer's requirement.
- > A leakproof casing is ensured.
- > A leak proof casing ensures Indoor Air Quality by preventing the entry of contaminated air into the equipment.
- ➤ EPDM foam gaskets on Aluminum frame provide superior sealing from casing leakages.
- > Base frame is rugged in construction, made of galvanized steel with intermediate cross members and has lifting holes for easy installation.







Blower Section

- Energy Efficient AMCA Certified, forward / backward curved / Airfoil fans are provided. Plug fans are available as an option.
- ➤ Electric motor of TEFC type IP55 and Class F insulation.
- Fan and motor are mounted on a common extruded Aluminum channel / GI heavy gauge pressed channel using anti vibration spring mounts and flexible Fire retardant canvas connection for silent and vibration free operation.
- Motor is mounted on easy slide mounting bracket for easy adjustment.
- Drives are selected for optimum performance. Taper lock Pulleys are used.
- ➤ Electrical interlock trips the fan immediately on opening of AHU door to ensure absolute safe operation.

Mist Eliminator

- ➤ Eliminators are located on the air-leaving end of the washer to remove entrained water droplets from the air.
- > The eliminator blades are of the 4 pass design and are spaced on 30mm centers extending from below the water level of the tank to the top of the washer. The blades are extruded PVC fixed on a GI spacer.
- ➤ The casing of the Eliminator is made out of Galvanized steel sheet of minimum 18 G



Spray System:

- An efficient Scrubber system must an high quality spray system oriented in proper direction with proper spray velocity.
- The Spray nozzles are made up of high quality brass.
- The whole system is conduited by B class Galvanised Iron Pipelines.
- > SAGAR AIR's Stringent design of Spray system ensures high performance of the unit as a whole





Filter Section

- A complete line of filters are available to meet all kinds of filtration demands.
- > Separate Pre-Filter, fine and HEPA filter sections are provided.
- ➤ The filters are arranged in a grid in heavy-duty specially designed highly galvanised sheet steel frame to avoid air bypass and are removable from front.
- Pre-filters are of flange type provided with handles for convenient removal and are washable.
- > Fine and HEPA filter sections are provided with access door panel with positive locking. The door is removable type with locking arrangement with nylon handles.

Standard Accessories:

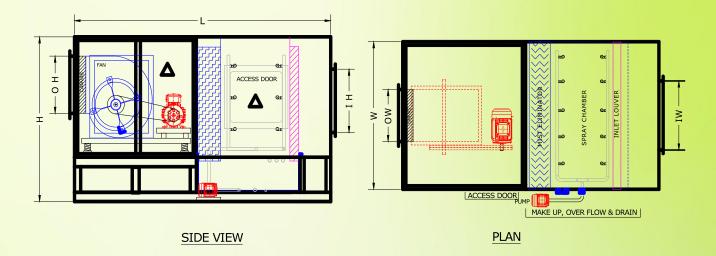
- Service doors are provided with ease of access to the fan, motor and pump.
- Marine Lamp is provided for better visibility during servicing.
- View port is provided for inspection during the Air washer unit operation
- Door limit switches are provided to trip the Fan motor to ensure safety.



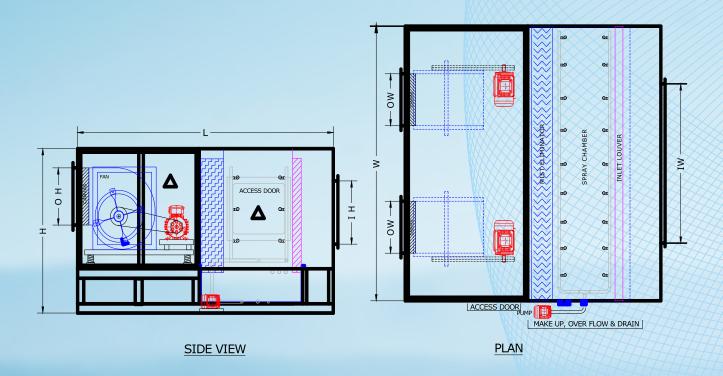
Technical Specifications

Sophisticated Engineering Guaranteed.

SAGAR AIR Scrubber Package Type - 1 (Single Blower Series)

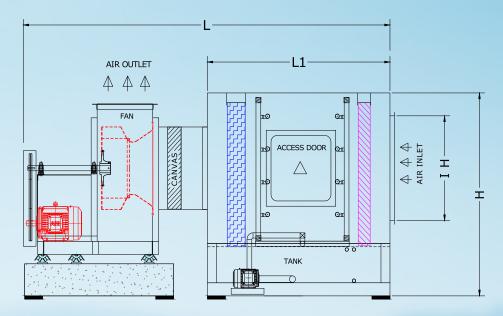


Scrubber	Air Volume		Fan	OV	Fan	Air Inlet	Overall		Motor KW		PUMP KW	
Model			Model	Model (m/s)		Opening		Dimensions-mm			TSP-mm	
	CFM	СМН			OW x OH	IW x IH	L	W	Н	50	65	
SASU-50	3000	5100	FDA-315	8.7	404*404	500*500	1900	1000	1200	1.5	1.5	0.37
SASU-70	4000	6800	FDA-355	9.2	452*452	500*600	2400	1200	1300	1.5	2.2	0.37
SASU-85	5000	8500	FDA-400	9.2	507*507	500*800	2500	1150	1350	2.2	3.7	0.37
SASU-100	6000	10200	FDA-450	8.7	568*568	500*900	2600	1200	1450	2.2	3.7	0.37
SASU-140	8000	13600	FDA-500	8.7	638*638	700*900	2750	1350	1650	2.2	3.7	0.37
SASU-170	10000	17000	FDA-560	9.2	714*714	700*1100	2750	1500	1650	3.7	5.5	0.37
SASU-200	12000	20400	FDA-630	8.8	800*800	1000*1000	2800	1800	1800	5.5	5.5	0.55
SASU-250	15000	25500	FDA-710	8.8	898*898	1000*1200	2900	2000	2000	5.5	7.5	0.55
SASU-300	18000	30600	FDA-800	8.4	1006*1006	1000*1400	3200	2200	2200	7.5	8.8	0.55
SASU-340	20000	34000	FDA-800	8.4	1006*1006	1000*1600	3200	2300	2200	7.5	8.8	0.75
SASU-420	25000	42500	FDA-900	9.2	1130*1130	1000*1900	3500	2600	2400	8.8	13	0.75
SASU-460	27000	45900	FDA-1000	7.9	1263*1263	1000*2100	3700	2800	2500	8.8	13	0.75
SASU-500	30000	51000	FDA-1000	8.8	1263*1263	1000*2300	3100	3000	2500	11	13	0.75

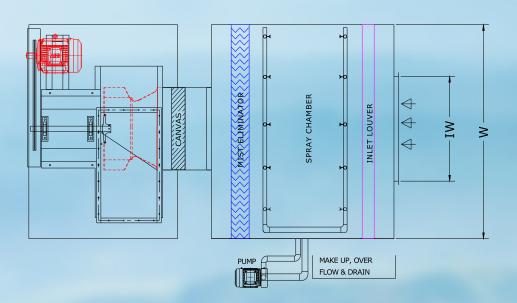


Scrubber Model	Air Volume		Fan Model	OV (m/s)	Fan Opening	Air Inlet	Overall Dimensions-mm		Motor KW Qty -2nos		PUMP KW	
			Qty-2nos							TSP -	mm	
	CFM	CMH			OW x OH	IW x IH	L	W	Н	50	65	
SASU-400D	24000	40800	FDA-630	8.8	800*800	1650*900	3200	3200	2000	5.5	7.5	0.55
SASU-500D	30000	51000	FDA-710	8.8	898*898	1850*1000	3500	3800	2100	5.5	7.5	0.55
SASU-600D	36000	61200	FDA-800	8.4	1006*1006	2250*1000	3700	4000	2200	7.5	8.8	1.1
SASU-780D	45000	76500	FDA-800	10.5	1006*1006	2750*1000	3700	4200	2200	8.8	11	1.1
SASU-850D	50000	85000	FDA-900	9.2	1130*1130	2550*1200	4000	4650	2400	11	11	1.5
SASU-950D	55000	93500	FDA-900	10.2	1130*1130	2850*1200	4000	5100	2400	11	13	1.5
SASU-1020D	60000	102000	FDA-1000	8.8	1263*1263	3000*1250	4500	5000	2600	11	13	1.5

SAGAR AIR Scrubber Package Type - 2 (SISW Blower Series)



SIDE VIEW



PLAN

Scrubber Model	Air Volume		Fan Model	Overall Dimensions-mm			OV (m/s)	Air Inlet (mm)	Motor KW TSP - mm				PUMP KW	
	CFM	СМН		L	L1	W	Н		IW x IH	40	50	65	75	
SASU-70	4000	6800	BSZ-500	2700	1500	1000	1250	9.2	600 x 400	1.5	2	2	2	0.37
SASU-85	5000	8500	BSZ-560	2800	1500	1150	1250	9.1	700 x 400	2.2	2	4	4	0.37
SASU-100	6000	10200	BSZ-630	2900	1500	1300	1500	8.8	700 x 500	2.2	4	4	4	0.37
SASU-140	8000	13600	BSZ-710	3300	1700	1500	1550	9.3	800 x 500	3.7	4	4	6	0.55
SASU-170	10000	17000	BSZ-800	3700	2000	2000	1700	9.2	1000 x 600	3.7	6	6	6	0.75
SASU-250	13000	22100	BSZ-900	3800	2000	2300	1700	9.2	1100 x 600	5.5	6	8	8	1.5
SASU-270	16000	27200	BSZ-1000	4500	2300	2500	2000	9.3	1200 x 600	5.5	8	9	9	1.5





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