





CLEENjet®

> The thermal air-purification systems from Schröter are used to purify highly contaminated smoke streams – from 200 to thousands of cubic meters per hour. They can be supplied as individual solutions or as a central system for multiple emission sources. In addition, downstream units can be integrated for heat recovery. The Schröter CLEENjet® is available with multiple options in our classic design or as weatherproof, sound-insulated container solution. For plants with steam smoke generators, water scrubbers are also an alternative. We offer also individual solutions for lightly polluted streams.

A CLEAN AFFAIR

IN THE MEAT PRODUCTS INDUSTRY, SMOKE EMISSIONS THAT POLLUTE THE ENVIRONMENT ARE GENERATED DURING PRODUCTION. AS A MANUFACTURER OF AIR-CONDITIONING AND HOT SMOKE SYSTEMS, SCHRÖTER OFFERS, AMONG OTHER THINGS, THE CLEENjet® AIR-PURIFICATION SYSTEM AS A TAILOR-MADE AND ENVIRONMENTALLY FRIENDLY SOLUTION.

The thermal air-purification system consists of a drum-shaped combustion chamber with an integrated preheating selection. Smoke exhaust emissions are purified here at temperatures in excess of 750 degrees Celsius. This means that the carbon compounds in the raw gas and the oxygen in the air are converted almost completely to CO₂ and water vapor (H₂O). Besides this, the plant manufacturer optimally utilizes waste heat – whether it is used to heat processing water, integrated into heating equipment, or used to heat thermal oil for frying lines. Schröter analyzes both the volume of exhaust air and the degree of pollution in order to propose a system solution that meets demands.

We offer a four-column systems as an alternative for systems with steam smoke generators. It purifies the exhaust air by means of spraying water. A level sensor determines the maximum and minimum water level so that partial and total water exchange is fully automated. If the exhaust air scrubber is installed outside, an automatically controlled electric heater prevents the water from freezing during the cold season.

Besides this, biological exhaust-air scrubbers are an option too. An efficient bio-filter system with a biological bed, including exhaust air scrubber, is used for purifying odorous exhaust air. Odor and fat particles are effectively separated in the scrubber. Subsequently the air with residual odor particles flows into the bed, where it must penetrate a one-meter-thick layer of bark mulch and is then metabolized and cleaned by microorganisms. In addition, Schröter offers further alternative exhaust-air cleaning systems that can be tailored to meet any need.

The dimensions and connected loads of the CLEENjet® thermal air-purification system can be found in the Technical Details chapter on page 95.

- 01 Biological exhaust air purification based on bio-filter technology
- 02 Purification of smoke-exhaust based on thermal exhaust air purification
- 03 RWK four-column scrubber for low-loaded stream capacities



01



02







TECHNICAL DETAILS

> Sophisticated Schröter systems feature exceptional details and first-class workmanship and are manufactured using high-quality materials. We adapt every system and its equipment down to the smallest component to meet the customer's individual requirements. Even accessories such as smoking, cooking, and baking trolleys and frames for material-handling equipment are customized in line with your specific needs. The following pages contain all the dimensions and connected loads of our systems (hot smoking, cooking, baking, intensive chilling, smoke, climatic cold-smoking and climatic post-maturing, as well as cooking kettles and exhaust purification systems).

SMOKjet® RD AND RL: STEAM AND LIQUID SMOKE GENERATORS

SMOKjet® RD (STEAM SMOKE GENERATORS)		
CONNECTED LOADS		
Electricity	230/400 V, 50 Hz	11 kW
Heating	Electricity	9 kW
Steam	ND-Steam DN 25 0.3-0.5 bar	30 kg/h
Condensate	Discharged to atmosphere	
Cleaning	Cold water DN 25	60 l/min
Control	Compressed air DN 10 6 bar	5 l/min
Consumption	Chip size 1-4 (1-8)	8 kg/h

SMOKjet® RL (LIQUID SMOKE SYSTEMS)		
CONNECTED LOADS		
Electricity	230 V, 50 Hz	0.2 kW
Atomization	Compressed air DN 10 6 bar	150 l/min
Consumption	Liquid smoke per nozzle	3-4 l/h

CLEENjet®: THERMAL EXHAUST PURIFICATION SYSTEMS (TNV)

CLEENjet® TNV											
TNV	DIMENSIONS				CONNECTED LOADS						
	Diameter mm	Length mm	Electricity kW	Weight kg	Power kW**	Gas burner		Oil burner		WRG	Electricity
						Type	kW	Type	kW	kW	kW
300	1000	2950	3	700	70	WG 20	35-200	WL 20	55-130	22	0.4
600	1000	3450	3	1150	140	WG 30	60-350	WL 30	72-215	43	0.4
900	1250	4000	4	1575	210	WG 30	60-350	WL 30	72-215	65	1.1
1200	1250	4450	4.5	1875	280	WG 30	60-350	WL 30	72-215	87	1.1
1500	1250	4950	4.5	2175	350	WG 40	80-550	WL 30	72-215	108	1.7
2000	1400	5160	7	2700	470	WG 40	80-550	WL 40	120-355	145	2.2
3000	1400	5160	7	2850	700	WM-G 20	100-940	WM-L 20	190-775	217	4.5
4000	1900	4680*	8	3500	1275	WM-G 20	150-1750	WM-L 20	300-1190	289	7.5
5000	1900	5120*	8	4000	1600	WM-G 20	150-1750	WM-L 20	570-1965	361	7.5

* Without integrated crude gas preheater. | ** These values are approximate and based on the precise local conditions.