

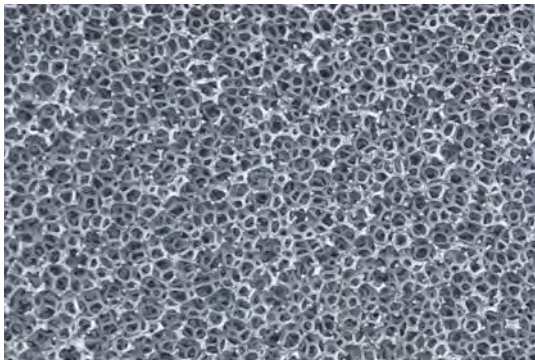
ETAMAT - Recuperator Gas Burner
A New Generation



ETAMAT RHGBS Recuperator Burner

FEATURES / ADVANTAGES

- Newly developed high-speed burner with foamed metal recuperator for outstanding thermal recovery
- Efficiency up to 90 %
- 2-part burner housing
- Exhaust gas temperature reduced to less than 300 °C
- Multi-stage low-NO_x combustion
- Compact modular unit with separate cooling air connection
- Ignition directly electrical
- Direct flame monitoring throughout operating area
- Very low sound pressure level: to below 60 dB(A)



SYSTEM REQUIREMENTS FOR RHGBS 25


- Use in type 200 mantle nozzle with type 200 flame tube
- Maximum thermal load of the nozzle 25 kW/m² - at a combustion chamber temperature of 920 °C
- Higher connection pressures for gas and combustion air of maximum 10 kPa, depending on the burner output
- Clean combustion air
- Cold start: use of a start-up reducer to limit the starting load

APPLICATION

- Use in new systems or as replacement for existing burner with rib recuperators for upgraded efficiency
- Burner modes ON/OFF, LARGE/SMALL, and CONTINUOUS
- Replacing the RHGB 40 with the RHGBS 25



COMPARISON WITH STANDARD RHGB 40 BURNER

RHGBS 25		RHGB 40
with		with
35 kW		39,5 kW
30 kW		34 kW
25 kW		28,5 kW

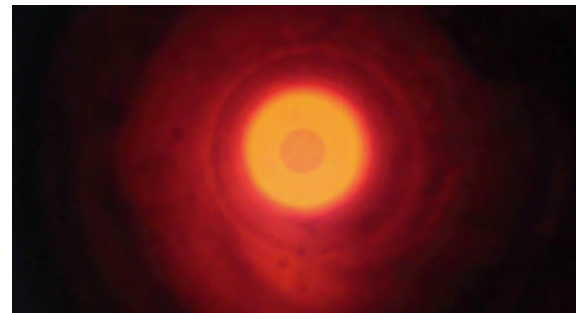
TECHNICAL DATA

Burner size ETAMAT		RHGBS 25
Thermal output, maximum	kW	35
Thermal output, rated	kW	25
Thermal output, minimum	kW	15
Gas connection pressure, maximum	kPa	10
Combustion air connection pressure, maximum	kPa	10
Mass (basic burner)	kg	55
Maximum temperature at recuperator	°C	1050
Installation length	mm	560
Combustion gas	Natural gas, LPG	

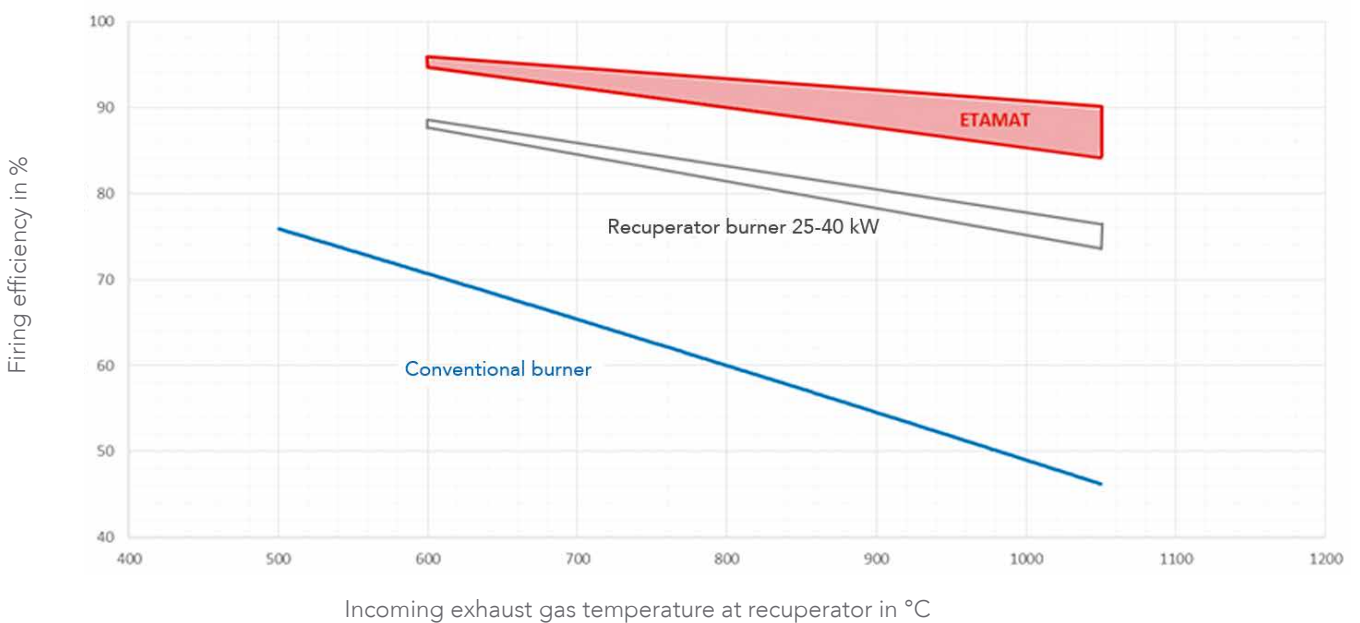
ENERGY SAVINGS

Depending on the temperature of the incoming exhaust gas, the firing efficiency of the ETAMAT burner is between 85 % and 95 %. Depending on the operating mode, this results in an energy savings in comparison with earlier recuperator burners of another 5 to 10 percent.

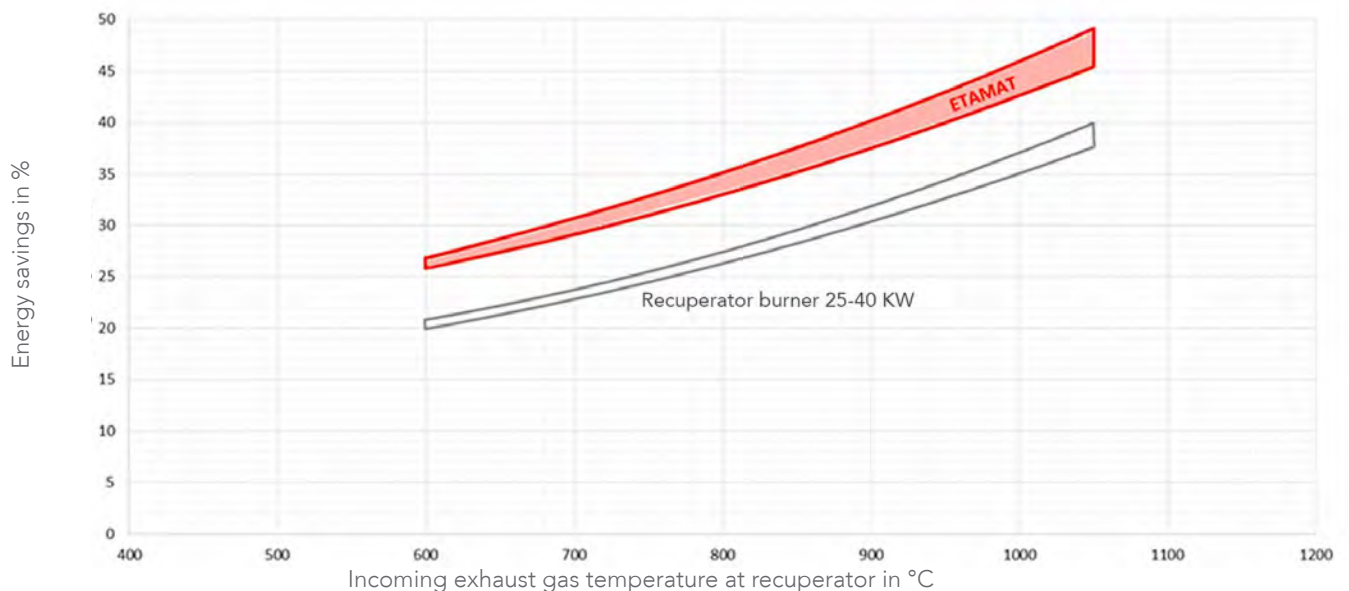
The values in the diagrams are intended as guide values. We will design the actual layout on the basis of your technical data for the application itself.



EFFICIENCY in %

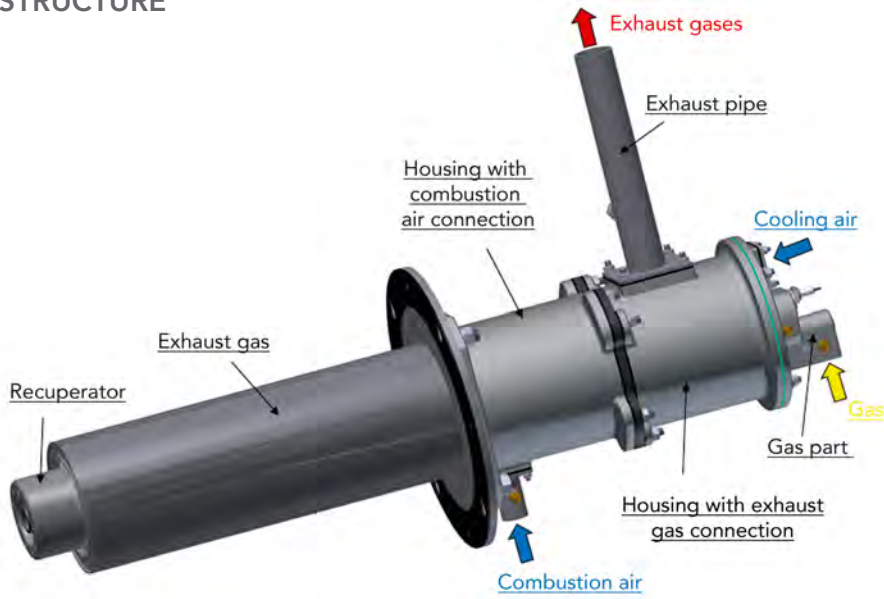


ENERGY SAVINGS IN %

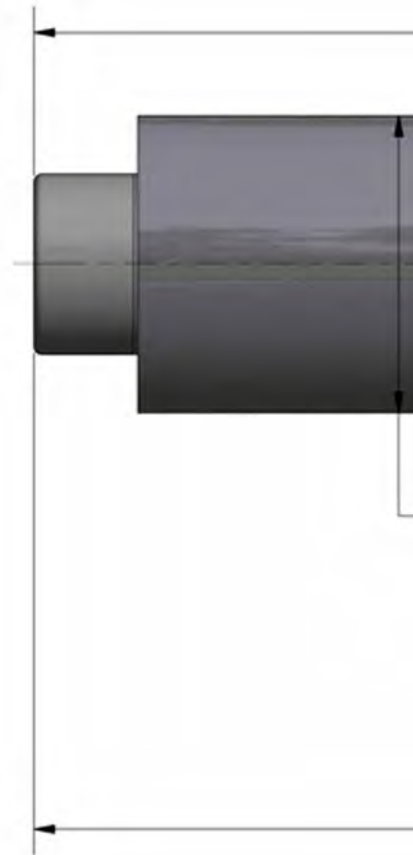
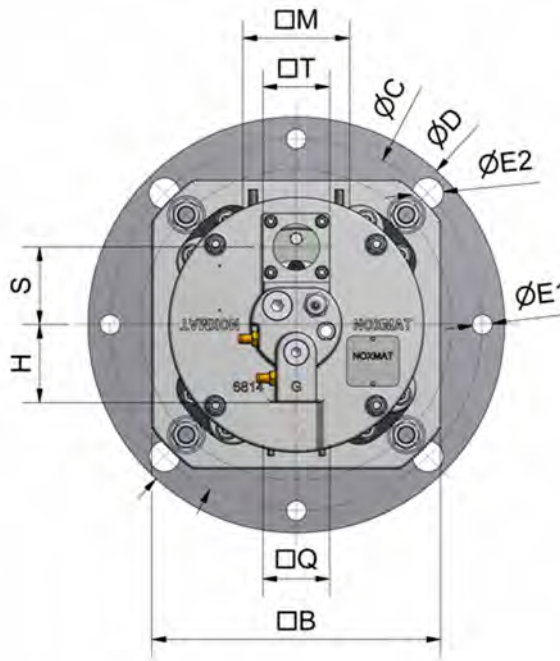


ETAMAT RHGBS Recuperator Burner

BURNER STRUCTURE

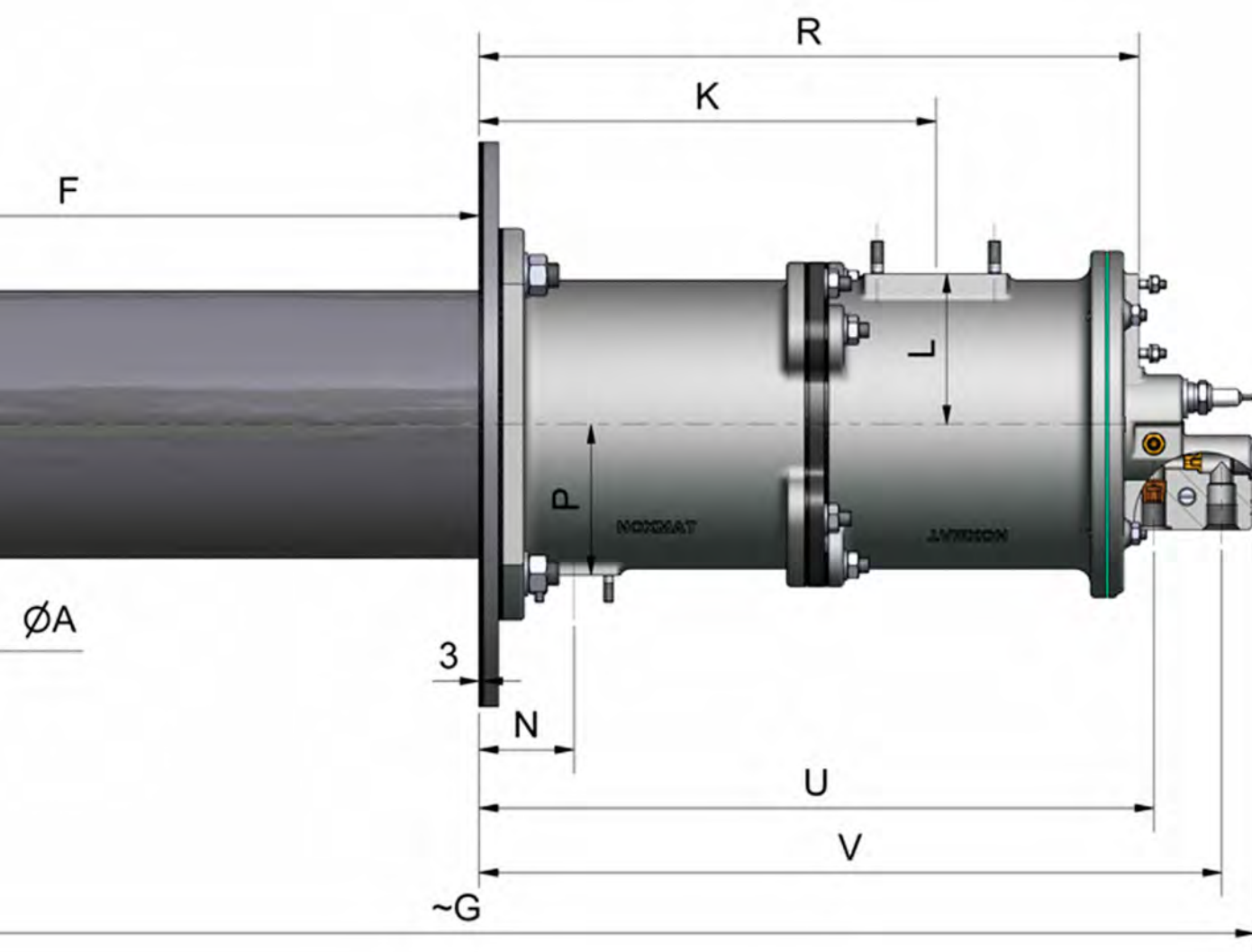
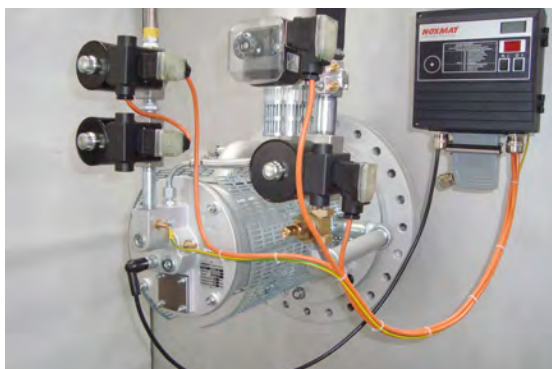


Recuperator HIGH-SPEED BURNER NOXMAT RHGBS - indirect heating



MAIN DIMENSIONS/CONNECTION DIMENSIONS

Burner size	Main dimensions in [mm]								Exhaust		
	A	B	C	D	E1/E2	F	G	H	K	L	
									mm		
RHGBS 25	178	252	335	375	18/28	545	1060	70	303	100	96



Connection dimensions

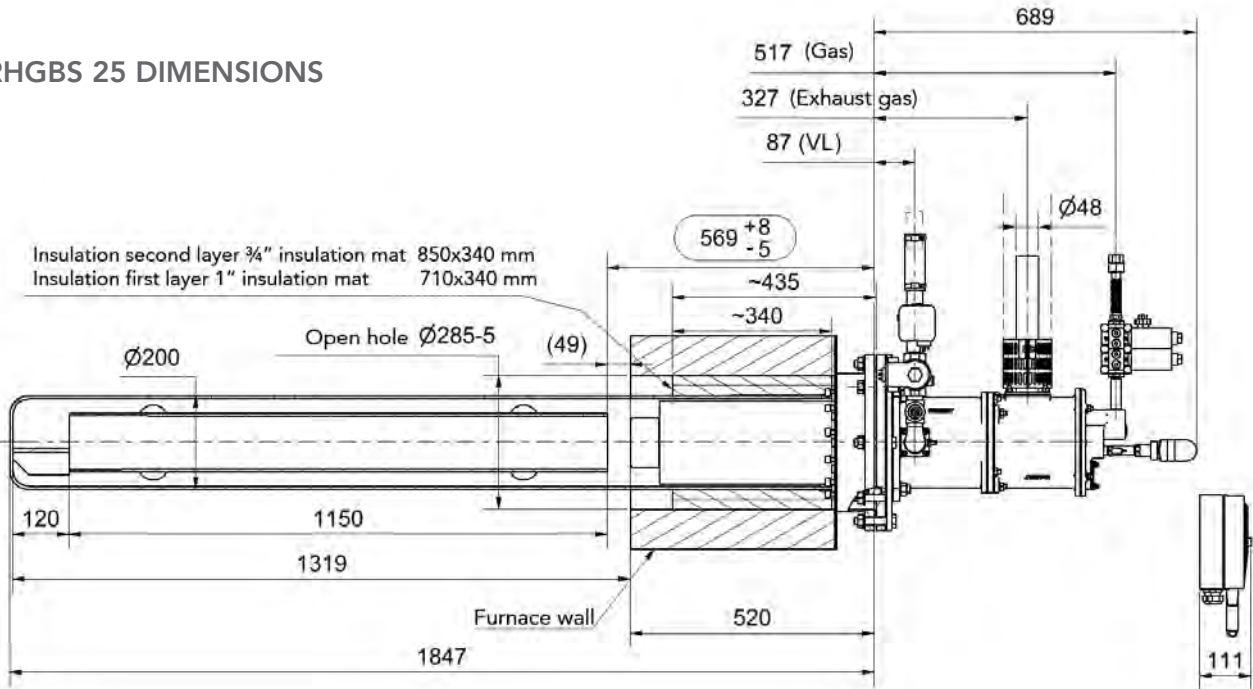
gas	Combustion air			Cooling air			Purging air		Combustion gas			
M	N	P	Q	R	S	T	U		V			
	mm			mm			mm	Zoll	mm	Zoll		
Ø75	63	100	60	Ø50	438	70	60	Ø42	448	G3/8	493	Rp1/2

ETAMAT RHGBS Recuperator Burner

NOZZLE SYSTEM

The ETAMAT Recuperator burner is designed for use in indirect heating systems such as mantle nozzles, as well as P and double-P nozzles.

RHGBS 25 DIMENSIONS



TEST RESULTS - BURNER REBUILD AND REPLACEMENT

ETAMAT burner installed with Type 200 nozzle in a belt furnace

RHGBS(U) 25
Upgrade variant
Recuperator replacement only

RHGBS 25
New burner

Burner		RHGBS(U) 25	RHGBS 25
Connection power	kW	18	18
Gas connection pressure	kPa	4,8	4,8
Air connection pressure	kPa	7,8	7,8
Max recovery temperature	°C	1020	1030
Efficiency		0,865	0,905
Exhaust gas temperature	°C	< 340	< 250
Emission		according to TA-Air	



Additional details about the burner, such as installation drawings, diagrams, spare parts drawings, installation instructions, start-up and maintenance, etc., are available upon request.

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