



PRODUCED & CRAFTED

Because Our Planet is Beautiful

AND WE WANT TO KEEP IT AS IT IS. CROPHEX PROVIDES EFFICIENT PRODUCTS TO SAVE ENERGY.

Our Company

Crophex Inc. is a company in the business of manufacturing and providing high quality heat transfer products and services. We are located in Cherry Hill, NJ. We build our business on trust and we are dedicated to providing superior customer service with an emphasis on personal customer relationships. With that goal in mind and our passion to providing our client with a world class service, we support our clients prior, through out, and following the sale process.

Our products have quality standards certificates such as ISO, CE and ASME(Code Section VIII, Division 1 U stamped, UM Stamped, or built to Code with no stamp). Our heat transfer engineers can assist you in making the right choice of product for your application.

You can always contact us to experience our unique approach and service.

INDEX

7 OUR PRODUCTS

- 9 Gasketed Plate Heat Exchangers
- 15 Brazed Heat Exchangers
- 21 Shell and Tube Heat Exchangers
- 27 Packaged System

30 INDUSTRIES

- 31 Food Dairy and Beverage
- 35 HVAC
- 39 Chemical Industry
- 43 Marine
- 47 Energy
- 51 Refrigeration

55 TECHNICAL SUPPORT

Our Products

Gasketed Plate Heat Exchangers
Brazed Heat Exchangers
Shell and Tube Heat Exchangers
Packaged System

Gasketed plate heat exchangers

Model	CR3	CR4	CR8	CR9	CR10	CR13	CR14	CR21	CR22
Width, mm (inch)	167,50 (6.59")	200 (7.87")	293 (11.53")	292 (11.49")	425 (16.73")	350 (13.77")	350 (13.77")	460 (18.50")	460 (18.50")
Height mm (inch)	397 (15.63")	490 (19.29")	772 (30.39")	782 (30.78")	704 (27.71")	942,50 (37.10")	942,50 (37.10")	1090 (43.22")	1090 (43.22")
Horizontal Port Distance, mm (inch)	50 (1.96")	72 (2.83")	100 (3.93")	100 (3.93")	203 (7.99")	140 (5.51")	140 (5.51")	210 (8.85")	210 (8.85")
Vertical Port Distance, mm (inch)	298 (11.73")	383 (15.07")	546 (21.49")	546 (21.49")	380 (14.96")	640 (25.19")	640 (25.19")	720 (28.30")	720 (28.30")
Max. Working Pressure, bar (PSI)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)
Connection Diameter, pipe inch	3/4"	1 1/4"	2"	2"	2" or 2 1/2"	2"	2"	-	-
Connection Size, flange (mm)	-	-	-	-	-	50	50	100	100

Model	CR35	CR17	CR25	CR37	CR43	CR47	CR50	CR53
Width, mm (inch)	465 (18.30")	334 (13.14")	325 (12.79")	460 (18.11")	770 (30.31")	480 (18.89")	765 (30.11")	572 (22.51")
Height mm (inch)	1444 (56.84")	1044 (41.10")	1425 (56.10")	1418 (55.82")	1402 (55.19")	1800 (70.86")	1530 (60.23")	1810 (71.25")
Horizontal Port Distance, mm (inch)	238 (9.37")	150 (5.90")	130 (5.11")	238 (9.37")	395 (25.552")	225 (8.85")	365 (14.37")	260 (10.23")
Vertical Port Distance, mm (inch)	1070 (42.12")	800 (31.49")	1192,5 (46.94")	1070 (42.12")	791 (31.14")	1365 (53.74")	930 (36.61")	1400 (55.11")
Max. Working Pressure, bar (PSI)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)
Connection Size, pipe (inch)	-	2 1/2"	2"	-	-	-	-	-
Connection Size, flange (mm)	80	-	-	80	200	100	200	100

Model	CR56	CR62	CR65	CR85	CR86	CR101	CR123	CR125	CR131	CR180
Width, mm (inch)	765 (30.11")	608 (23.93")	790 (31.10")	780 (30.70")	780 (30.70")	800 (31.49")	800 (31.49")	920 (36.22")	800 (31.49")	1190 (46.85")
Height mm (inch)	1634 (64.33")	1831,20 (72.09")	1700 (66.92")	2100 (82.67")	2100 (82.67")	2104 (82.73")	2534 (99.76")	2895 (113.97")	2505 (98.62")	2920 (114.96")
Horizontal Port Distance, mm (inch)	365 (14.37")	297 (11.69")	395 (15.55")	353 (13.89")	353 (13.89")	395 (15.55")	350 (13.77")	439 (27.28")	395 (15.55")	596 (23.46")
Vertical Port Distance, mm (inch)	930 (36.61")	1292 (50.86")	1091 (42.95")	1478 (58.18")	1478 (58.18")	1489 (58.62")	1842 (72.51")	1939 (76.33")	1891 (74.44")	1842 (72.51")
Max. Working Pressure, bar (PSI)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)	25 (362)
Connection Size, pipe (inch)	-	-	-	-	-	-	-	-	-	-
Connection Size, flange (mm)	200	150	200	200	200	200	200	250	200	300



Gasketed plate heat exchangers are widely used because of their compact design and high efficiency in heat transfer. The compact design allows installation in limited spaces. The units can be easily disassembled for maintenance and service. They can be expanded by adding extra plates into the plate pack, if there's an increase in heat load. Gasketed plate heat exchangers are preferred in many different applications and fields such as, HVAC, dairy and food, marine, power generation, chemical industry.



Double Wall Plate Heat Exchangers

When the application is more critical than the others, Crophex double wall plate heat exchanger will be in your service. The air space between the plates makes the leakage visible if there's any. The liquid will leak out to the atmosphere without mixing or contamination. Double wall heat exchangers mostly used in applications such as; food industry, chemical industry, pharmaceuticals, domestic hot water and engine cooling.

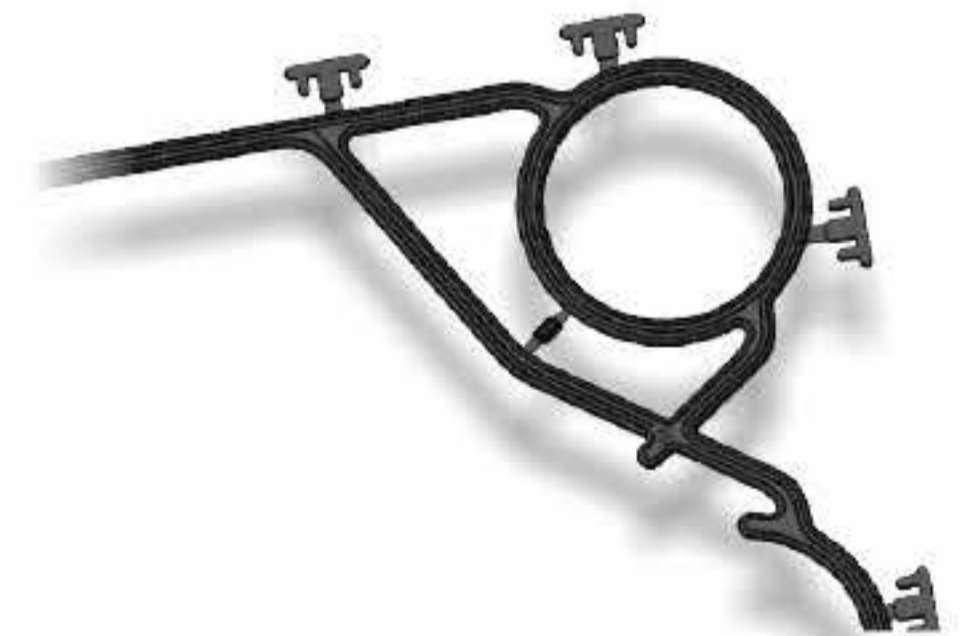
Semi-Welded Plate Heat Exchangers

Crophex semi-welded plate heat exchanger is used for the applications when gasketed plate heat exchanger is not suitable. The plates are welded using laser welding technique. Semi-welded plate heat exchangers are resistant to leakage and can operate under higher design pressures. Most refrigerants and ammonia can be used with this type.

Crophex Gasket Technology

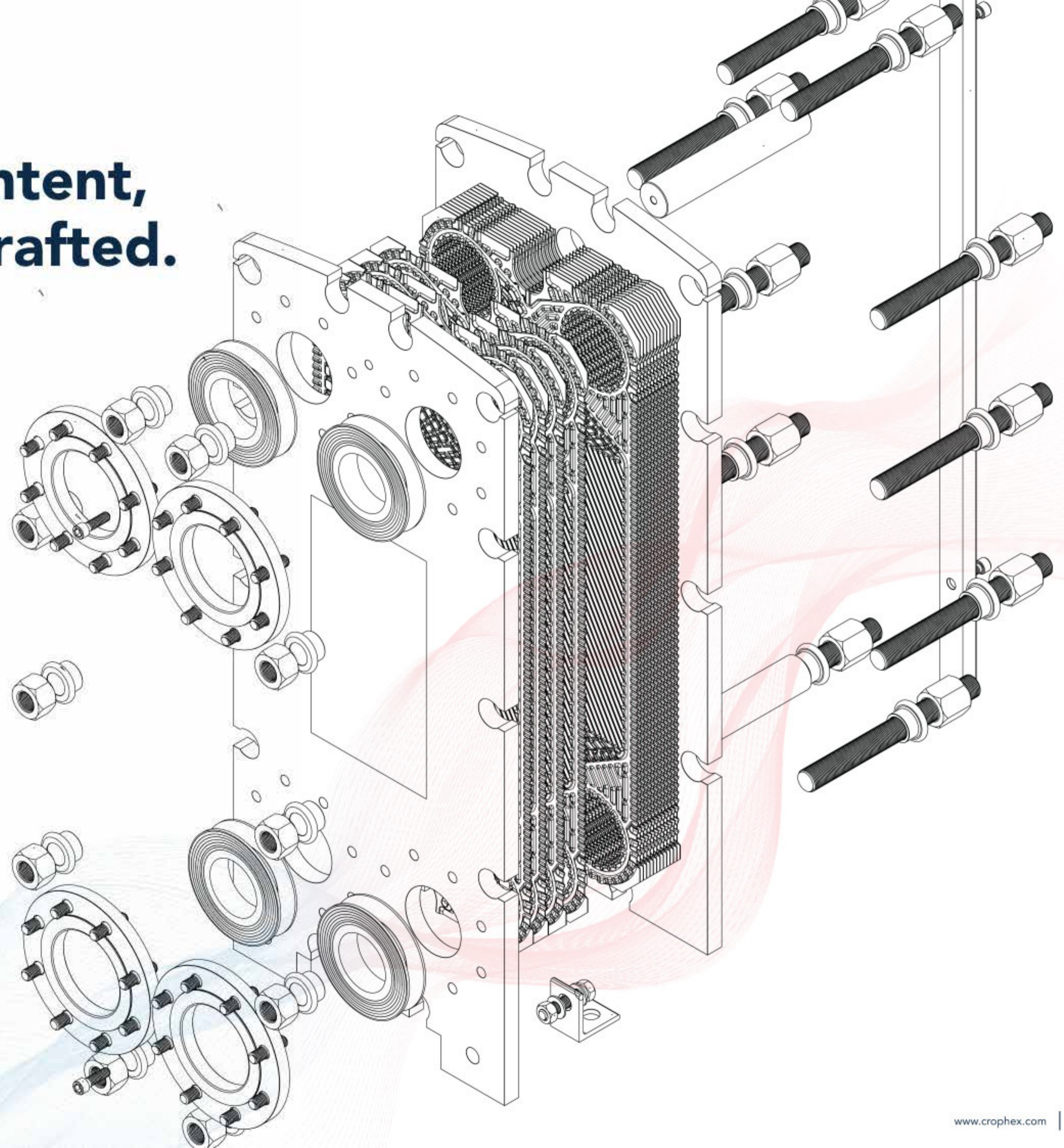
Three-level sealing: The three level sealing system helps prevent deformation on the main body of gasket by having three different elastic level design where the standard gaskets have planar design. The deformation is divided in three different elastic levels to make the gaskets last longer.

The "V" Shape: Standart gasketed plate heat exchangers have thick-edged gaskets. Crophex's gaskets have thinner edge which is formed in the shape of "V", provides resistance against pressure fluctuation.



Designed with Intent, Produced and Crafted.

CROPHEX GASKETED PLATE HEAT EXCHANGERS ARE CAREFULLY ENGINEERED TO PROVIDE EFFICIENT AND RELIABLE PRODUCTS TO MEET MOST HEAT TRANSFER REQUIREMENTS.



Brazed Heat Exchangers

Brazed plate heat exchangers are compact, strong and gasket-free units which can handle high operating pressures and high temperatures. They provide high heat transfer efficiency and do not require a maintenance. This type of heat exchangers are commonly used in heating, cooling, evaporation and condensing applications.

PHE Information 01-04	CRB-01	CRB-02	CRB-03	CRB-04
Capacity, Kw/(HP)	0.5-4 (0.7-5.4)	0.5-5 (0.7-6.7)	0.5-5 (0.7-6.7)	2-10 (2.7-13.4)
Design Temperature, C°/(F°)	-196/200 (-321/392)	-196/200 (-321/392)	-196/200 (-321/392)	-196/200 (-321/392)
Standart Design Pressure, Bar/(psig)	10 (145)	10 (145)	10 (145)	10 (145)
High Design Pressure Bar/(psig)	30 (435)	40 (580)	30 (435)	30 (435)
Channel Pattern	H	HLM	H	HLM
Max. Plate Number	50	60	50	60
Height/Width mm/(inch)	186/72 (7.3/2.8)	207/77 (8.14/3)	193/83 (7.6/3.2)	314/72 (12.3/2.8)
Max. Brazed Connection Dimensions	7/8"	7/8"	7/8"	7/8"
Max. Threaded Connection Dimensions	3/4"	3/4"	3/4"	3/4"
Standart Plate Material	AISI 316L	AISI 316L	AISI 316L	AISI 316L
Braze Material	Copper or Nickel	Copper or Nickel	Copper	Copper or Nickel
PHE Information 05-08	CRB-05	CRB-06	CRB-07	CRB-08
Capacity, Kw/(HP)	5-15 (6.7-20.1)	3-30 (4-40.2)	30-80 (40.2-107.3)	10-60 (13.4-80.5)
Design Temperature, C°/(F°)	-196/200 (-321/392)	-196/200 (-321/392)	-196/200 (-321/392)	-196/200 (-321/392)
Standart Design Pressure, Bar/(psig)	30 (435)	30 (435)	30 (435)	30 (435)
High Design Pressure Bar/(psig)	45 (652)	45 (652)	40 (580)	45 (652)
Channel Pattern	HLM	H	H	HLM
Max. Plate Number	150	150	118	150
Height/Width mm/(inch)	311/111 (12.2/4.4)	325/95 (12.8/3.7)	390/195 (15.3/7.7)	527/111 (20.7/4.4)
Max. Brazed Connection Dimensions	13/8"	13/8"	15/8"	15/8"
Max. Threaded Connection Dimensions	11/4"	11/4"	11/2"	11/4"
Standart Plate Material	AISI 316L	AISI 316L	AISI 316L	AISI 316L
Braze Material	Copper or Nickel	Copper	Copper	Copper or Nickel
PHE Information 09-012	CRB-09	CRB-10	CRB-11	CRB-12
Capacity, Kw/(HP)	30-200 (40.2-268.2)	60-200 (80.5-268.2)	150-450 (201.1-603.5)	150-500 (201.1-670.5)
Design Temperature, C°/(F°)	-196/200 (-321/392)	-196/200 (-321/392)	-196/200 (-321/392)	-196/200 (-321/392)
Standart Design Pressure, Bar/(psig)	30 (435)	30 (435)	30 (435)	25 (362)
High Design Pressure Bar/(psig)	45 (652)	40 (580)	40 (580)	
Channel Pattern	HLM	H	H	H
Max. Plate Number	250	198	250	250
Height/Width mm/(inch)	615/188 (24.2/7.4)	490/250 (19.3/9.8)	739/322 (29/12.7)	796/363 (31.4/14.3)
Max. Brazed Connection Dimensions	2 1/8"	2 5/8"	3 1/8"	4"
Max. Threaded Connection Dimensions	2"	2 1/2"	3 1/8" clamp	4" clamp
Standart Plate Material	AISI 316L	AISI 316L	AISI 316L	AISI 316L
Braze Material	Copper or Nickel	Copper	Copper	Copper



Model	Standart Connections	Optional Connections	Max. Thread Connection Diameter	Max. Thread Connection Diameter	Material	
					Welded Connection	Threaded Connection
MB-01	Thread	Solder	3/4"	7/8"		
MB-02	Thread	Solder	3/4"	7/8"		
MB-03	Thread	Solder	3/4"	7/8"	Maximum Connection 7/8" Maximum Connection 3/4"	
MB-04	Thread	Solder	1 1/4"	1 3/8"		
MB-05	Thread	Solder	1 1/4"	1 3/8"	Crophex provides exchangers with various Threaded and welded connection.	
MB-06	Thread	Solder	1 1/4"	1 3/8"		
MB-07	Thread	Solder	1 1/4"	1 5/8"	Material Plate Material AISI 304 / 316, Titanium, Hastelloy Connection Material AISI 304 Brazing Material Brazing Material: Copper (Standard) or Stainless	
MB-08	Solder	Thread	1 1/4"	1 5/8"		
MB-09	Thread	Solder	3/4"	2 1/8"		
MB-10	Thread	Solder	2"	2 1/8"		
MB-11	Victualic	Solder	3 1/4"	2 1/8"		
MB-12	Victualic	Solder	4"	4"		



CROPHEX OFFERS COPPER AND NICKEL BRAZED HEAT EXCHANGERS WITH COMPACT SIZE, RELIABLE CONSTRUCTION AND HIGH HEAT TRANSFER EFFICIENCY. THANKS TO THEIR COMPACT SIZE, THEY REQUIRE MINIMAL SPACE.

CropheX has a wide range of brazed plate heat exchangers with different sizes and capacities, alternative connection ports and plate patterns. Additionally, connection ports can be designed specially to meet your requirements.

Inlet and outlet ports are located in the front frame if the fluids make a single pass. If it's more than a single pass, the ports are located both in the front frame and rear frame.

Brazed heat exchanger is used in many different applications such as; refrigeration, steam heating, hydraulic oil cooling, liquid nitrogen cooling, condensing and evaporating and other applications.

Each product is designed
and crafted by our expert engineers.

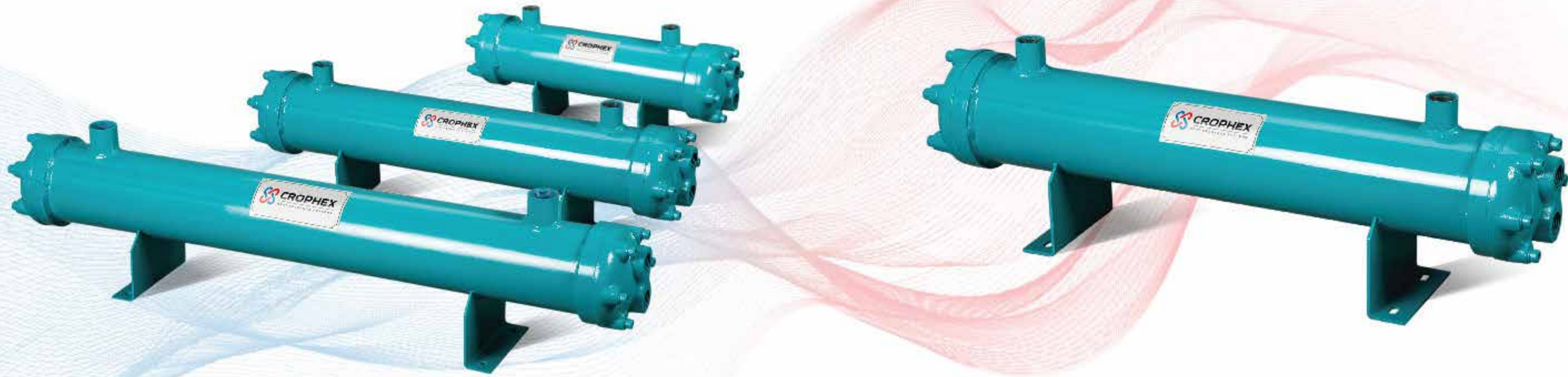
That makes us
a big family.



Shell and Tube Heat Exchangers

Shell and tube heat exchangers have various designs and are used in many different applications. One of the fluids flow through the tubes and the other flows outside the tubes but inside the shell.





SOME APPLICATIONS ARE DIFFERENT THAN THE OTHERS AND REQUIRE SPECIAL, CUSTOMIZED HEAT EXCHANGERS. THAT'S WHEN CROPHEX CUSTOM MADE SHELL AND TUBE HEAT EXCHANGERS TAKE ROLE TO BE A SOLUTION FOR YOUR NEEDS.

Custom Made Shell and Tube Heat Exchangers

The units are designed depending on the application and customer request. Although each unit is unique, they are produced by using as much standardized components as possible.

There is no capacity limit in the design of shell and tube exchangers. The units can be grouped in alternative ways such as serial or parallel connection and their capacities can be increased.

Depending on application requirements, the following materials can be used in shell and tube heat exchangers.

Oil Cooler Shell And Tube Heat Exchanger

Crophex offers compact shell and tube heat exchangers for oil cooling. The tube bundle supported with baffles, provides a large heat transfer area for high transfer efficiency. The tubes are made of grooved copper in order to increase the heat transfer efficiency.

Crophex oil coolers have a standart model range with different capacities. They can also be designed with special design codes or connection types, according to application requirements.

Materials

- Carbon steel ST37
- Carbon Steel ST35.8
- Stainless Steel AISI304
- Stainless Steel AISI316
- Copper
- Titanium

Applications

- Power plants
- Process industry
- Heat recovery
- Chemical plants
- Marine
- Hydraulic lube oil cooling
- Turbine and Engine cooling
- Steel mills

WHEN YOU SEE A DETAIL
YOU DON'T EXPECT,
YOU NEVER FORGET.



HYGIENIC SHELL AND TUBE HEAT EXCHANGERS

Crophex Hygienic shell and tube heat exchanger is designed for the applications which require high hygiene in food and pharmaceutical industry. Thanks to its flexible design, it can be used in many different hygienic applications providing the most efficient heat transfer.



Packaged System

CROPHEX PROVIDES SEVERAL MODELS INCLUDING; WASTE HEAT RECOVERY PACKAGED SYSTEMS FOR TEXTILE FACTORIES, AUTOMATIC ADJUSTABLE PACKAGED SYSTEM FOR POOLS AND USER DEFINED SYSTEMS FOR RESIDENTIAL HEATING.





Touchscreens are available for Crophex packaged systems if requested and you can visually see the progress on screen, get Daily or weekly periodic reports make calculations and get a receipt. Crophex packaged systems always offer the most convenient solution for your satisfaction.

If it's not designed by a professional engineer, a small mistake might harm the exchanger and other equipments during a start up.

If you have a special request you can contact us anytime.

Crophex packaged systems are under warranty of Crophex, only if the installation is done by our experts.

-
- You can save up to %25 energy with Crophex packaged systems.
 - Crophex complete heating systems will provide water at a stable temperature even there is an immediate hot or cold water requirement.
 - Sensitive temperature control available even with high volume of hot water. Adopts volume change perfectly in accordance with heating process.
 - Performs easily at high volume of water.
 - Save time by letting us design the system for you.
 - It only needs a small space.
 - Solution can be completed with only one system.
 - Suitable for any process.
 - High efficiency with low cost and less maintenance.

Food Dairy & Beverage

As one of our most basic needs, it makes sense that food has had such a powerful influence on world history.





Pasteurization

Milk is one of the most basic nutrients yet it's an excellent medium for microbial growth. Pasteurization of milk, has made it one of the safest food in the world. Crophex heat exchangers support food industry by providing top hygiene with stainless steel structure and FDA approved gaskets.

Crophex multi-pass heat exchangers, can be designed to have inlet-outlet ports for different food equipments such as, separator, homogenizer, holder and degasifier.

Beverage processing

Beverage processing is one of the most efficient manufacturing process in the world. This process started with tea brewers, wine growers and home industries. Now there are hundreds of different types of drinks such as; juices, soft drinks, beer, tea, coffee etc. This also increased the competition in the beverage industry as well. Therefore, beverage processing companies have started to search for solutions to reduce the cost of production and increase the efficiency. Our plate heat exchangers are designed to meet these requirements and provide you the most economical solution.

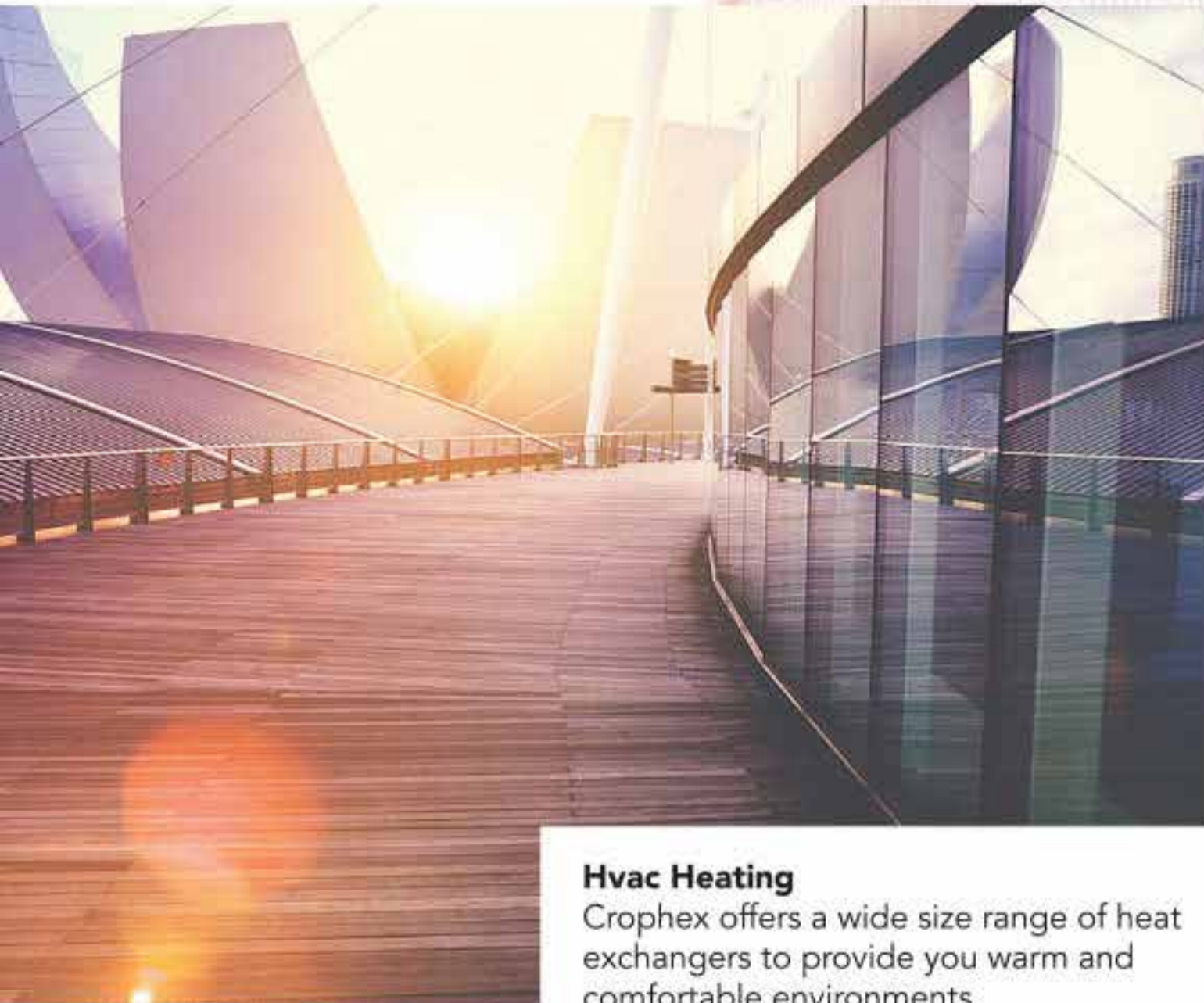
CIP applications

Hygiene is very important in food and beverage processing. In order to ensure the safety, the equipments which are used in the food and beverage process need to be cleaned. The liquid used for cleaning is called CIP. This liquid must be circulated in the system in certain temperatures and flowrates. Crophex heat exchangers are used for keeping CIP liquid in desired temperatures.

HVAC

Crophex offers a wide size range of heat exchangers to provide you warm and comfortable environments.





Hvac Heating

Crophex offers a wide size range of heat exchangers to provide you warm and comfortable environments.

The heat can be distributed from different sources and the most common applications for HVAC heating are; domestic hot water, district heating and floor heating.



Hvac Cooling

Cooling systems have more complex design and require expert engineering. Crophex provides the best and most efficient solution for cooling applications. Our exchangers can be used as pressure breakers in skyscrapers, in free cooling applications or can be simply used to protect chillers.



Pool Heating

All pools must be kept in certain temperature levels. In order to keep pools in certain temperature levels, Crophex plate heat exchangers are used with the help of a simple automation. By means of its compact structure, the units occupy really small place and enable to keep your pool stable in a certain temperature level.

Chemical Industry

The heavy Chemical industry has started with Industrial revolution in general.





Chemical Industry

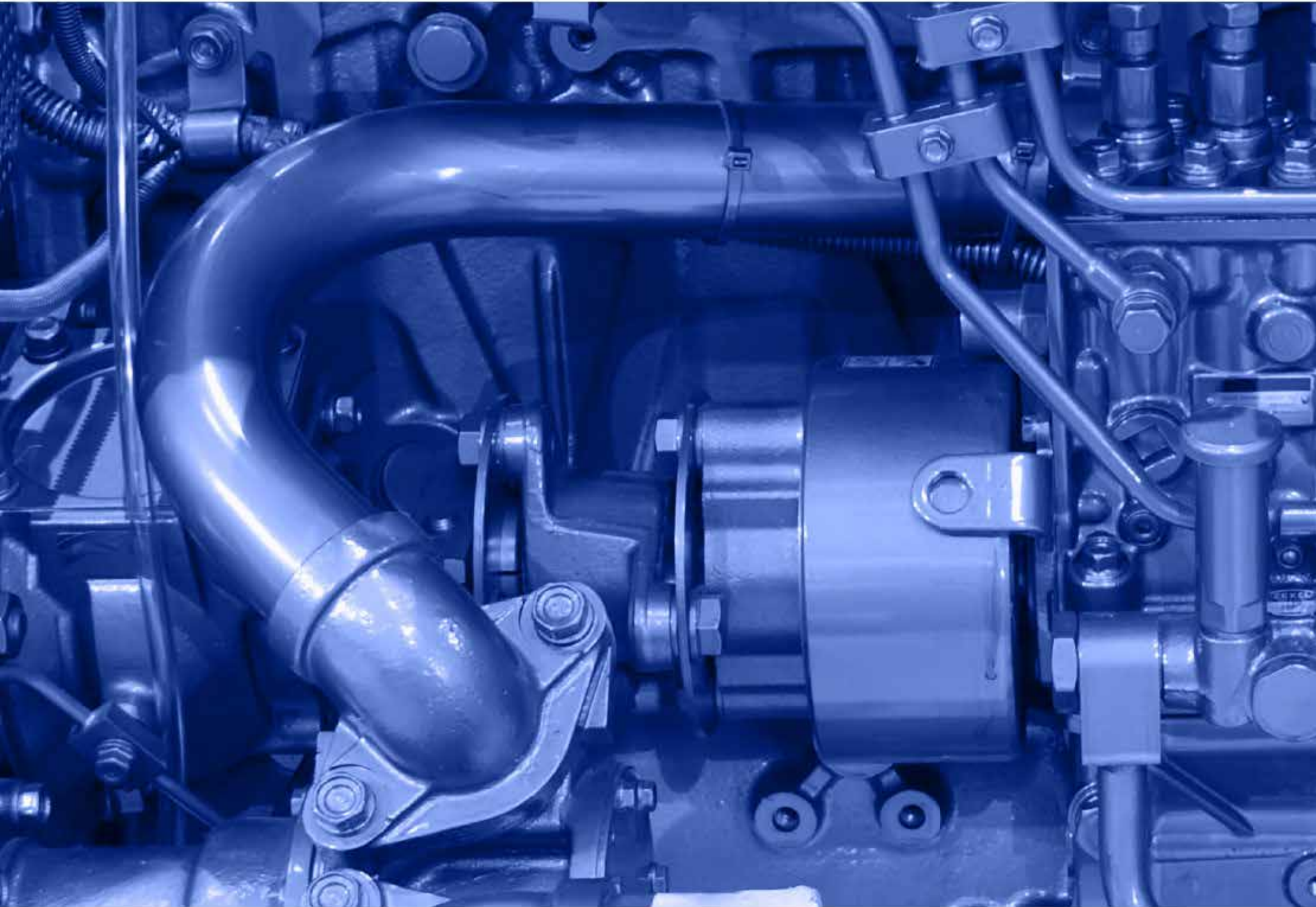
The heavy Chemical industry has started with Industrial revolution in general. The first chemicals which were produced in high amounts were, sulfuric acid, soda, fertilizer, paint and medicine. Chemicals are used across many different industry sectors such as, rubber and plastic production, agriculture, manufacturing, construction and service industries.

Crophex provides efficient, safe and durable heat exchangers to chemical industry. Steam is mostly used for heating or heat recovery in most processes and cooling towers or chillers used along with a heat exchanger for cooling. It's a must to keep the product and the cooling/heating media separated. Also, right heat exchangers and right materials must be selected to use with the aggressive media.

Marine Industry

Sea transport, is the largest and most preferred carrier of freight and the least environmentally damaging mode of transportation in the world. Also, cruise travels have been gaining popularity recently. A ship is usually alone in the open sea and for that reason Crophex heat exchangers are on board.



**Engine Cooling**

Sea water is not used directly for marine engines because of the corrosion. Instead, fresh water is circulated around the engine. Fresh water is cooled by seawater then returns to the engine. If the fresh water gets too cold, it may cause thermal shocking, in order to prevent that, the cooling water temperature must be controlled. We offer safe, reliable and efficient solutions to many ships around the world.

Fuel Oil Heating

Fuel oil is commonly used in ships and the misuse of fuel oil can lead to major safety problems. Oil and water must not mix in this process. Double-wall plate heat exchangers and shell and tube heat exchangers can be used for this type of applications.

Energy Industry

Along with the increase of energy usage in the world, renewable energy has become more important. Many countries have set a goal to reach %100 renewable energy in the future.





Renewable Energy

Along with the increase of energy usage in the world, renewable energy has become more important. Many countries have set a goal to reach %100 renewable energy in the future. Renewable energy uses sources such as, sunlight, wind, waves and geothermal heat. We offer you different types of heat exchangers to be used in renewable energy applications for a safer, healthier and greener world.

Oil and Gas

Oil in general, has always been an important energy source in human history. Oil is also the raw material for many chemical products. From extraction stage to refining, Crophex heat exchangers serve many different applications such as, removing water from crude oil, pre-heaters and cracking. Depending on the application, gasketed or welded plate heat exchangers, shell and tube heat exchangers and brazed heat exchangers can be used.



Refrigeration

Crophex keeps your environment cool and your food fresh.





Heat Pumps

Heat pumps use various heat sources such as air, ground and water. Heat pumps are designed to be used for heating or cooling. They are much more efficient in their use of electric power than simple electrical resistance heaters. Crophex brazed heat exchangers can be used with different refrigerants in heat pumps and gasketed plate heat exchangers can be used with water heat pumps in order to provide better efficiency and sanitation.

Chillers

Chillers are the most commonly used cooling units. Heat exchangers are used along with chillers to create a bypass system. This system, extends the chillers lifetime and provide a better operating condition.

Cold Storage Room

A cold storage room is a great place to store fresh fruit and vegetables so that they keep for longer. The idea of these rooms is that they will stay much cooler than normal room temperature which makes them ideally suited to keeping all sorts of perishable items.

These rooms need to be designed carefully so that they can benefit from natural temperature differences.

After-sale and Service at It's Best!

Crophex offers service and replacement for every brand and model.

Well-experienced and trained service team in Crophex, is always ready to provide you fast and expert solution. Our service is backed up by our knowledgeable and skilled engineers. You can contact our service team at anytime.

Crophex Service includes:

- Plate and gasket replacement for every brand and model
- Detailed plate cleaning and regasketing
- Detailed repairing
- Returning the heat exchanger back to its first condition
- Testing
- Upgrade solutions

Well-experienced and trained service team in Crophex, is always ready to provide you fast and expert solution.

Crophex Technical Service
is always with you.
1-844-834-9948
support@crophex.com





Crophex Inc.
Address : 603 Kresson Rd. Unit 9,
Cherry Hill Township, NJ 08003

Phone : 1-844-834-9948
Fax : 856-433-8660
Email : info@crophex.com

