# **Brazed Plate**Heat Exchanger





**SONDEX A/S** is a Danish company specialized in development, production and global marketing of plate heat exchangers and freshwater distillers. Since the very start in 1984 **SONDEX** has grown into one of the leading companies on the world market and has developed a big range of plate heat exchangers for any task. Apart from our traditional plate heat exchangers the product range includes copper brazed, semi-welded and all-welded plate heat exchangers as well as freshwater distillers based on the plate heat exchanger technology in single- or multistage.

Subsidiaries and a global net of highly educated suppliers take care of sale and marketing of our products. The successive product development has made **SONDEX** a company with a very high growth rate.

By means of technological innovation **SONDEX** has developed and designed a new generation of brazed plate heat exchangers.

In this brochure we will present the advantages of the Sondex brazed plate heat exchanger to you.



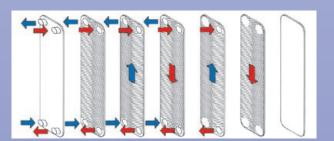
SONDEX brazing vacuum owens.



# Construction and mode of operation

**SONDEX** brazed plate heat exchanger consists of: A number of thin, acid-resistant plates, precision stamped and assembled as a unit, each alternate plate being rotated 180°.

The plate pack, assembled with two end plates and connections, is vacuum brazed at extremely high temperatures providing a permanently sealed heat exchanger. The final result is a strong and compact plate heat exchanger with extremely high heat transmissions. The high heat transmission comes from the main pattern which is designed to create a turbulence flow.



# Advantages of Brazed Plate Heat Exchanger

### **Low Purchase Price**

High technical efficiency combined with thin plate material and low production costs keeps the **SONDEX** sales price of the brazed plate heat exchanger at an extremely competitive level.

# **High Temperature and Pressure**

Contrary to the traditional plate heat exchanger the brazed plate heat exchanger does not contain rubber gaskets and can thus operate continuously at temperatures from minus 180°C up to plus 200°C. The operating pressure can be as high as 30 bar.

### **Small Volumes**

The high efficiency of the brazed plate heat exchanger makes the product volume in the heat exchanger minimal compared to for example tube heat exchangers reducing the volume of refrigerant to a minimum.

# **Self Cleaning**

The high turbulence on the plates prevents or minimizes blockages in the heat exchanger.

# **Compact Size**

Sondex brazed plate heat exchanger gives a spaceand weight-saving of up to 80% compared with a tube heat exchanger.

# **Application**

SONDEX brazed plate heat exchanger can be utilized for heating and cooling of clean liquids. Furthermore, the SONDEX brazed plate heat exchangers are suitable as evaporator and condenser units.



# **Typical Applications are**

- District heating/heating and ventilation
- Solar heating and air-conditioning units
- Heating pumps and heat recovering units
- Hydraulic oil units
- Refrigeration
- Compres air units

# Approval:

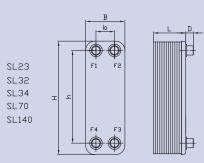
Our brazed heat exchangers are approved according to Pressure Equipment PED 97/23/EC.

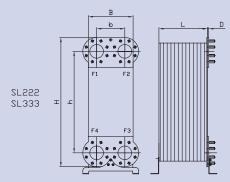


# The large range of Sondex Brazed Plate Heat Exchangers

Sondex has developed a range of brazed plate heat exchangers which totally meets the demand for this type of heat exchangers. Our product range includes connection sizes from 1/2" threaded pipe to DN100-PN25 flanges. In addition to this the plates

for several of our model types have various press depths and plate patterns making it possible to optimize the technical solution according to customer's specification.





Туре	B mm	H mm	b mm	h mm	D mm	L Mm	Connection
SL23	76	315	40	278	27	7 + (n x 2,3)	G
SL32	104	304	50	250	27	8 + (n x 2,2)	G1
SL34	117	294	65	242	27	9 + (n x 2,4)	G1
SL70	117	498	65	446	27	TM+TL:9 +(n x 2,4) / TK: 9 +(n x 2,9)	G1
SL140	242	611	150	520	40,6	9 + (n x 2,9)	G2
SL222	325	933	205	623	8	18 + (n x 2,9)	DN80
SL333	380	1180	239	862	8	18 + (n x 2,9) TM+TL / 18(n x 3,9) TK	DN100

# **Additional Equipment**

In order to obtain the optimal utilization of a Sondex brazed plate heat exchanger, a correct installation is of big importance, and here Sondex can offer you following:

### **Foot Unit**

A foot unit leading to a correct and safe installation of the heat exchanger.

# **Insulation Jackets**

A specially designed insulation jacket adjusted to the temperature conditions according to the design of the heat exchanger.

# **Connection Fittings**

We recommend Sondex original connection fittings in order to secure a correct connection of the heat exchanger to the pipe system.





