

Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market Growth 2026-2032

<https://marketpublishers.com/r/GD2C90FE37D3EN.html>

Date: July 2026

Pages: 140

Price: US\$ 3,660.00 (Single User License)

ID: GD2C90FE37D3EN

Abstracts

The global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems market size is predicted to grow from US\$ 186 million in 2025 to US\$ 533 million in 2032; it is expected to grow at a CAGR of 15.0% from 2026 to 2032.

Shell-and-tube heat exchangers for AI training cluster cooling systems are indirect heat transfer devices used in the cooling infrastructure of AI training data centres, intelligent computing facilities and high-density GPU clusters. Structurally, they consist of a shell, tube bundle, tube sheets, baffles, heads and nozzles, allowing chilled water, condenser water, glycol mixtures, refrigerants or other engineering fluids to exchange heat across the tube wall between shell-side and tube-side circuits. In AI training environments, these exchangers are primarily deployed within chiller evaporators or condensers, primary cooling plants, facility-water isolation loops, liquid-cooling support systems, free-cooling arrangements and heat recovery modules. Their role is not to cool the processor directly, but to provide a robust, maintainable and certifiable thermal bridge for mission-critical cooling infrastructure. Pricing varies widely: small standard coolers may be priced from several thousand US dollars, while medium and large customised exchangers for data-centre cooling plants can reach several hundred thousand dollars or more per unit.

Based on our research, shell-and-tube heat exchangers for AI training cluster cooling systems should not be treated as a newly created product category detached from the traditional heat exchanger industry. They are better understood as a mature pressure-vessel heat transfer technology being redeployed into mission-critical cooling infrastructure for high-density AI computing. The product should not be described as an 'air-cooled' component. Its engineering role is to provide stable indirect heat transfer in

chilled-water plants, chiller evaporators or condensers, facility-water loops, glycol systems and heat recovery arrangements. In direct-to-chip or immersion liquid cooling, heat is captured close to processors, but it still has to be rejected into facility water, dry coolers, chillers or broader thermal infrastructure. This is where robust heat exchangers remain essential. However, shell-and-tube units do not cover the entire data-centre heat exchanger market. Plate heat exchangers are often more common in compact CDU and liquid-to-liquid modules, while shell-and-tube designs are more relevant in larger, higher-pressure, more serviceable or chiller-integrated applications.

The global supply base is structurally layered. North America and Europe remain the strongest regions for TEMA-type engineering, ASME/PED pressure-vessel fabrication and high-end custom shell-and-tube heat exchangers. Specialist manufacturers such as API Heat Transfer, Xylem Standard Xchange, Metalforms Heat Transfer, FUNKE, Bronswerk and Enerquip provide clear shell-and-tube product evidence. At the same time, data-centre cooling system OEMs such as Johnson Controls, Trane, Carrier and Dunham-Bush participate through chillers and cooling plants, where the shell-and-tube component value is often embedded within larger systems. China is becoming increasingly important because AI computing centres, liquid-cooling systems, domestic thermal management suppliers and industrial cooling equipment makers are growing together. Chinese suppliers such as Envicool, Sanhe Tongfei and Binglun Environment are relevant to the broader cooling infrastructure chain, although the revenue directly attributable to shell-and-tube heat exchangers requires careful separation from total system revenue.

Demand growth is being driven by three primary forces. First, new AI training data centres require larger and more resilient cooling plants as GPU cluster density rises. Second, existing data centres are being retrofitted for hybrid air-liquid and liquid-cooling deployments, creating demand for primary-side heat exchange, hydraulic separation and redundancy. Third, pressure to reduce PUE, WUE and power-system stress is making cooling infrastructure a board-level and site-selection issue rather than a back-end mechanical service. The market is therefore not simply growing because more heat exchangers are needed; it is growing because thermal infrastructure has become a constraint on AI deployment. Shell-and-tube products will benefit selectively, particularly where high duty, pressure tolerance, corrosion resistance, inspectability and long operating life are valued more than footprint minimisation.

The future competitive landscape will be shaped by integration rather than by component manufacturing alone. Shell-and-tube heat exchanger suppliers that can work with chiller OEMs, liquid-cooling integrators, data-centre EPC contractors and

hyperscale owners will have stronger access to AI-related demand. Manufacturers with pressure-vessel certification, short engineering cycles, proven thermal design capability, material flexibility and global service support will be better positioned than commodity fabricators. At the same time, substitution risk from plate heat exchangers remains real in compact CDU and liquid-to-liquid applications. The practical conclusion is that this is a mature industry with a new growth vector, not a broad-based hypergrowth component market. The investable and strategic opportunity lies in the intersection of high-reliability heat transfer engineering, AI data-centre cooling architecture and regional supply-chain localisation.

LP Information, Inc. (LPI) ' newest research report, the "Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Industry Forecast" looks at past sales and reviews total world Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems sales in 2025, providing a comprehensive analysis by region and market sector of projected Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems sales for 2026 through 2032. With Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems sales broken down by region, market sector and sub-sector, this report provides a detailed analysis in US\$ millions of the world Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems industry.

This Insight Report provides a comprehensive analysis of the global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems landscape and highlights key trends related to product segmentation, company formation, revenue, and market share, latest development, and M&A activity. This report also analyzes the strategies of leading global companies with a focus on Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems portfolios and capabilities, market entry strategies, market positions, and geographic footprints, to better understand these firms' unique position in an accelerating global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems market.

This Insight Report evaluates the key market trends, drivers, and affecting factors shaping the global outlook for Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems and breaks down the forecast by Product Configuration, by Application, geography, and market size to highlight emerging pockets of opportunity. With a transparent methodology based on hundreds of bottom-up qualitative and quantitative market inputs, this study forecast offers a highly nuanced view of the current state and future trajectory in the global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems.

This report presents a comprehensive overview, market shares, and growth opportunities of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems market by product type, application, key manufacturers and key regions and countries.

Segmentation by Product Configuration:

Fixed Tubesheet Shell-and-Tube Heat Exchanger

U-Tube Shell-and-Tube Heat Exchanger

Floating Head Shell-and-Tube Heat Exchanger

Other

Segmentation by System Position:

Chiller-integrated Heat Exchanger

Primary Cooling Plant Heat Exchanger

Liquid-cooling Support Heat Exchanger

Heat Recovery Heat Exchanger

Segmentation by Heat Transfer Media:

Water-to-Water

Glycol-to-Water

Refrigerant-to-Water

Other

Segmentation by Manufacturing Model:

Specialist Heat Exchanger OEM

Chiller / Cooling System OEM

Pressure Vessel Fabricator

System Integrator / Non-manufacturer

Segmentation by Application:

Hyperscale AI Training Data Center

Colocation AI Computing Facility

Enterprise / Research HPC Facility

Edge / Modular AI Data Center

Other

This report also splits the market by region:

Americas

United States

Canada

Mexico

Brazil

APAC

China

Japan

Korea

Southeast Asia

India

Australia

Europe

Germany

France

UK

Italy

Russia

Middle East & Africa

Egypt

South Africa

Israel

Turkey

GCC Countries

The below companies that are profiled have been selected based on inputs gathered from primary experts and analysing the company's coverage, product portfolio, its market penetration.

API Heat Transfer

Johnson Controls

Kelvion

Xylem Standard Xchange

Metalforms Heat Transfer

FUNKE

Bronswerk Heat Transfer

Binglun Environment

Enerquip Thermal Solutions

Graham Corporation

Hughes-Anderson

SACOME

HRS Heat Exchangers

E.J. Bowman

Sanhe Tongfei

Taiwan Heat Transfer

Kaori

Trane Technologies

Carrier Global

Dunham-Bush

Key Questions Addressed in this Report

What is the 10-year outlook for the global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems market?

What factors are driving Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems market growth, globally and by region?

Which technologies are poised for the fastest growth by market and region?

How do Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems market opportunities vary by end market size?

How does Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems break out by Product Configuration, by Application?

Contents

1 SCOPE OF THE REPORT

- 1.1 Market Introduction
- 1.2 Years Considered
- 1.3 Research Objectives
- 1.4 Market Research Methodology
- 1.5 Research Process and Data Source
- 1.6 Economic Indicators
- 1.7 Currency Considered
- 1.8 Market Estimation Caveats

2 EXECUTIVE SUMMARY

2.1 World Market Overview

2.1.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Sales 2021-2032

2.1.2 World Current & Future Analysis for Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems by Geographic Region, 2021, 2025 & 2032

2.1.3 World Current & Future Analysis for Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems by Country/Region, 2021, 2025 & 2032

2.2 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Segment by Product Configuration

2.2.1 Fixed Tubesheet Shell-and-Tube Heat Exchanger

2.2.2 U-Tube Shell-and-Tube Heat Exchanger

2.2.3 Floating Head Shell-and-Tube Heat Exchanger

2.2.4 Other

2.2.5 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration

2.2.5.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Product Configuration (2021-2026)

2.2.5.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue and Market Share by Product Configuration (2021-2026)

2.2.5.3 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Product Configuration (2021-2026)

2.3 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Segment by System Position

2.3.1 Chiller-integrated Heat Exchanger

- 2.3.2 Primary Cooling Plant Heat Exchanger
- 2.3.3 Liquid-cooling Support Heat Exchanger
- 2.3.4 Heat Recovery Heat Exchanger
- 2.3.5 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by System Position
 - 2.3.5.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by System Position (2021-2026)
 - 2.3.5.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue and Market Share by System Position (2021-2026)
 - 2.3.5.3 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by System Position (2021-2026)
- 2.4 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Segment by Heat Transfer Media
 - 2.4.1 Water-to-Water
 - 2.4.2 Glycol-to-Water
 - 2.4.3 Refrigerant-to-Water
 - 2.4.4 Other
 - 2.4.5 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Heat Transfer Media
 - 2.4.5.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Heat Transfer Media (2021-2026)
 - 2.4.5.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue and Market Share by Heat Transfer Media (2021-2026)
 - 2.4.5.3 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Heat Transfer Media (2021-2026)
- 2.5 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Segment by Manufacturing Model
 - 2.5.1 Specialist Heat Exchanger OEM
 - 2.5.2 Chiller / Cooling System OEM
 - 2.5.3 Pressure Vessel Fabricator
 - 2.5.4 System Integrator / Non-manufacturer
 - 2.5.5 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Manufacturing Model
 - 2.5.5.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Manufacturing Model (2021-2026)
 - 2.5.5.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue and Market Share by Manufacturing Model (2021-2026)
 - 2.5.5.3 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Manufacturing Model (2021-2026)

2.6 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Segment by Application

2.6.1 Hyperscale AI Training Data Center

2.6.2 Colocation AI Computing Facility

2.6.3 Enterprise / Research HPC Facility

2.6.4 Edge / Modular AI Data Center

2.6.5 Other

2.6.6 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Application

2.6.6.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Market Share by Application (2021-2026)

2.6.6.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue and Market Share by Application (2021-2026)

2.6.6.3 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Application (2021-2026)

3 GLOBAL BY COMPANY

3.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Breakdown Data by Company

3.1.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Sales by Company (2021-2026)

3.1.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Company (2021-2026)

3.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Revenue by Company (2021-2026)

3.2.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Company (2021-2026)

3.2.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Company (2021-2026)

3.3 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Company

3.4 Key Manufacturers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Producing Area Distribution, Sales Area, Product Type

3.4.1 Key Manufacturers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Location Distribution

3.4.2 Players Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Products Offered

3.5 Market Concentration Rate Analysis

- 3.5.1 Competition Landscape Analysis
- 3.5.2 Concentration Ratio (CR3, CR5 and CR10) & (2024-2026)
- 3.6 New Products and Potential Entrants
- 3.7 Market M&A Activity & Strategy

4 WORLD HISTORIC REVIEW FOR SHELL-AND-TUBE HEAT EXCHANGERS FOR AI TRAINING CLUSTER COOLING SYSTEMS BY GEOGRAPHIC REGION

- 4.1 World Historic Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market Size by Geographic Region (2021-2026)
 - 4.1.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Sales by Geographic Region (2021-2026)
 - 4.1.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Revenue by Geographic Region (2021-2026)
- 4.2 World Historic Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market Size by Country/Region (2021-2026)
 - 4.2.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Sales by Country/Region (2021-2026)
 - 4.2.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Revenue by Country/Region (2021-2026)
- 4.3 Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Growth
- 4.4 APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Growth
- 4.5 Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Growth
- 4.6 Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Growth

5 AMERICAS

- 5.1 Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country
 - 5.1.1 Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country (2021-2026)
 - 5.1.2 Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Country (2021-2026)
- 5.2 Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026)

5.3 Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Application (2021-2026)

5.4 United States

5.5 Canada

5.6 Mexico

5.7 Brazil

6 APAC

6.1 APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Region

6.1.1 APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Region (2021-2026)

6.1.2 APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Revenue by Region (2021-2026)

6.2 APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Product Configuration (2021-2026)

6.3 APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Application (2021-2026)

6.4 China

6.5 Japan

6.6 South Korea

6.7 Southeast Asia

6.8 India

6.9 Australia

6.10 China Taiwan

7 EUROPE

7.1 Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
by Country

7.1.1 Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling
Systems Sales by Country (2021-2026)

7.1.2 Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling
Systems Revenue by Country (2021-2026)

7.2 Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Product Configuration (2021-2026)

7.3 Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems
Sales by Application (2021-2026)

7.4 Germany

7.5 France

7.6 UK

7.7 Italy

7.8 Russia

8 MIDDLE EAST & AFRICA

8.1 Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems by Country

8.1.1 Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country (2021-2026)

8.1.2 Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Country (2021-2026)

8.2 Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026)

8.3 Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Application (2021-2026)

8.4 Egypt

8.5 South Africa

8.6 Israel

8.7 Turkey

8.8 GCC Countries

9 MARKET DRIVERS, CHALLENGES AND TRENDS

9.1 Market Drivers & Growth Opportunities

9.2 Market Challenges & Risks

9.3 Industry Trends

10 MANUFACTURING COST STRUCTURE ANALYSIS

10.1 Raw Material and Suppliers

10.2 Manufacturing Cost Structure Analysis of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

10.3 Manufacturing Process Analysis of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

10.4 Industry Chain Structure of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

11 MARKETING, DISTRIBUTORS AND CUSTOMER

11.1 Sales Channel

11.1.1 Direct Channels

11.1.2 Indirect Channels

11.2 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Distributors

11.3 Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Customer

12 WORLD FORECAST REVIEW FOR SHELL-AND-TUBE HEAT EXCHANGERS FOR AI TRAINING CLUSTER COOLING SYSTEMS BY GEOGRAPHIC REGION

12.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market Size Forecast by Region

12.1.1 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Forecast by Region (2027-2032)

12.1.2 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Revenue Forecast by Region (2027-2032)

12.2 Americas Forecast by Country (2027-2032)

12.3 APAC Forecast by Region (2027-2032)

12.4 Europe Forecast by Country (2027-2032)

12.5 Middle East & Africa Forecast by Country (2027-2032)

12.6 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Forecast by Product Configuration (2027-2032)

12.7 Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Forecast by Application (2027-2032)

13 KEY PLAYERS ANALYSIS

13.1 API Heat Transfer

13.1.1 API Heat Transfer Company Information

13.1.2 API Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.1.3 API Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.1.4 API Heat Transfer Main Business Overview

13.1.5 API Heat Transfer Latest Developments

13.2 Johnson Controls

13.2.1 Johnson Controls Company Information

13.2.2 Johnson Controls Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.2.3 Johnson Controls Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.2.4 Johnson Controls Main Business Overview

13.2.5 Johnson Controls Latest Developments

13.3 Kelvion

13.3.1 Kelvion Company Information

13.3.2 Kelvion Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.3.3 Kelvion Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.3.4 Kelvion Main Business Overview

13.3.5 Kelvion Latest Developments

13.4 Xylem Standard Xchange

13.4.1 Xylem Standard Xchange Company Information

13.4.2 Xylem Standard Xchange Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.4.3 Xylem Standard Xchange Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.4.4 Xylem Standard Xchange Main Business Overview

13.4.5 Xylem Standard Xchange Latest Developments

13.5 Metalforms Heat Transfer

13.5.1 Metalforms Heat Transfer Company Information

13.5.2 Metalforms Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.5.3 Metalforms Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.5.4 Metalforms Heat Transfer Main Business Overview

13.5.5 Metalforms Heat Transfer Latest Developments

13.6 FUNKE

13.6.1 FUNKE Company Information

13.6.2 FUNKE Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.6.3 FUNKE Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.6.4 FUNKE Main Business Overview

- 13.6.5 FUNKE Latest Developments
- 13.7 Bronswerk Heat Transfer
 - 13.7.1 Bronswerk Heat Transfer Company Information
 - 13.7.2 Bronswerk Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.7.3 Bronswerk Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.7.4 Bronswerk Heat Transfer Main Business Overview
 - 13.7.5 Bronswerk Heat Transfer Latest Developments
- 13.8 Binglun Environment
 - 13.8.1 Binglun Environment Company Information
 - 13.8.2 Binglun Environment Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.8.3 Binglun Environment Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.8.4 Binglun Environment Main Business Overview
 - 13.8.5 Binglun Environment Latest Developments
- 13.9 Enerquip Thermal Solutions
 - 13.9.1 Enerquip Thermal Solutions Company Information
 - 13.9.2 Enerquip Thermal Solutions Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.9.3 Enerquip Thermal Solutions Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.9.4 Enerquip Thermal Solutions Main Business Overview
 - 13.9.5 Enerquip Thermal Solutions Latest Developments
- 13.10 Graham Corporation
 - 13.10.1 Graham Corporation Company Information
 - 13.10.2 Graham Corporation Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.10.3 Graham Corporation Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.10.4 Graham Corporation Main Business Overview
 - 13.10.5 Graham Corporation Latest Developments
- 13.11 Hughes-Anderson
 - 13.11.1 Hughes-Anderson Company Information
 - 13.11.2 Hughes-Anderson Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.11.3 Hughes-Anderson Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

- 13.11.4 Hughes-Anderson Main Business Overview
- 13.11.5 Hughes-Anderson Latest Developments
- 13.12 SACOME
 - 13.12.1 SACOME Company Information
 - 13.12.2 SACOME Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.12.3 SACOME Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.12.4 SACOME Main Business Overview
 - 13.12.5 SACOME Latest Developments
- 13.13 HRS Heat Exchangers
 - 13.13.1 HRS Heat Exchangers Company Information
 - 13.13.2 HRS Heat Exchangers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.13.3 HRS Heat Exchangers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.13.4 HRS Heat Exchangers Main Business Overview
 - 13.13.5 HRS Heat Exchangers Latest Developments
- 13.14 E.J. Bowman
 - 13.14.1 E.J. Bowman Company Information
 - 13.14.2 E.J. Bowman Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.14.3 E.J. Bowman Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.14.4 E.J. Bowman Main Business Overview
 - 13.14.5 E.J. Bowman Latest Developments
- 13.15 Sanhe Tongfei
 - 13.15.1 Sanhe Tongfei Company Information
 - 13.15.2 Sanhe Tongfei Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.15.3 Sanhe Tongfei Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)
 - 13.15.4 Sanhe Tongfei Main Business Overview
 - 13.15.5 Sanhe Tongfei Latest Developments
- 13.16 Taiwan Heat Transfer
 - 13.16.1 Taiwan Heat Transfer Company Information
 - 13.16.2 Taiwan Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications
 - 13.16.3 Taiwan Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster

Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.16.4 Taiwan Heat Transfer Main Business Overview

13.16.5 Taiwan Heat Transfer Latest Developments

13.17 Kaori

13.17.1 Kaori Company Information

13.17.2 Kaori Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.17.3 Kaori Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.17.4 Kaori Main Business Overview

13.17.5 Kaori Latest Developments

13.18 Trane Technologies

13.18.1 Trane Technologies Company Information

13.18.2 Trane Technologies Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.18.3 Trane Technologies Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.18.4 Trane Technologies Main Business Overview

13.18.5 Trane Technologies Latest Developments

13.19 Carrier Global

13.19.1 Carrier Global Company Information

13.19.2 Carrier Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.19.3 Carrier Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.19.4 Carrier Global Main Business Overview

13.19.5 Carrier Global Latest Developments

13.20 Dunham-Bush

13.20.1 Dunham-Bush Company Information

13.20.2 Dunham-Bush Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

13.20.3 Dunham-Bush Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales, Revenue, Price and Gross Margin (2021-2026)

13.20.4 Dunham-Bush Main Business Overview

13.20.5 Dunham-Bush Latest Developments

14 RESEARCH FINDINGS AND CONCLUSION

List Of Tables

LIST OF TABLES

Table 1. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Sales CAGR by Geographic Region (2021, 2025 & 2032) & (\$ millions)

Table 2. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Sales CAGR by Country/Region (2021, 2025 & 2032) & (\$ millions)

Table 3. Major Players of Fixed Tubesheet Shell-and-Tube Heat Exchanger

Table 4. Major Players of U-Tube Shell-and-Tube Heat Exchanger

Table 5. Major Players of Floating Head Shell-and-Tube Heat Exchanger

Table 6. Major Players of Other

Table 7. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026) & (Units)

Table 8. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Product Configuration (2021-2026)

Table 9. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Product Configuration (2021-2026) & (\$ million)

Table 10. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Product Configuration (2021-2026)

Table 11. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Product Configuration (2021-2026) & (US\$/Unit)

Table 12. Major Players of Chiller-integrated Heat Exchanger

Table 13. Major Players of Primary Cooling Plant Heat Exchanger

Table 14. Major Players of Liquid-cooling Support Heat Exchanger

Table 15. Major Players of Heat Recovery Heat Exchanger

Table 16. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by System Position (2021-2026) & (Units)

Table 17. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by System Position (2021-2026)

Table 18. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by System Position (2021-2026) & (\$ million)

Table 19. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by System Position (2021-2026)

Table 20. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by System Position (2021-2026) & (US\$/Unit)

Table 21. Major Players of Water-to-Water

Table 22. Major Players of Glycol-to-Water

Table 23. Major Players of Refrigerant-to-Water

Table 24. Major Players of Other

Table 25. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Heat Transfer Media (2021-2026) & (Units)

Table 26. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Heat Transfer Media (2021-2026)

Table 27. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Heat Transfer Media (2021-2026) & (\$ million)

Table 28. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Heat Transfer Media (2021-2026)

Table 29. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Heat Transfer Media (2021-2026) & (US\$/Unit)

Table 30. Major Players of Specialist Heat Exchanger OEM

Table 31. Major Players of Chiller / Cooling System OEM

Table 32. Major Players of Pressure Vessel Fabricator

Table 33. Major Players of System Integrator / Non-manufacturer

Table 34. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Manufacturing Model (2021-2026) & (Units)

Table 35. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Manufacturing Model (2021-2026)

Table 36. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Manufacturing Model (2021-2026) & (\$ million)

Table 37. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Manufacturing Model (2021-2026)

Table 38. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Manufacturing Model (2021-2026) & (US\$/Unit)

Table 39. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale by Application (2021-2026) & (Units)

Table 40. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Market Share by Application (2021-2026)

Table 41. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Application (2021-2026) & (\$ million)

Table 42. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Application (2021-2026)

Table 43. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Application (2021-2026) & (US\$/Unit)

Table 44. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Company (2021-2026) & (Units)

Table 45. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Company (2021-2026)

Table 46. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Company (2021-2026) & (\$ millions)

Table 47. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Company (2021-2026)

Table 48. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Price by Company (2021-2026) & (US\$/Unit)

Table 49. Key Manufacturers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Producing Area Distribution and Sales Area

Table 50. Players Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Products Offered

Table 51. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Concentration Ratio (CR3, CR5 and CR10) & (2024-2026)

Table 52. New Products and Potential Entrants

Table 53. Market M&A Activity & Strategy

Table 54. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Geographic Region (2021-2026) & (Units)

Table 55. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share Geographic Region (2021-2026)

Table 56. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Geographic Region (2021-2026) & (\$ millions)

Table 57. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Geographic Region (2021-2026)

Table 58. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country/Region (2021-2026) & (Units)

Table 59. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Country/Region (2021-2026)

Table 60. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Country/Region (2021-2026) & (\$ millions)

Table 61. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Country/Region (2021-2026)

Table 62. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country (2021-2026) & (Units)

Table 63. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Country (2021-2026)

Table 64. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Country (2021-2026) & (\$ millions)

Table 65. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026) & (Units)

Table 66. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling

Systems Sales by Application (2021-2026) & (Units)

Table 67. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Region (2021-2026) & (Units)

Table 68. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Region (2021-2026)

Table 69. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Region (2021-2026) & (\$ millions)

Table 70. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026) & (Units)

Table 71. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Application (2021-2026) & (Units)

Table 72. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country (2021-2026) & (Units)

Table 73. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Country (2021-2026) & (\$ millions)

Table 74. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026) & (Units)

Table 75. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Application (2021-2026) & (Units)

Table 76. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Country (2021-2026) & (Units)

Table 77. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Country (2021-2026)

Table 78. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Product Configuration (2021-2026) & (Units)

Table 79. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Application (2021-2026) & (Units)

Table 80. Key Market Drivers & Growth Opportunities of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

Table 81. Key Market Challenges & Risks of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

Table 82. Key Industry Trends of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

Table 83. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Raw Material

Table 84. Key Suppliers of Raw Materials

Table 85. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Distributors List

Table 86. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

Customer List

Table 87. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Region (2027-2032) & (Units)

Table 88. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Forecast by Region (2027-2032) & (\$ millions)

Table 89. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Country (2027-2032) & (Units)

Table 90. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Revenue Forecast by Country (2027-2032) & (\$ millions)

Table 91. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Region (2027-2032) & (Units)

Table 92. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Annual Revenue Forecast by Region (2027-2032) & (\$ millions)

Table 93. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Country (2027-2032) & (Units)

Table 94. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Forecast by Country (2027-2032) & (\$ millions)

Table 95. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Country (2027-2032) & (Units)

Table 96. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Forecast by Country (2027-2032) & (\$ millions)

Table 97. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Product Configuration (2027-2032) & (Units)

Table 98. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Forecast by Product Configuration (2027-2032) & (\$ millions)

Table 99. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Forecast by Application (2027-2032) & (Units)

Table 100. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Forecast by Application (2027-2032) & (\$ millions)

Table 101. API Heat Transfer Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 102. API Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 103. API Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 104. API Heat Transfer Main Business

Table 105. API Heat Transfer Latest Developments

Table 106. Johnson Controls Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 107. Johnson Controls Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 108. Johnson Controls Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 109. Johnson Controls Main Business

Table 110. Johnson Controls Latest Developments

Table 111. Kelvion Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 112. Kelvion Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 113. Kelvion Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 114. Kelvion Main Business

Table 115. Kelvion Latest Developments

Table 116. Xylem Standard Xchange Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 117. Xylem Standard Xchange Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 118. Xylem Standard Xchange Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 119. Xylem Standard Xchange Main Business

Table 120. Xylem Standard Xchange Latest Developments

Table 121. Metalforms Heat Transfer Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 122. Metalforms Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 123. Metalforms Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 124. Metalforms Heat Transfer Main Business

Table 125. Metalforms Heat Transfer Latest Developments

Table 126. FUNKE Basic Information, Shell-and-Tube Heat Exchangers for AI Training

Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 127. FUNKE Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 128. FUNKE Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 129. FUNKE Main Business

Table 130. FUNKE Latest Developments

Table 131. Bronswerk Heat Transfer Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 132. Bronswerk Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 133. Bronswerk Heat Transfer Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 134. Bronswerk Heat Transfer Main Business

Table 135. Bronswerk Heat Transfer Latest Developments

Table 136. Binglun Environment Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 137. Binglun Environment Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 138. Binglun Environment Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 139. Binglun Environment Main Business

Table 140. Binglun Environment Latest Developments

Table 141. Enerquip Thermal Solutions Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 142. Enerquip Thermal Solutions Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 143. Enerquip Thermal Solutions Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 144. Enerquip Thermal Solutions Main Business

Table 145. Enerquip Thermal Solutions Latest Developments

Table 146. Graham Corporation Basic Information, Shell-and-Tube Heat Exchangers for

AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 147. Graham Corporation Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 148. Graham Corporation Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 149. Graham Corporation Main Business

Table 150. Graham Corporation Latest Developments

Table 151. Hughes-Anderson Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 152. Hughes-Anderson Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 153. Hughes-Anderson Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 154. Hughes-Anderson Main Business

Table 155. Hughes-Anderson Latest Developments

Table 156. SACOME Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 157. SACOME Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 158. SACOME Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 159. SACOME Main Business

Table 160. SACOME Latest Developments

Table 161. HRS Heat Exchangers Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 162. HRS Heat Exchangers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 163. HRS Heat Exchangers Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 164. HRS Heat Exchangers Main Business

Table 165. HRS Heat Exchangers Latest Developments

Table 166. E.J. Bowman Basic Information, Shell-and-Tube Heat Exchangers for AI

Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 167. E.J. Bowman Shell-and-Tube Heat Exchangers for AI Training Cluster

Cooling Systems Product Portfolios and Specifications

Table 168. E.J. Bowman Shell-and-Tube Heat Exchangers for AI Training Cluster

Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 169. E.J. Bowman Main Business

Table 170. E.J. Bowman Latest Developments

Table 171. Sanhe Tongfei Basic Information, Shell-and-Tube Heat Exchangers for AI

Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 172. Sanhe Tongfei Shell-and-Tube Heat Exchangers for AI Training Cluster

Cooling Systems Product Portfolios and Specifications

Table 173. Sanhe Tongfei Shell-and-Tube Heat Exchangers for AI Training Cluster

Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 174. Sanhe Tongfei Main Business

Table 175. Sanhe Tongfei Latest Developments

Table 176. Taiwan Heat Transfer Basic Information, Shell-and-Tube Heat Exchangers

for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 177. Taiwan Heat Transfer Shell-and-Tube Heat Exchangers for AI Training

Cluster Cooling Systems Product Portfolios and Specifications

Table 178. Taiwan Heat Transfer Shell-and-Tube Heat Exchangers for AI Training

Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 179. Taiwan Heat Transfer Main Business

Table 180. Taiwan Heat Transfer Latest Developments

Table 181. Kaori Basic Information, Shell-and-Tube Heat Exchangers for AI Training

Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 182. Kaori Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling

Systems Product Portfolios and Specifications

Table 183. Kaori Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling

Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 184. Kaori Main Business

Table 185. Kaori Latest Developments

Table 186. Trane Technologies Basic Information, Shell-and-Tube Heat Exchangers for

AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 187. Trane Technologies Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 188. Trane Technologies Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 189. Trane Technologies Main Business

Table 190. Trane Technologies Latest Developments

Table 191. Carrier Global Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 192. Carrier Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 193. Carrier Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 194. Carrier Global Main Business

Table 195. Carrier Global Latest Developments

Table 196. Dunham-Bush Basic Information, Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Manufacturing Base, Sales Area and Its Competitors

Table 197. Dunham-Bush Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Product Portfolios and Specifications

Table 198. Dunham-Bush Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales (Units), Revenue (\$ Million), Price (US\$/Unit) and Gross Margin (2021-2026)

Table 199. Dunham-Bush Main Business

Table 200. Dunham-Bush Latest Developments

List Of Figures

LIST OF FIGURES

Figure 1. Picture of Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

Figure 2. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Report Years Considered

Figure 3. Research Objectives

Figure 4. Research Methodology

Figure 5. Research Process and Data Source

Figure 6. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Growth Rate 2021-2032 (Units)

Figure 7. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth Rate 2021-2032 (\$ millions)

Figure 8. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales by Geographic Region (2021, 2025 & 2032) & (\$ millions)

Figure 9. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Country/Region (2025)

Figure 10. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Country/Region (2021, 2025 & 2032)

Figure 11. Product Picture of Fixed Tubesheet Shell-and-Tube Heat Exchanger

Figure 12. Product Picture of U-Tube Shell-and-Tube Heat Exchanger

Figure 13. Product Picture of Floating Head Shell-and-Tube Heat Exchanger

Figure 14. Product Picture of Other

Figure 15. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Product Configuration in 2026

Figure 16. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Product Configuration (2021-2026)

Figure 17. Product Picture of Chiller-integrated Heat Exchanger

Figure 18. Product Picture of Primary Cooling Plant Heat Exchanger

Figure 19. Product Picture of Liquid-cooling Support Heat Exchanger

Figure 20. Product Picture of Heat Recovery Heat Exchanger

Figure 21. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by System Position in 2026

Figure 22. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by System Position (2021-2026)

Figure 23. Product Picture of Water-to-Water

Figure 24. Product Picture of Glycol-to-Water

Figure 25. Product Picture of Refrigerant-to-Water

Figure 26. Product Picture of Other

Figure 27. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Heat Transfer Media in 2026

Figure 28. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Heat Transfer Media (2021-2026)

Figure 29. Product Picture of Specialist Heat Exchanger OEM

Figure 30. Product Picture of Chiller / Cooling System OEM

Figure 31. Product Picture of Pressure Vessel Fabricator

Figure 32. Product Picture of System Integrator / Non-manufacturer

Figure 33. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Manufacturing Model in 2026

Figure 34. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Manufacturing Model (2021-2026)

Figure 35. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Consumed in Hyperscale AI Training Data Center

Figure 36. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market: Hyperscale AI Training Data Center (2021-2026) & (Units)

Figure 37. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Consumed in Colocation AI Computing Facility

Figure 38. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market: Colocation AI Computing Facility (2021-2026) & (Units)

Figure 39. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Consumed in Enterprise / Research HPC Facility

Figure 40. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market: Enterprise / Research HPC Facility (2021-2026) & (Units)

Figure 41. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Consumed in Edge / Modular AI Data Center

Figure 42. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market: Edge / Modular AI Data Center (2021-2026) & (Units)

Figure 43. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Consumed in Other

Figure 44. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market: Other (2021-2026) & (Units)

Figure 45. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sale Market Share by Application (2025)

Figure 46. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Application in 2025

Figure 47. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems

Sales by Company in 2025 (Units)

Figure 48. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Company in 2025

Figure 49. Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue by Company in 2025 (\$ millions)

Figure 50. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Company in 2025

Figure 51. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Geographic Region (2021-2026)

Figure 52. Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Geographic Region in 2025

Figure 53. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales 2021-2026 (Units)

Figure 54. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue 2021-2026 (\$ millions)

Figure 55. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales 2021-2026 (Units)

Figure 56. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue 2021-2026 (\$ millions)

Figure 57. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales 2021-2026 (Units)

Figure 58. Europe Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue 2021-2026 (\$ millions)

Figure 59. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales 2021-2026 (Units)

Figure 60. Middle East & Africa Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue 2021-2026 (\$ millions)

Figure 61. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Country in 2025

Figure 62. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Country (2021-2026)

Figure 63. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Product Configuration (2021-2026)

Figure 64. Americas Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Application (2021-2026)

Figure 65. United States Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth 2021-2026 (\$ millions)

Figure 66. Canada Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth 2021-2026 (\$ millions)

Figure 67. Mexico Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth 2021-2026 (\$ millions)

Figure 68. Brazil Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth 2021-2026 (\$ millions)

Figure 69. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Region in 2025

Figure 70. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Market Share by Region (2021-2026)

Figure 71. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Product Configuration (2021-2026)

Figure 72. APAC Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Sales Market Share by Application (2021-2026)

Figure 73. China Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth 2021-2026 (\$ millions)

Figure 74. Japan Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Revenue Growth 2021-2026 (\$ millions)

Figure 75. South Korea Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Reven

I would like to order

Product name: Global Shell-and-Tube Heat Exchangers for AI Training Cluster Cooling Systems Market Growth 2026-2032

Product link: <https://marketpublishers.com/r/GD2C90FE37D3EN.html>

Price: US\$ 3,660.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GD2C90FE37D3EN.html>