



SONDEX

HOT MISSION COOL VISION





HOT MISSION COOL VISION,

Sondex is your trusted partner for District Cooling Applications



SONDEX

A COMPANY WITH VISION

Sondex was established in 1984 with a strong vision and mission, to strive to be the best and to keep every single promise to the customer. Today, this Danish company is well known for its impeccable performance, innovative products and for its enduring credibility.

SONDEX WORLDWIDE

The brand has grown and achieved an indelible presence in Europe, USA, the Far East and the Middle East. Our sister companies in USA, Australia, Poland, Netherlands, Italy, Germany and Romania, provide a strong network of agents and suppliers on a global scale. With a working team of over 750 employees, the company is well prepared to meet the escalating demand of the industry.

QUALITY SYSTEMS

- DS/EN ISO 9001-2000
- EN ISO 9001:2008



Melbourne Cricket Ground Re- Development,Australia



Eureka Tower-16 nos., Australia



Suntec City-10 nos., Singapore



Kuala Lumpur City Centre-3 nos., Malaysia



Kowloon Station T 20-9 nos., China



Jordan gate project, Jordan

SONDEX IN THE MIDDLE EAST

In a region where cooling is required round the clock, round the year, the role of heat exchanger is optimal, right from HVAC, Oil & Gas, Marine, Food & Dairy and other individual applications. The need for high quality heat exchange system is always on the rise. The products are both compact and efficient and after sales service matches the best on offer. Naturally, SONDEX has gained the trust of clients and aims to extend the market boundaries in the near future. We have successfully delivered over 5000 units in the Middle East including AHRI (400-2001) certified units for St. Regis Resort, Saadiyat Island. Ewan Residences has 2nos. of 3500 T/R capacity units, one of the biggest in the Middle East region.



Qipco office tower, Doha Qatar



SONDEX

THE ATLANTIS HOTEL-76 NOS.

The resort is designed & based on the mythical lost continent of Atlantis, along with the traditional Arabic design themes. SONDEX Plate Heat Exchangers have been supplied for this landmark project and is one among many of SONDEX Dubai's prestigious projects carried out here in the Middle East Region.



DUBAI HEALTH CARE CITY DISTRICT COOLING – 47 NOS.

DHCC is the world's first health care Free Zone. SONDEX is proud to be part of this prestigious project.

PALM ISLAND – Palm Jumeriah Shoreline Apartments, Golden Mile, Atlantis, Ottoman palace hotel and many more.



DUBAI FESTIVAL CITY DISTRICT COOLING – 78 NOS.

Dubai Festival City, 16,000 acre city-within-a-city built on the banks of Dubai creek is an all-in-one destination for leisure, business and entertainment. This is one of the major projects in the Middle East which trusted our expertise.

JUMEIRAH LAKE TOWERS DUBAI



JUMEIRAH BEACH RESIDENCE DISTRICT COOLING (JBR) – 164 NOS.

JBR has changed the face of Dubai's coastline with its freehold luxury homes. To this state of the art project, Gulf Sondex has provided 60,000 tonnes, 164 nos. of heat exchangers.



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PRODUCT & PERFORMANCES

Sondex plate heat exchangers are unique because of their innovative design. New technology is developed to keep pace with the changing needs to this fast progressing industry. A result of years of modernization, the heat exchangers are created to suit diverse working conditions. The tool department is well equipped with CAD / CAM and CNC machines which are used to create new tools. The production takes place in the state of the art factory with specially developed hydraulic press which ranges up to 14,000 tons. Huge press machines are used for the production of the flow plates. Vacuum furnaces have been installed for the production of brazed plate heat exchangers, laser welding etc.

DISTRICT COOLING

The need of the day is to have complete systems for entire townships and all areas to have a central provider of energy. SONDEX has successfully undertaken major projects to supply heat exchangers to facilitate this need.

With the support of major breakthroughs in heat transfer technology, SONDEX makes ultimate cooling possible; through project specific designs which meet the requirements of the consulting engineers so as to ensure complete satisfaction from our product and services.



HEAT EXCHANGERS ACCESSORIES: INSULATION & DRIP TRAY

INSULATION:

There are two types of Insulation - Heating Insulation and Cooling Insulation

HEATING INSULATION:

It covers all sides of the PHE including the frame and pressure plate except downwards where there is galvanized drip tray. The different parts are held together with snap locks.

COOLING INSULATION:

It covers all sides of the PHE including the frame and pressure plate except downwards where there is galvanized drip tray. The different parts are held together with SS locks.

DRIP TRAY:

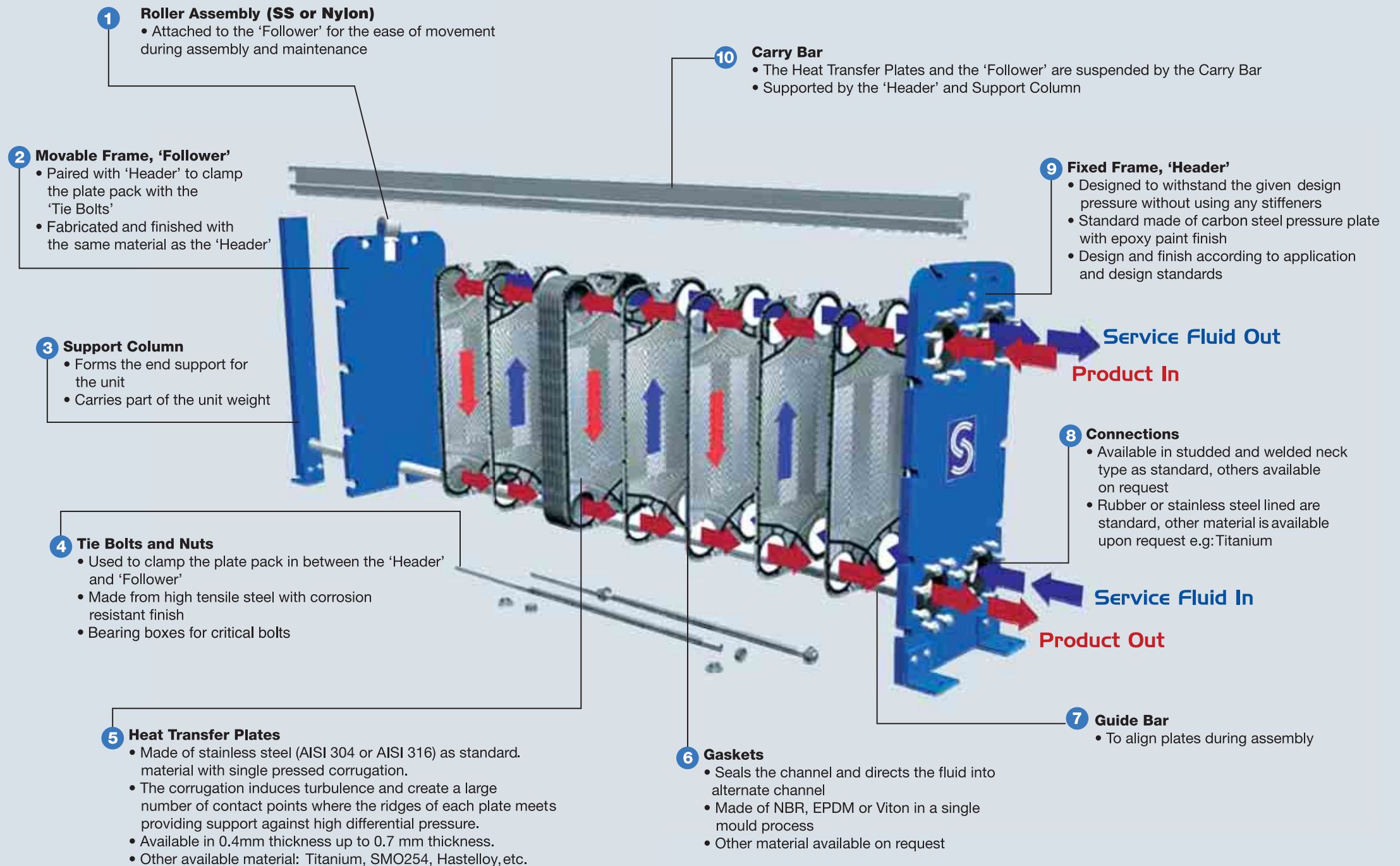
It insulates the heat exchanger from the floor, and it also collects any condensate formed on the outside of the heat exchanger. The drip tray also collects any remaining water (after drainage) in the PHE when the unit is opened for inspection or maintenance.

PROTECTION SHEET:

A protection sheet is a device covering all sides of the plate pack except downwards. It prevents a person from getting injured if a sudden leak of hot corrosive or toxic media occurs. Heating & cooling insulations and drip trays are designed, engineered and supplied by SONDEX.



PHE Construction Diagram



Design Codes

- ASME Section VIII div1
- PED 97/23/EC



PHE Design Features

1 Distribution Area

- Special pattern engineered to reduce pressure drop
- Results in even distribution across the plate
- Avoids dead-spot hence no fouling in stagnant zone
- Allows parallel flow configuration



2 Heat Transfer Area

- Corrugated/'herringbone' pattern designed to induce turbulence to achieve high 'k-value'
- Two basic plate pattern, thermal long (TL) and thermal short (TK). The combination of the plate pattern depends on individual process conditions
- High turbulence also means high local velocity which results in high 'shear stress' and better 'self-cleaning' effect (minimize fouling)



TL Plate

TK Plate

3 Relieving Groove

- Channel out any leakage at port area for easier detection



8 Hanging System

- Designed for free sliding of the plates back and forth along carry and guide bar
- Folded edge design interlocks the plates together during tightening



7 Interlock System

- Align and secure the plates together during assembly, avoiding 'mis-alignment' of the plate pack

6 Reinforce Edges

- Special profile strengthens the plate for easy handling
- Used to check the correct plate pack assembly



5 'Sonder Lock' Gasket

- Glue free mechanism for gasket fixing
- Positioned in groove for maximum protection, minimize exposure to atmosphere and operating media
- Prolong the life time



4 Double Gasket

- Prevent cross-contamination between hot and cold media at port





Dubai Metro Station

DUBAI METRO

Dubai becomes the first gulf state to have a Metro and has joined the league of mega-cities around the world to have similar transport systems. Here too Sondex plate heat exchangers have been supplied and we are proud to be associated with this prestigious project.



Dubai Metro



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SONDEX SERVICING

Sondex is always on call to help you protect your investment in critical plate heat exchangers and fresh water distillers. You can expect a quick and professional response to your requests from expert field service personnel. We offer a wide variety of services and we will be happy to develop a customized service program to fit your needs. Our field service personnel can assist you with:

Upgrading and Expansion

When we initially implement your Sondex PHE solutions we will always design for expansion according to your needs. When the time comes we are ready to re-specify your system and add the necessary plates

Plate Re-Gasketing

Our high quality re-gasketing services are not limited to sondex products only: We can take care of all PHE on your site irrespective of the original manufacturer.

Field Services

Our field services personnel are on call for troubleshooting any plate heat exchanger issue and to offer long term solutions to your problems.

Frame Services

For total refurbishment of your PHE the frame assembly can be sandblasted and painted and insulation replaced as required.



SONDEX LEED CERTIFICATION

The Gulf Sondex building was specifically developed as a sustainable “Green” building and is pursuing a “Silver” certification from United Green Building Council (USGBC) LEED NC 2.2 rating system.

The LEED NC rating system is a consensus based green building rating system developed in the United States and adopted with amendments by the Environment, Health and Safety (EHS) arm of Dubai World, in conformance with His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President and Prime Minister and Ruler of Dubai’s “Green Resolution” of 24th October 2007. The building has implemented green building practices that reduce or eliminate negative environmental impacts through high performance, market leading design, construction and operation. As an added benefit, the Gulf Sondex building is operated and managed to reduce operating costs, enhance building occupant comfort and welfare, and produce less waste.

Through the development of Gulf Sondex building as a sustainable facility, Gulf Sondex is contributing in reducing the carbon footprint of Dubai and mitigating of climate change.

GULF SONDEX FZCO

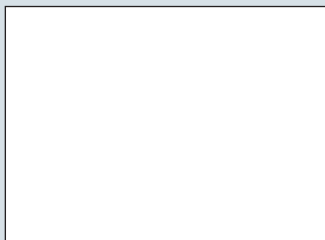
PLOT NO. S31121, JEBEL ALI
FREEZONE (SOUTH) DUBAI, U.A.E



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