

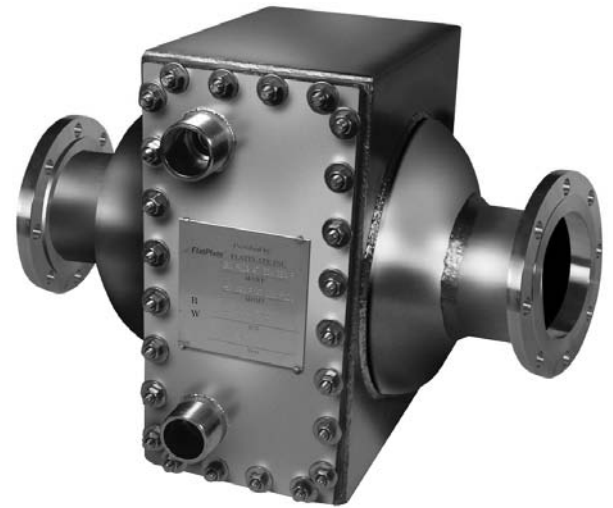
## GP Series – Brazed Plate Heat Exchangers

### A giant leap for Gas to Fluid Heat Exchangers

GEA PHE Systems now offers high efficiency in an ultra-compact package at a reasonable cost. By combining years of innovative experience in traditional liquid/gas plate heat exchangers GEA PHE Systems has a proven design for cogeneration, industrial boiler, waste heat recovery, and gas process applications.

GEA PHE Systems has combined brazed plate technology with a hybrid louvered fin, to create the GP Series. The GP Series sets a new standard and competitive advantage for OEM's, Systems Packagers and Design/Build Engineers. Compared to traditional designs, the GP Series truly represents a new generation of heat exchanger.

- Engine Exhaust Heat Recovery
- Turbo After-cooler
- Boiler Heat Recovery
- Waste Heat Recovery
- Process Heating/Cooling



The innovation is inside the box!

#### Key Features

##### Compact

Low profile and short length combine to produce a versatile yet rugged heat exchanger able to fit easily into tight enclosures and OEM packages.

##### High Performance

High effectiveness and heat transfer are possible with low gas side pressure drop. Hybrid fin design provides full heat transfer surface utilization and low pressure drop.

##### Reliability

The GP Series has been performance tested by a nationally recognized laboratory. This means that predicted performance by GEA PHE Systems is reliable, accurate, and meets your design requirements.

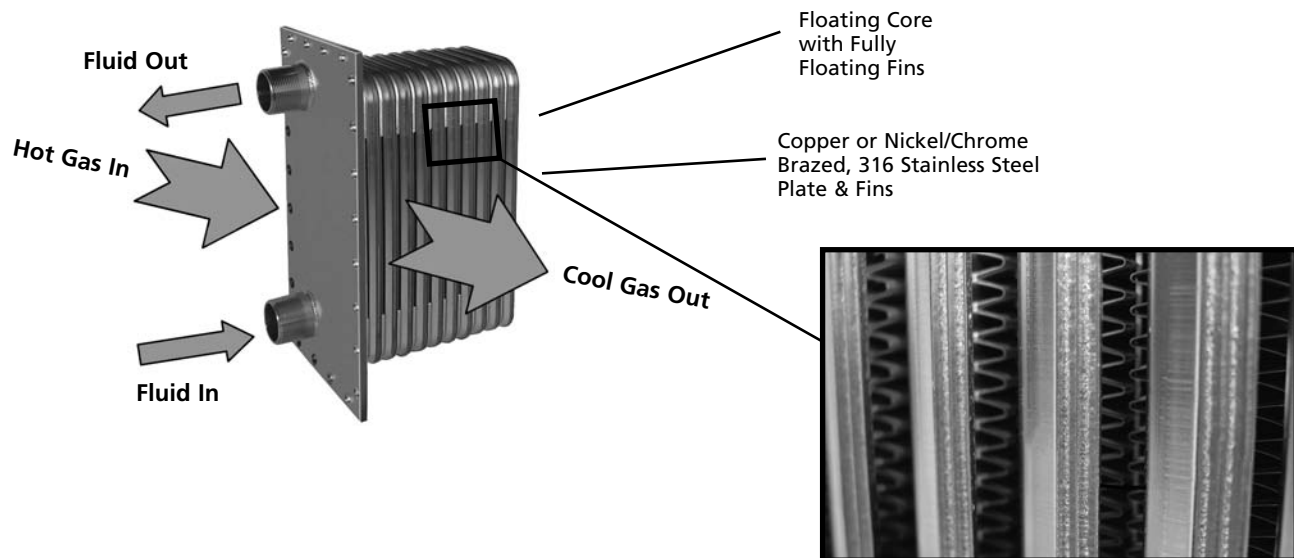
##### Factory Tested

All GEA PHE Systems GP Series heat exchangers are 100% tested with Helium/Nitrogen on the fluid side to code requirements. Shell side is leak tested to design requirements.

# GP Series – Design Features

The GEA PHE Systems GP Series is an innovative “Plate & Fin” construction designed for high heat transfer and endurance. By combining brazed plate and fin technologies, an ultra compact heat exchanger is possible that is 30% to 60% smaller than conventional designs... and provides higher performance.

GEA PHE Systems developed the hybrid fin to be used in a wide range of new product configurations. The fin is integrally brazed to heat transfer plate surfaces for heat exchangers requiring high gas operating pressures and temperatures up to 1180F (638C). The hybrid fin is a “louvered” type, optimized for high heat transfer performance and ultra low pressure drop in both laminar and turbulent flow conditions. The louvers provide lateral shifting of the air flow to increase fin effectiveness, minimize pressure drop and eliminate imbalanced flow conditions within the heat transfer cells.



- **Removable Core** – Gasketed for easy inspection and servicing. Includes Core with nickel/chrome brazed, stainless steel plates or copper brazed stainless steel plates.
- **Floating Core** – A unique floating core assembly minimizes core/shell thermal stress.
- **Lifting Lugs & Lifting Bar** – For easy core removal (10x20 version only).
- **Fluid Connections** – Standard MPT pipe thread and other optional connection types.
- **Field Reversible Fluid Connections** – Can be installed with fluid connections on left or right.
- **Leak Tested** – Every shell is pressure and leak tested prior to shipping. Every Core is pressure tested and helium leak tested to code construction requirements.
- **Dual Drain Plugs with Shell** – Allows draining of start-up condensables when HX is mounted horizontally.
- **Flange Gas Connections** – For easy mounting and installation. Nozzle and V-ring connection options available.
- **Horizontal or Vertical gas flows** are possible.
- **Standard or Custom** versions available (contact the factory).











