

## Exhaust gas heat exchanger



# **CERTECON** 700 – 2000



### Exhaust gas heat exchanger at a glance

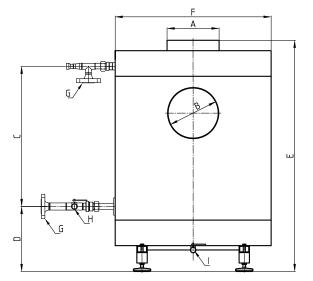
## **Energy Saving with CERTECON**

#### **CERTECON Flue gas heat exchangers**

An innovative solution for saving energy during operation of the oil- or gas-heated CERTUSS steam generators of the Universal 500 – 2000 series.

For the Universal 500 – 600 the exhaust gas heat exchanger CERTECON 250 – 650 with a lower heat output can be used alternatively.

Depending on the output level, operating pressure and utilization of the steam generator, the combustion-specific degrees of efficiency increases to up to 98%.



#### **CERTECON Flue gas heat exchangers**

are compact with small dimensions are inserted horizontally or vertically in the flue gas flue between the steam generator and exhaust gas stack.

At the water end they have to be installed between the boiler feed pump and the steam generator.

#### **CERTECON Flue gas heat exchangers**

continuously return the gained energy to the steam generators. The burner output is reduced correspondingly. External heat intake is not required. They are approved solely for the operation with CERTUSS steam generators.

#### **CERTECON Flue gas heat exchangers**

have a robust heat exchanger package made of high-quality boiler tubes. They are adapted optimally to the respective sizes of the CERTUSS steam generators. Depending on the boiler size the flue gas temperature is reduced to 130 °C to 160 °C, whereby the danger of the dew point being underpassed in the exhaust gas stack is avoided.

#### **CERTECON Flue gas heat exchangers**

are protecting the heating system of the CERTUSS steam generator system respectively used against deposits and corrosion through the dew point being underpassed during intermittent operation with non-optimal feed water during operation. The heating coil is divided into two parts and can be replaced easily.

#### **CERTECON Flue gas heat exchangers**

are manufactured in accordance with the European Pressure Equipment Directive 2014/68/EU and have a CE marking.

CERTECON		700 – 960		1000 – 1300		1500 – 2000	
CERTUSS Steam Generator Universal		700 – 850		1000 – 1300		1500 – 2000	
A Flue gas inlet Ø internal	mm	300		350		500	
B Flue gas outlet Ø external	mm	295 345		495			
C Connecting piece distance	mm	850		900		940	
D Distance floor / connecting piece	mm	355					
E Height	mm	1325		1385		1450	
F Diameter	mm	900		1020		1100	
G Water inlet/water outlet PN 100	DN	25			32		
H Desliming	DN	15			25		
I Dewatering flue gas condensate		3/4 "					
* Heat output at full load up to	kW	15		25		43	
Connectable burner output max.	kW	730		1100		1480	
Heating flue gas temperature max.	°C	350					
Weight without water filling	kg	320		387		442	
Pressure equipment volume V	L	43,1		51,6		71,6	
Operating overpressure PS	bar	10 – 32	40	10 – 32	40	10 – 32	40
Product PS x V	max.	1379,2	1724	1651,2	2064	2291,2	2864
PED 2014/68/EU, Annex II, Diagram 5, Category		III	IV	III	IV	III	IV

\*The values can deviate depending on the burner output, operating overpressure and utilization of the steam generator.

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