



**SEC** *Heat Exchangers*

**TECHNICAL CATALOGUE**

**Section 6**

**Plate and Frame Models**

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## Plate and Frame Models

SEC is a Canadian Heat Exchanger Company providing our customers with courteous professional service, economical heat transfer solutions and equipment second to none in performance, quality and price.

In order, to meet the requirements of your industry, our experienced sales team will provide you with the solutions to meet your heat transfer applications. SEC Plate and Frame Heat Exchangers have been designed and development, to the highest quality, to satisfy the most demanding duties, even on our base price units.



### Working principle

All the individual plates put together form the SEC Plate and Frame Heat Exchangers "plate pack."

These are always mounted with the gaskets towards the fixed frame plate. The fluids flow through these plates in alternate channels.

The most common plate heat exchanger configuration is where the heated and the heating fluids pass through the heat exchanger once (in a counter flow manner). This is referred to as a single pass unit. All of the feed and discharge pipes are connected to the fixed plate. This is a particularly maintenance-friendly installation.

Close temperature differences between the fluids may demand multi-pass heat exchangers. The connection pipes are then attached to the fixed and pressure plates.

### Performance:

SEC Heat Exchanger production is supported by a large engineering based manufacturer with the newest plate presses in the industry. Extensive R&D will continue to ensure an ever larger range of units will be available to meet customer requirements.

SEC Heat Exchangers Thermal Calculations are based on advanced industry standards. SEC has extensive contacts and reference sites in North America and worldwide, which is testament to the long term quality and performance of SEC World Class Plate Heat Exchangers .

For more information on the SEC Plate and Frame Models please visit:

<http://www.secplateandframe.com/>

## **Construction Features**

### **Construction Features of the Plate and Frame Heat Exchanger**

#### **Frame Material:**

SEC Plate and Frame Heat Exchangers provides carbon or stainless steel frames for industrial, commercial, process, marine, aquaculture, HVAC applications, heat recovery, refrigeration, food and beverage processing, pharmaceutical and many other clean room applications.

All units have heavy duty frames for maximum pressure rating, depending on unit size. AISI 304 stainless, in solid or clad frames are available. SEC Plate and Frame units have certifications meeting your industry standards. (ASME, ISO, DNV)

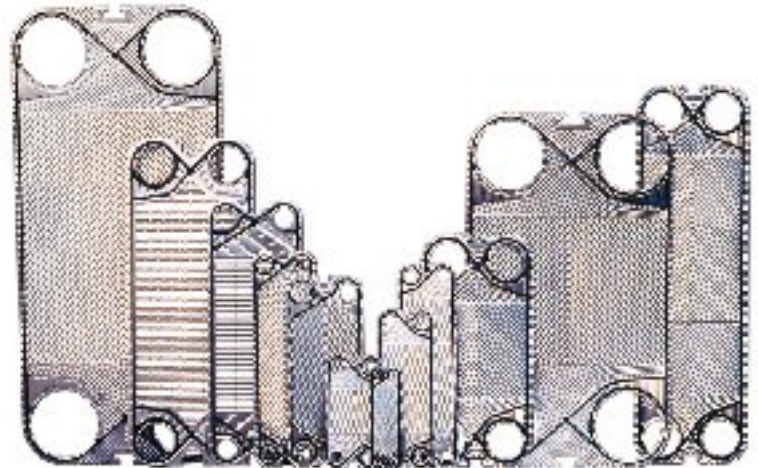


#### **Plate Selection:**

AISI 316L plates is the minimum standard quality for robust performance. Additional grades include AISI 304 Stainless, Titanium and Hastalloy.

#### **Gasket Material:**

A wide range of Nitrile, EPDM, RCB and Viton materials are available for Industrial and Food applications. EPDM is supplied as the standard gasket material, with the final selection being made for each quoted Thermal duty.



#### **Stock:**

Gaskets and Plates are kept in stock for fast delivery.

#### **Plate Reconditioning:**

A Plate Reconditioning service is available as an additional service for most Plate Heat exchanges, not just SEC units.

#### **Full Service Gaskets:**

An extensive range of gaskets covers most manufacturers.

#### **Retro Fit Units:**

We can replace existing Plate Heat Exchanges without any pipe Rework, a tremendous saving in time and capital expenditure.

#### **24 Hour Service:**

Many of our customers operate 24 hours a day, so does SEC.

## SEC Heat Exchanger Quote Form



**To find out which type of our heat exchangers  
will best suit your requirements  
please complete this form and send it to us**

Name: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Project Reference: \_\_\_\_\_ Quantity: \_\_\_\_\_

Material of Construction: \_\_\_\_\_

Type Of Heat Exchanger: \_\_\_\_\_ Delivery Required by: \_\_\_\_\_ In Weeks

### SIDE 1

### SIDE 2

FLUID TYPE: \_\_\_\_\_

FLOW RATE: \_\_\_\_\_

INLET TEMPERATURE: \_\_\_\_\_ C° or F° \_\_\_\_\_ C° or F°

OUTLET TEMPERATURE: \_\_\_\_\_ C° or F° \_\_\_\_\_ C° or F°

ALLOWABLE  
PRESSURE DROP: \_\_\_\_\_

DESIGN PRESSURE: \_\_\_\_\_

Optional Data  
If Known: \_\_\_\_\_

HEAT TRANSFERRED  
(CAPACITY): \_\_\_\_\_

DENSITY @  
TEMPERATURE: \_\_\_\_\_

THERMAL  
CONDUCTIVITY: \_\_\_\_\_

SPECIFIC HEAT: \_\_\_\_\_

VISCOSITY: \_\_\_\_\_

PHASE CHANGE: \_\_\_\_\_

**Print and Fax This Form to 1.902.659.2800**



## **SEC** Heat Exchangers

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[www.heatexchangers.ca](http://www.heatexchangers.ca)  
[www.brazedplate.com](http://www.brazedplate.com)  
[www.secplateandframe.com](http://www.secplateandframe.com)  
[www.secshellandtube.com](http://www.secshellandtube.com)

**To Obtain Your Copy of the SEC Catalogue,  
Installation Manual or Other SEC Publications  
Please Visit our Web Site At:**

**[www.heatexchangers.ca](http://www.heatexchangers.ca)**