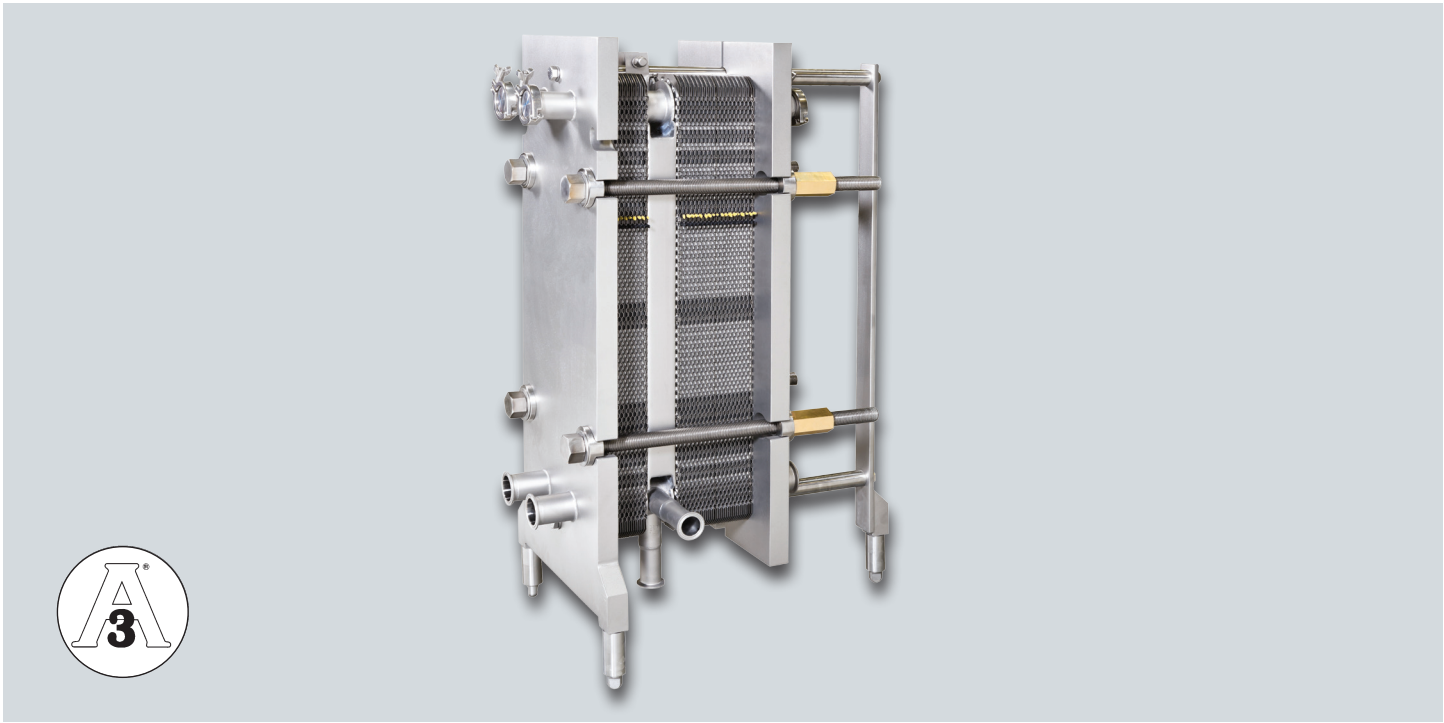
Kelvion

## Sanitary Plate Heat Exchangers

# NT50M SYCS FRAME



The NT plate is the most technologically advanced heat transfer plate with features for efficient processing of all products, including those with high viscosities and fouling tendencies.

**PosLoc™—**Heat transfer plates have multiple lead-ins that ensure self-alignment of the plate pack for ease in closing. This feature reduces downtime when servicing the unit.

**EcoLoc™—**Adhesive-free gasket attachment makes replacement a snap. A special design keeps gaskets in place even after several service cycles.

**OptiWave™—**Computer modeled heat transfer area design provides even flow distribution across the entire plate surface, maximizing heat transfer while minimizing fouling rates, plate count, and cost.transfer while minimizing fouling rates, plate count, and cost.

The NT50 SYCS frame is a solid stainless steel frame with 2" triclamp connections and 4 easy to handle tightening bolts. Six frame lengths are available for a maximum heat transfer area of 650 $ft^2$. Optional grids and high legs make this a reliable choice for all sanitary applications with flowrates up to 175 GPM.

### NT50M Sanitary Frame Features

- Meets 3-A Sanitary Standards
- Max design pressure 150 psig (10.3 barg)
- Max flow rate 175 gpm (40 $m^3$/hour)
- Solid stainless steel with 150 grit blast finish
- 2" tri -clamp connections, 316 stainless steel
- #4 finish on all 8 ports (for restream flexibility)
- Frame lengths for up to 360 plates available
- Grids available for multi-section designs
- ASME code stamp available

**NT50M Sanitary Frame:** Technical Data

**MATERIALS AND CONSTRUCTION:**

**Frame Lengths:** 6 standard lengths for a maximum of 360 plates

**Individual Plate Weight:** 1.07 kg/2.35 lb

**Mounting Feet:** Adjustable ball foot, adjustment range + 0.75" (+ 19.1 mm)

**Frame Plate Material:** Solid 304 stainless steel

**Frame Surface:** 150 grit bead blasted

**Upper Hanging Beam:** 304 stainless steel round bar

**Lower Carrying Beam:** 304 stainless steel round bar

**Tightening Bolt Material:** SA-193 B8 stainless steel with C464 Naval Brass Nut

**Standard Connections:** 2" tri-clamp, 316 stainless steel polished to #4 finish, other connections are available

**Grid Connections:** 1.5" tri-clamp tangential for full drainability, 316 stainless steel polished to #4 finish, other materials are available

**Codes:** Meets 3-A sanitary standard. ASME code stamp available

**Port Height:** Dimensions shown are for standard frame and highleg frame option

**PERFORMANCE:**

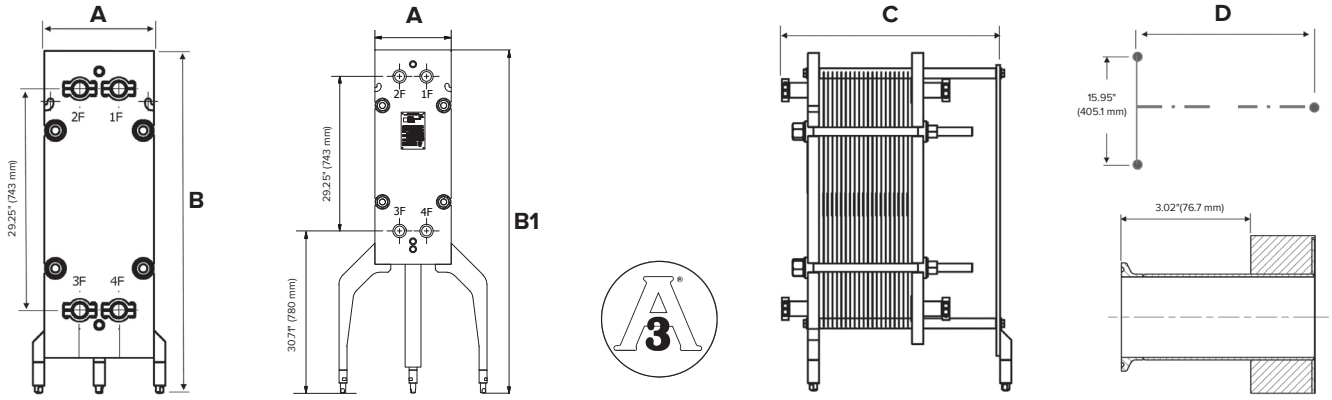
**Maximum Standard Design Pressure:** 150 psig (10.3 barg)

**Maximum Standard Design Temperature:** Dependent on gasket selection

**Maximum Standard Flow Rate:** 175 gpm (40 $m^3$/hour)

**Heat Transfer Plate:** 0.6 mm, 316L Stainless Steel is standard, Titanium and others are available

**Gasket:** FDA and 3-A compatible NBR, EPDM. Viton and others are available




| | | | | | | | | Frame Dimensions Inches (mm) | | | Frame Footprint |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Model** | **Tightening Bolts** | **Max Plate Count** | **Max Plate Pack Dims** | **Net Weight (no plates)** | **Grid Thickness** | **Grid Weight** | **A (Width)** | **Reg Frame B (Height)** | **Extended Frame B1 (Height)** | **C (Length)** | **D (Length)** |
| **NT50M** | 4 | 51 | 6.80" (173 mm) | 582 lbs | 2.17" (16 plates*) | 40 lbs | 14.45" (367 mm) | 46.10" + 0.75" (1171 mm + 19 mm) | 64.96" + 0.75" (1650 mm + 19 mm) | 29.89" | 25.37" |
| | | 115 | 15.24" (387 mm) | 600 lbs | | | | | | 41.70" | 37.18" |
| | | 179 | 23.68" (601 mm) | 618 lbs | | | | | | 53.51" | 48.99" |
| | | 243 | 32.11" (816 mm) | 636 lbs | | | | | | 65.32" | 60.80" |
| | | 307 | 40.55" (1030 mm) | 661 lbs | | | | | | 77.13" | 72.61" |
| | | 371 | 48.99" (1244 mm) | 686 lbs | | | | | | 88.95" | 84.43" |

*Data is based on 0.6 mm flow plates



About Kelvion:
Kelvion provides one of the most extensive product portfolios in the heat exchange market worldwide for a wide range of applications. Kelvion manufactures plate, shell and tube, air-cooled heat exchangers, air filter systems, synthetic fillings for numerous areas of application, wet cooling towers and dry cooling systems, as well as air-conditioning facilities. As a result, Kelvion provides reliable and comprehensive coverage of the entire spectrum for heat exchange.

Kelvion Inc., PHE
100 Gea Drive, York, PA 17406
Phone: 717-268-6200
Fax: 717-268-6162
www.kelvion.com/us