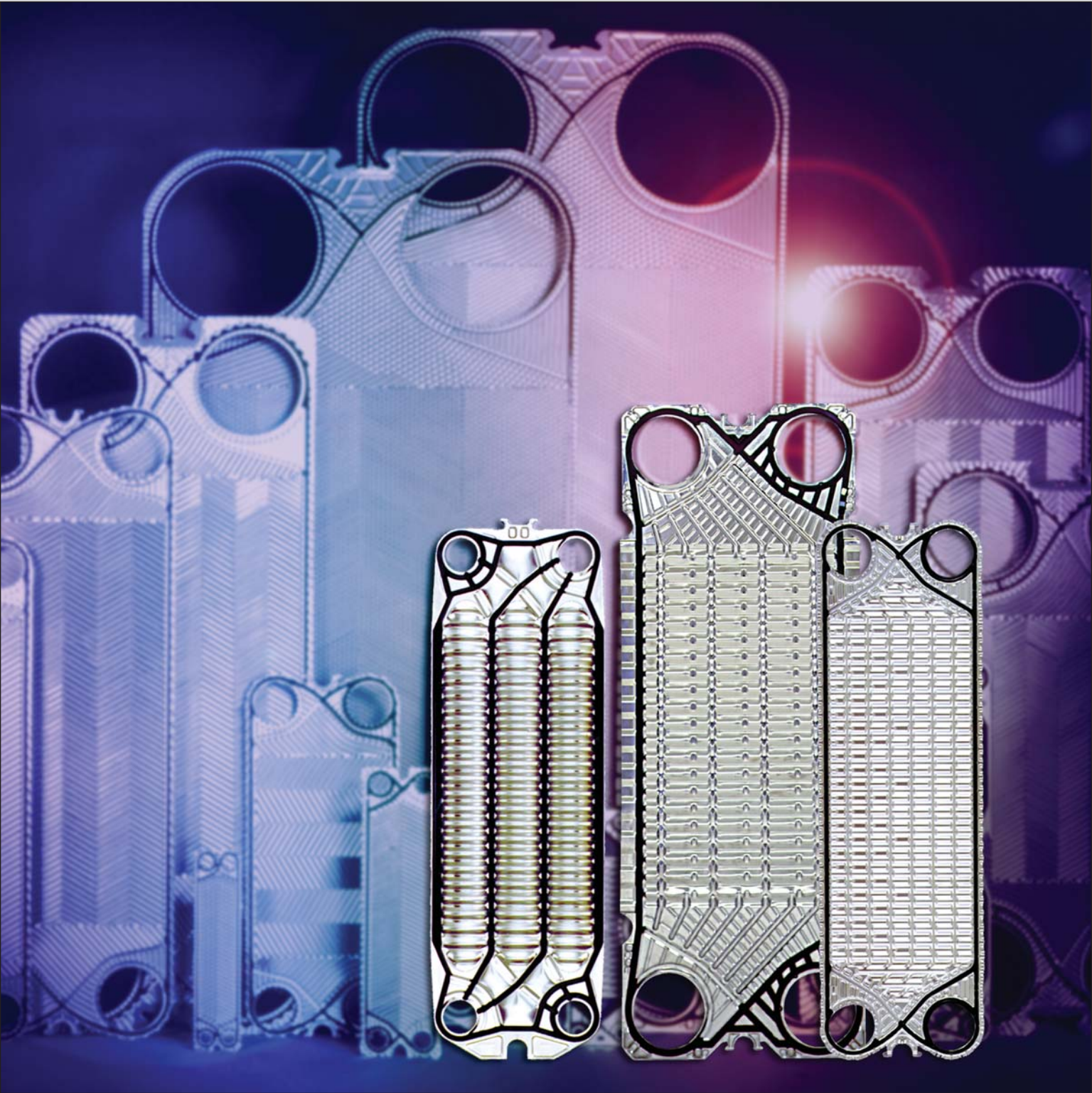


# FREE-FLOW PLATE HEAT EXCHANGERS



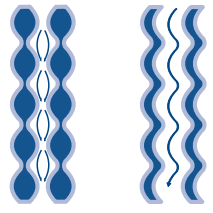
**MUELLER**<sup>®</sup>

HEAT TRANSFER PRODUCTS



# Free-Flow Plate Heat Exchangers... For Viscous Products, Slurries, and Effluent Streams

## Handles Large Particles and Slurries



The *Free-Flow* can be used with fluids containing fibers or particles that can block the flow channels of conventional heat exchangers, resulting in costly maintenance.

Competition Free-Flow

## High Heat Transfer Capabilities

The embossed pattern of the plates promotes high turbulence and reduced fouling at low fluid velocities. This results in heat transfer coefficients ("U" values) that are higher than shell-and-tube units and two to three times higher than spiral heat exchangers.

## Numerous Flow Channels

Numerous *Free-Flow* channels mean continued operation is possible, even if one channel plugs. With a spiral heat exchanger, one blocked channel stops production. The *Free-Flow* plate heat exchanger features include open fluid-flow channels that virtually eliminate any metal-to-metal contact.

## Easy to Disassemble and Clean

Simply remove the compression bolts and slide away the moveable end frame. You can visually inspect and clean every square inch of the *Free-Flow* unit heat transfer surface.

Ease of assembly and disassembly means less down time and costs during maintenance.

## Eliminates Cross Contamination of Fluids

In the *Free-Flow* plate heat exchanger, each medium is individually gasketed. The space between gaskets is vented to atmosphere, reducing the possibility of cross contamination of fluids. This feature makes the *Free-Flow* especially ideal for applications where product contamination cannot be tolerated.

## Expandable Design

The expandable feature of the *Free-Flow* plate heat exchanger protects your investment. If your heat transfer requirements change, your *Free-Flow* unit will not become obsolete. The unit's thermal performance can be adjusted by simply adding or removing heat transfer plates.

## Cost Effective

High heat transfer coefficients mean less square feet of material are necessary to accomplish a given job, greatly reducing the overall cost of the units.

## Compact Size

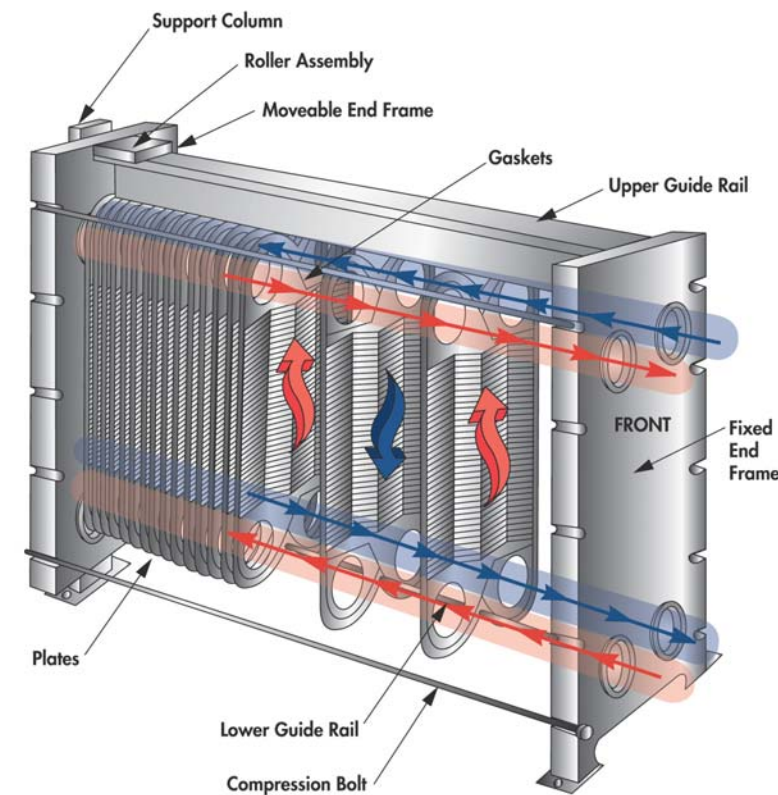
A single *Free-Flow* unit can do the work of multiple spiral units or one shell-and-tube in a fraction of the required floor space.

### SPECIFICATIONS

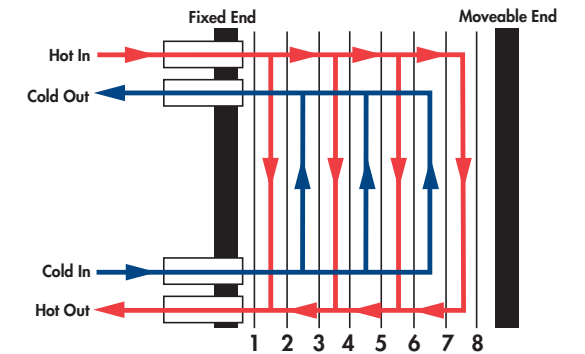
Plate	Port Size	Pressures	Gap Between Plates
AT40FF	4" Studded Ports	Operating Pressures up to 150 psig	0.20 inches
AT161FF	3" Studded Ports	Operating Pressures up to 86 psig	0.25 inches
AT161FFD	3" Studded Ports	Operating Pressures up to 86 psig	0.50 inches
AT184FF	8" Studded Ports	Operating Pressures up to 86 psig	0.25 inches
AT184FFD	8" Studded Ports	Operating Pressures up to 86 psig	0.44 inches

Standard connections are recommended for maximum cost effectiveness and are available from stock. Lap joint, weld neck flanged, and tri-clamp connections are available at an additional cost with longer delivery times. Temperatures up to 300 degrees F available on all models.

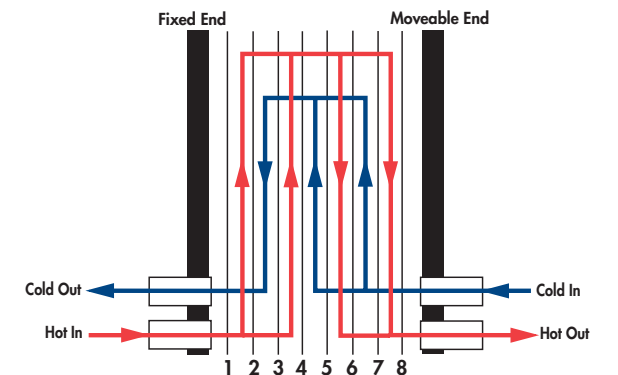
### ACCU-THERM CONSTRUCTION



### SINGLE-PASS ARRANGEMENT



### MULTI-PASS ARRANGEMENT

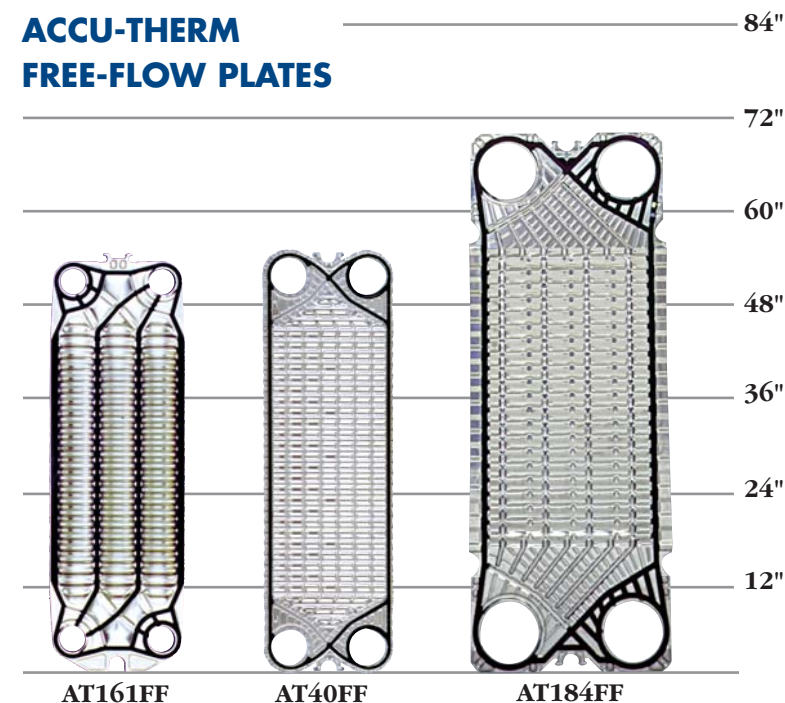


### GUARANTEED PERFORMANCE

Paul Mueller Company guarantees that Mueller Accu-Therm Plate Heat Exchangers will perform as specified.



### ACCU-THERM FREE-FLOW PLATES



# Accu-Therm®

## Free-Flow Plate Heat Exchangers

are for viscous products, slurries, and effluent streams that contain particles which can block the flow channels and plug up conventional heat exchangers.

### Computer Engineered

Each Mueller Accu-Therm *Free-Flow* plate heat exchanger is computer sized to match the specific performance requirements of each application. This sophisticated selection and sizing process, using computer programs that represent experience accumulated since 1940, guarantees low cost and efficient thermal performance.

### Computer Sizing and Personal Analysis

Mueller sales engineers are available to work directly with you in analyzing your data and matching an Accu-Therm *Free-Flow* plate heat exchanger to your process requirements. To take advantage of this personal analysis and computer sizing, simply complete the inquiry data sheet at right and call us at 1-800-MUELLER for immediate service.

### Plate Material

Accu-Therm *Free-Flow* plates can be supplied in Type 316 stainless steel.

### Gasket Material

Accu-Therm *Free-Flow* gaskets can be supplied in:

- Nitril (NBR)\*
- Ethylene Propylene Rubber (EPDM)\*
- Viton

*\*316 stainless steel plates and NBR/EPDM gaskets are carried in stock.*

Visit our Web site at  
[www.muel.com](http://www.muel.com) or  
[www.hxrx.com](http://www.hxrx.com) for  
 faster on-line analysis.

	Hot Side	Cold Side
Fluid Circulated		
Flow Rate		
Temperature In		
Temperature Out		
Operating Pressure		
Maximum Pressure Drop		
Specific Heat		
Specific Gravity		
Density		
Viscosity		
Thermal Conductivity		
Required Gasket Material		
Required Plate Material		
ASME Code Requirements		

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