

Building materials industry

Steel and metal production

Wood processing

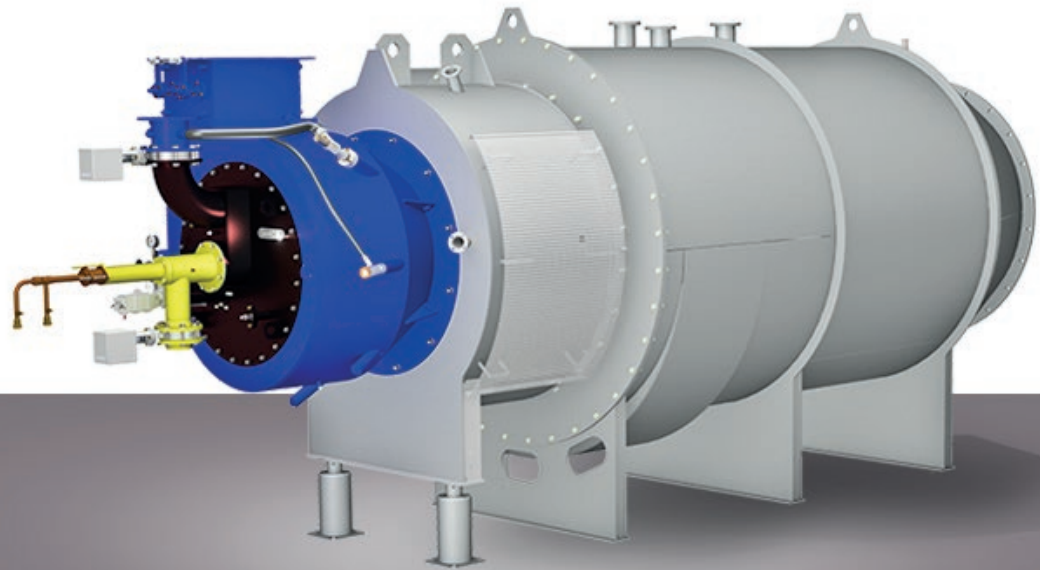
Waste incineration

Energy and heat supply

Chemical industry

Refineries

Food industry



## Hot gas generator CCS-LT

### *The all-steel version*

SAACKE offers a series of proven and cost-effective solutions of all-steel combustion chambers in the capacity range from 2 to 26 MW. Because of the low pressure loss on the mixed gas side, the CCS-LT combustion chamber series is ideal for large volume flows of mixed gas and therefore also permits low hot gas outlet temperatures. All-steel combustion chambers consist essentially of a double-walled steel mantle, a burner mounted on the front wall and a mixing system at the hot gas outlet. The furnace is not brick lined (except the pre-combustion chamber for light oil operation), which means the design is considerably lighter. Thus also hot gas generators with higher capacities can be delivered completely assembled at site. The low weight of the CCS-LT is a special advantage that facilitates very fast startup and shut-down for the combustion chamber as well as rapid temperature changes in operation.

### **Fast control response and homogeneous temperature profile**

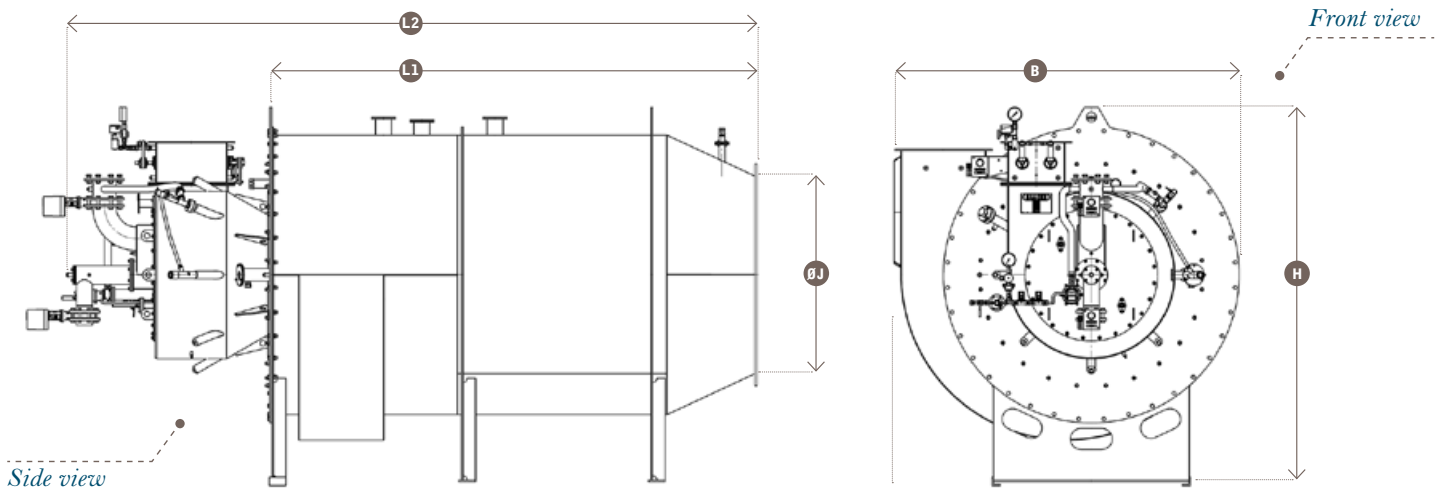
An SSB series burner forms the core of the combustion system: Its gas or oil flame is very stable, and also extremely short. The mixing gas (ambient air or recirculated flue gas, depending on the process)

enters the double mantle tangentially, cools the furnace and is mixed evenly with the hot gases emerging from the nozzles at the furnace end. The temperature profile is extraordinarily homogeneous at the outlet of the hot gas generator. Pressure loss is extremely low overall, thus allowing for large volume flows, very low outlet temperatures and mixing gas fans with low power requirement. The all-steel combustion chambers of the CCS-LT series are all based on proven standard products and can be adapted or expanded as requested by customers. In this way, optimum manufacturing quality and expert engineering facilitate solutions to especially challenging requirements.

### **Key technical data: CCS-LT**

<b>Applications</b>	Hot gas generation, gas and exhaust gas disposal
<b>Burner capacity</b>	2-26 MW, higher capacities on request
<b>Fuel</b>	Fuel gas and fuel oil DIN 51603-1 and equivalent liquid fuels, special gases on request

## Dimensions CCS-LT



*L3\*: Overall length for oil or dual-fuel combustion*

### Dimensions (mm)

Model	LT 20	LT 50	LT 100	LT 200	LT 300
L1	1,935	2,595	3,495	4,165	4,675
L2	2,795	3,805	4,955	6,075	7,505
L3	4,135	5,355	6,405	8,065	9,325
H	1,780	2,175	2,680	3,030	3,880
B	1,520	1,955	2,475	3,075	3,855
øJ	700	1,000	1,400	1,900	2,300

### Product information

- Short startup and shut-down times
- Fast control response
- Very homogeneous temperature profile at the hot gas outlet
- Low weight and small dimensions
- Low pressure loss

### Weight (kg)

Model	LT 20	LT 50	LT 100	LT 200	LT 300
Natural Gas	1,470	2,415	3,675	5,200	8,400
Light Oil or Dual-Fuel	2,050	3,255	4,620	6,880	10,450

### Operating data

Model	All-steel Combustor	LT 20	LT 50	LT 100	LT 200	LT 300
Burner	SSB / SSBG	20	50	100	200	300
Burner Capacity	max. QBr in MW	1.8	4.0	8.5	17.0	26.0
Combustion Air	max. VFI Nm <sup>3</sup> /h (<= 30 °C)	4,000	9,000	10,000	40,000	60,000
	pBr in mbar	35	35	35	40	40

