

HRS G SERIES

GAS COOLING HEAT EXCHANGER



The HRS G Series is a complete stainless steel shell and tube design for exhaust gas cooling and thermal recovery applications. Similar to the HRS K Series, the exhaust gases flow through the interior tubes and the media fluid flows through the surrounding shell. Using HRS corrugation technology, heat transfer and efficiency are increased over standard smooth tube heat exchangers. In addition, effects of fouling are minimized.

APPLICATIONS

Heat Recovery From:
Cogeneration Exhaust Gas
Boiler Exhaust Gas
Industrial Exhaust Gas/Flue Gas

STANDARD DESIGN CONDITIONS

Shell Side: 58 psig/1022°C
Tube Side: 29 psig/1022°C

MATERIALS OF CONSTRUCTION

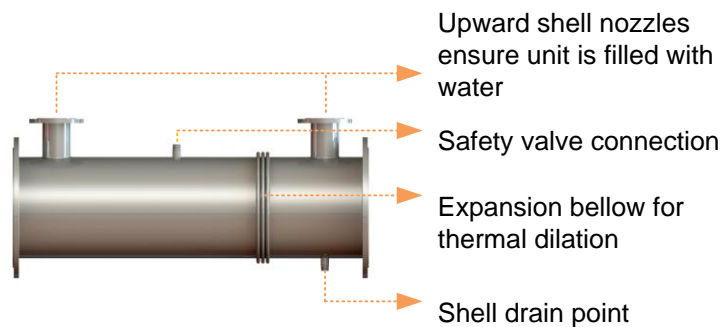
Shell Side: AISI 304/316L Stainless Steel
Tube Side: AISI 316L Stainless Steel

SURFACE FINISH

External: Matt
Product Side: Descaled

STANDARD CONNECTIONS

Shell Side: DIN Flange
Tube Side: Tubeplate-DIN Flange

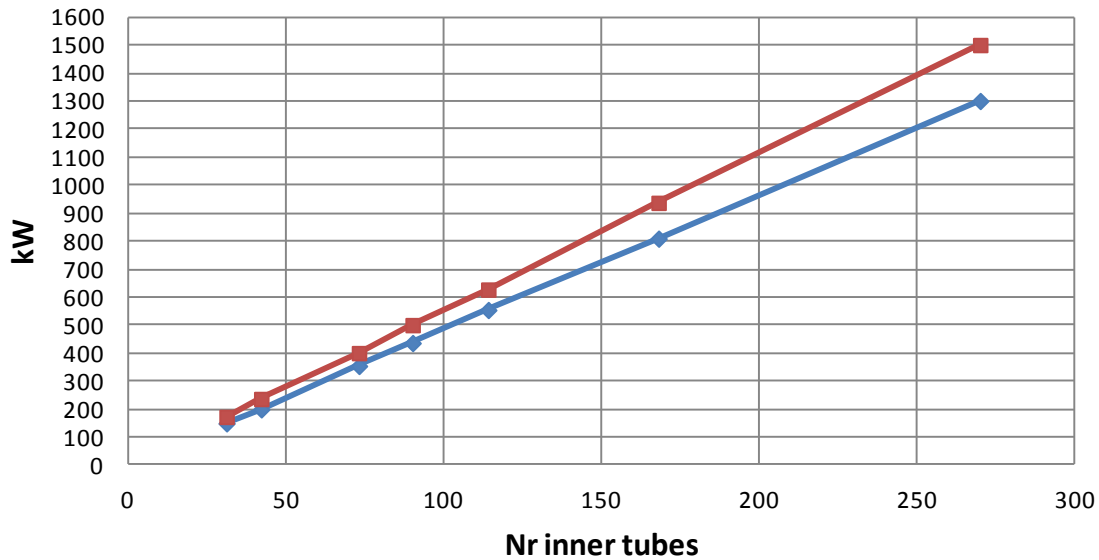


RANGE

Models:	No. of Tubes	Lengths (ft)	Surface Area (ft ²)	Shell Side Connection	Tube Side Connection	Max Flow Shell (gpm)	Volume Shell Side (gal)	Volume Tube Side (gal)
G 31 272/34	31	5 – 10	104	2½"	10"	198	22	19
G 42 323/34	42	5 – 10	142	3"	12"	242	32	26
G 73 406/34	73	5 – 10	247	4"	15¾"	374	47	46
G 90 457/34	90	5 – 10	305	4"	17¾"	374	61	56
G 114 508/34	114	5 – 10	385	5"	20"	572	74	71
G 168 609/34	168	5 – 10	567	6"	24"	793	104	105
G 270 762/34	270	5 – 10	924	8"	29½"	1409	160	169

Custom lengths between 5ft and 10ft can be supplied.
The surface area and volumes shown are for 10ft length models. Shell side nozzle volumes are included.

PERFORMANCE CHARTS



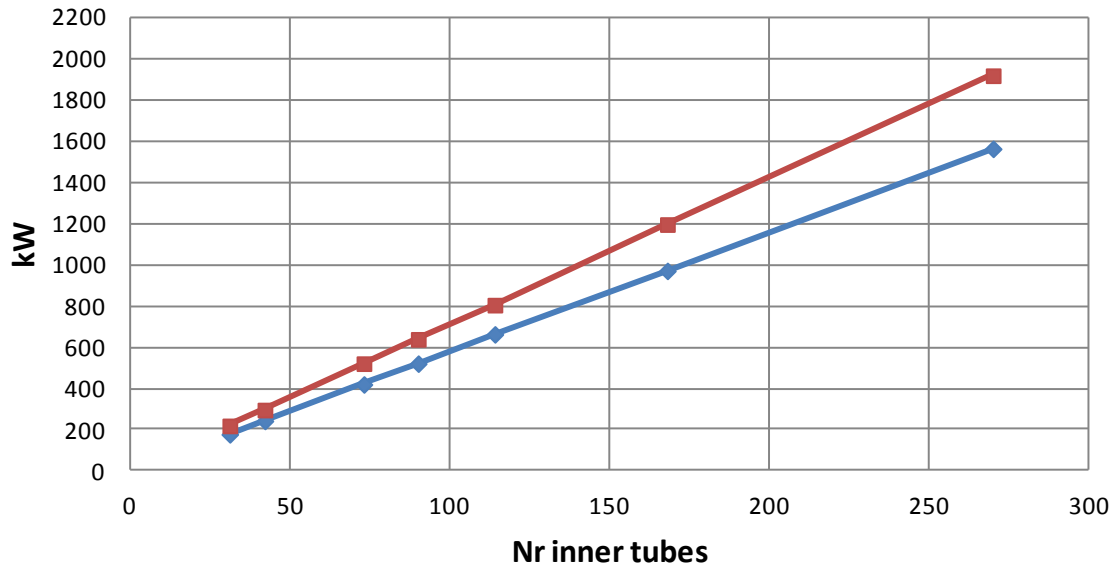
◆ 15 mbar ■ 20 mbar

Tube Length: 5.0ft

Tube Side: Cooling Cogeneration Exhaust from 932°F to 248°F

Shell Side: Heating Water from 176°F to 194°F

kW Heat Recovery for 15mbar and 20mbar Pressure Drop on Gas Side.



◆ 20 mbar ■ 30 mbar

Tube Length: 10.0ft

Tube Side: Cooling Cogeneration Exhaust from 932°F to 248°F

Shell Side: Heating Water from 176°F to 194°F

kW Heat Recovery for 20mbar and 30mbar Pressure Drop on Gas Side