

# **PLATE HEAT EXCHANGER**



## Plate Heat Exchanger



#### Maintenance agreements

Many customers opt for maintenance agreements that are based on tried-and-true standards for their equipment, with any necessary changes to their specific situation and requirements. Maintenance agreements call for TMXFLOW specialists to visit on a regular basis to service the equipment and address any issues that may arise before their next visit.

#### **Refurbishment - maintaining performance**

TMXFLOW plate heat exchangers are built to last a long time with minimal maintenance. Wear and tear are unavoidable, but at some point during their service life, refurnishment of the plate heat exchanger and replacement of the plate pack can result in a considerable improvement in performance and efficiency.

#### **On-site audits - reduce operating expenses**

TMXFLOW engineers are also available to conduct on-site audits of your plant and equipment in order to identify areas where upgrades or replacements can further lower your cost of ownership by improving efficiency and reducing your operating and maintenance expenses.

#### **Global presence - dedicated people**

The TMXFLOW global market presence extends throught the world to where our customers are going - and where they're growing. TMXFLOW heat transfer specialists assist customers all over the world in selecting the solutions that will deliver the best performance and ROI over a long service life in their particular applications and process conditions. In addition to leading technology and the wealth of experience and expertise available, one of the main reasons why customers prefer heat transfer solutions from TMXFLOW is the close and confidiential partnership between our engineers and the customer's own experts. A global team of highly qualifed and experienced specialist with special knowledge of sector needs and solution options are dedicated to bring you the best of heat transfer.

#### Typical product application

TMXFLOW offers innovative TMXFLOW heat transfer solutions for cooling, heating, condensing, and evaporating process fluids, as well as auxiliary applications. It is developed to tackle heat transfer process difficulties in a variety of sectors.





DAIRY, FOOD & BEVERAGE

MARINE





OIL & GAS

PETROCHEMICAL & CHEMICAL



POWER



Industrial Process



HVAC



DAIRY, FOOD & BEVERAGE





#### **NarrowFlow**

It is designed to achieve high thermal efficiency and very close temperature for products at low temperatures.

#### **WideFlow**

It is designed for ongoing processes and long working time for medium and high viscosity products.

#### **Hygenic frames**

Extendable frames to meet stringent hygienic requriements.

#### **Industrial frames**

Wide range of extendable frames for meeting various quality needs.

SELECTION GUIDE	NarrowFlow	WideFlow
DESCRIPTION	Plate with narrow gap and may contact points to secure high termal efficiency	Plate with wide gap and reduced number of contact points to ease the flow of viscous products and products contanin- ing small particles, designed for continuous durable flow and long run time
MATERIAL	Plates: AISI 316, AISI 304, Titanium and most alloys Gaskets: NBR per, EPDM, FKM, and others	Plates: AISI 316, AISI 304, Titanium and alloys Gaskest: NBR per, EPDM, FKM
TEMPERATURE	Rubber gaskets: -35°C to 180°C	-35°C to 180°C
PRESSURE	25 Bar Gauge	0-16 Bar Gauge
TRANSMISSION AREA / DUTY	Up to 3,800 m²	Up to 2,800 m²
MAINTENANCE ACCES	Full Access for cleaning and inspection	Full Access for cleaning and inspection





#### **WideFlow**



**NarrowFlow** 





#### Main components of TMXFLOW gasketed plate heat exchanger, Industrial design.

- 1. Head for connections and clamping the plate pack.
- 2. Follower for clamping the plate pack and any additional connections.
- 3. End support for supporting the top and bottom bars.
- Top bar for carrying and guiding the follower and plate pack.
  Bottom bar for guiding the follower and plate pack.
- 6. Tie bars for clamping the plate pack between head and follower.
- 7. Flow plate.
- 8. Flow gasket.
- 9. Nut for tie bar.
- 10. Footplate for securing the plate heat exchanger to the base.

### Plate Heat Exchanger



### Gaskets

#### **EPDM**

Temp. Limits -35° C to +145°C (intermittent 150° C)

Applications: Used for duties with dilute acids, alkalies, steam and hot water. For duties with small amounts of Animal fats: the gaskets have have to be glued to the plates.

Limitations: May not be used on hydrocarbon solvents or where traces of mineral oil are present. eg: compressor oil in refrigerants. For very low pressure operation, special rubbers can be made available down to -44° C. For these applications, refer to Goldsboro Engineering Department for further details.

#### NBR

Temp. limits: -15° C to +140° C (intermittent 150° C) Applications: Used for aqueous and fatty duties. Also vegetable and mineral oils. Refrigerant R134a With Alkly benzene or polyalkylene Glycol (PAG) compressor lubricants. Limitations: Certain restrictions apply when using nitric acid for cleaning.

#### VITON

Temp. limits -5° C to +190° C (intermittent 225° C)

#### EPDM HT

Temp. limits -35° C to +171° C (intermittent 180° C)

#### **NBR HT**

Temp. limits -35° C to +171° C (intermittent 180° C)

