Abstract

Benefiting from technology innovations and robust growth in the application markets such as fuel processing, power plants, HVAC and others, heat exchanger market is experiencing well above industry average growth. Stricter environmental regulations and ever-growing pressure of energy costs bring both challenges and chances for the heat exchanger market.

The global demand on heat exchangers reached US$42.7 billion in 2012. With a growth of approximately 7.8% annually in the next years, the market is expected to approach US$57.9 billion by 2016 and to increase to US$78.16 billion by 2020.

Tubular heat exchangers including shell and tube heat exchangers are still the largest product group, followed by plate-type heat exchangers. Accounting for more than half of the heat exchanger market, Metals and alloys are the mostly wide used materials for heat exchangers. Technology innovations in engineering materials such as polymers and ceramics contribute new growth to the industry.

Acmite Market Intelligence has finished a most comprehensive report on global heat exchanger market. It is ready for order.

The report examines the current products and application areas, provides extensive market data of 2012, and market forecast through 2016 to 2020. It also outlines the competition landscape, evaluates market chances and risks and anticipates future trends based on a series of influence factors.

- 207 pages analyzing the market
- 60 figure tables
- 325 company profiles of heat exchanger manufacturers

With a multi-dimensional and in-depth view of world heat exchanger market, this report is ideal help for you with decisions about international market penetration, business expansion or project feasibility analysis.
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Note:

Regions:

North America: US, Canada, Mexico (NAFTA region)

Asia Pacific: Countries of Asia, Australia, New Zealand

Asia Pacific*: Asia Pacific excluding Japan
5. Finned heat exchangers

5.3.1 Products, features and applications

Finned or extended surface heat exchangers have more compact surface as the tubular and plate-type exchangers. They offer a much larger heat transfer surface with less volume or mass. These heat exchangers apply fins with high fin density on one or both fluid sides to increase the surface area and heat transfer coefficient.

Plate-fin and tube-fin heat exchangers are the two most common finned heat exchangers.

Plate-Fin Heat Exchangers

This heat exchanger design, also known as matrix heat exchangers, uses corrugated fins or spacers sandwiched between parallel plates to transfer heat between gases, gas and liquid, or liquids.

There are three geometries of plate fins

- Uninterrupted and straight plain fins with triangular or rectangular passages
- Uninterrupted and wavy plain fins
- Interrupted fins such as offset strip, louver, perforated and pin fins.

Interrupted fins and their variations are preferred in industry as the materials used are more efficiently than the plain fins to meet the application requirements. Among them offset strip heat exchangers are the most widely used high performance heat exchangers of the plate-fin type.

The materials used for the exchanger plates and finds include

- Metal
- Ceramics
- …

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6.4.2.2 Heat exchanger market in food & beverage industry by region

Heat exchanger market in food & beverage industry by region in US$ Bn

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<th>Region</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
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(Vol.I P.164)
Chicago Bridge & Iron Company N.V. (NL)
Oostduinlaan 75
2596 JJ, The Hague
The Netherlands
Phone: +31 70 373 2010
Fax: +31 70 373 2750
http://www.cbi.com

Year of foundation: 1889
Number of employees: 26,800
Revenue 2012: USD 5,485.2 million

Company profile

Chicago Bridge & Iron Company N.V. (CB&I ), headquartered in The Hague, The Netherlands, is involved in design, construction and manufacturing of infrastructure projects and a complete range of equipment and services for petrochemicals, energy, gas, LNG, water and wastewater and environment sectors.

The company has four business groups:
- Technology
- Engineering, Construction and Maintenance
- Fabrication Services
- Government Solutions

CB&I’s product portfolio of heat transfer products by Lummus include:
- Lummus Advanced Breech-Lock Exchanger™
- HELIXCHANGER® Heat Exchanger
- Air Preheaters
- Fired Process Heaters
- ...

(Vol. II P.104)
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<tr>
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<td></td>
<td></td>
<td>☐ EUR</td>
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