

Sidearm Heat Exchangers

Designed using the natural thermo-siphon on the domestic hot water side, our sidearm heat exchangers not only provide faster heating at a greater capacity than traditional sidearms, they prevent cross contamination in potable water application.

While the capacity of traditional sidearm heat exchanger is determined by the length of sidearm tubes and their heat transfer efficiency is comparatively very low. Instead of using two bare copper tubes, our fin-enhanced heat exchangers made of stainless steel and will have high heat transfer efficiency resulting from the utilization of an internal finned tube. This fin-enhanced design has a surface area five to eight times bigger than the bare tube design and produces significant turbulence on the system side. Our fin-enhanced sidearms provide a larger capacity and faster heating using a shorter unit. Fin-enhanced sidearms are available upon request. Download the Sidearm Heat Exchanger Brochure.

Double Wall Sidearm Heat Exchangers

Concerns about cross contamination of potable water has forced several US States to enact several regulations designed to prevent this from happening. Double wall sidearm heat exchangers present the most effective means of protection from cross contamination. Our vented double walled sidearm meets all the criteria of these regulation.

Applications of the Sidearm Heat Exchanger

Due to its compact size and lightweight, these sidearm heat exchangers come highly recommended for use in domestic water heating and residential plumbing applications. Also called domestic water heat exchangers, they are typically used to heat domestic water using either a conventional boiler, outdoor wood furnace or a solar hot water system.



- I Domestic Hot Water Heating
- I Outdoor Wood Furnances
- I Solar Hot Water Heating

Typically the domestic water is circulated

by means of the thermosiphon principle which saves on the cost of a pump and the associated electrical costs. In cases where faster heat recovery is required the domestic hot water should be circulated by means of a pump. Pump circulation will typically provide a heat recovery 3 to 4 times greater than thermosiphoning. We offer the following three models:

| Model No. | BTU/hr | Length | Connection size | | Construction | C-C Distance | |
|-----------|--------|--------|-----------------|-------------|--------------|--------------|-------------|
| | | | DHW Side | System side | | | System Side |
| FES-115 | 22500 | 975mm | 3/4"NPT | 3/4"NPT | SS304 | 855mm | |
| FES-115DW | 18000 | 975mm | 3/4"NPT | 3/4"NPT | SS304 | 855mm | |
| FES-95 | 18500 | 840mm | 3/4"NPT | 3/4"NPT | SS304 | 720mm | |