





Dongxu Hydraulic Machinery Co., Ltd.











Experience, Innovation, and Quality – Made in China



Foshan Nanhai Dongxu Hydraulic Machinery Co., Ltd. (Dongxu Hydraulics) Established in 2002, the company has become one of the leading specialists in fluid and hydraulic technology. Our focus lies in three business areas:

- Temperature Control Systems for Industrial Equipment
- Hydraulic Lubrication and Monitoring Systems
- High-Quality Hydraulic Components

What sets us apart: We combine over 20 years of experience, cutting-edge research, and certified premium manufacturing in China.

Our systems are now an integral part of the value chains in many key industries, including:

Hydraulic OEMs

• Hydraulic cooling systems, control systems, sensors, etc.

Offshore Wind Power

• Cooling of power electronics, substations, control systems, etc.

Data Centers

• Cooling of power electronics, substations, control systems, etc.

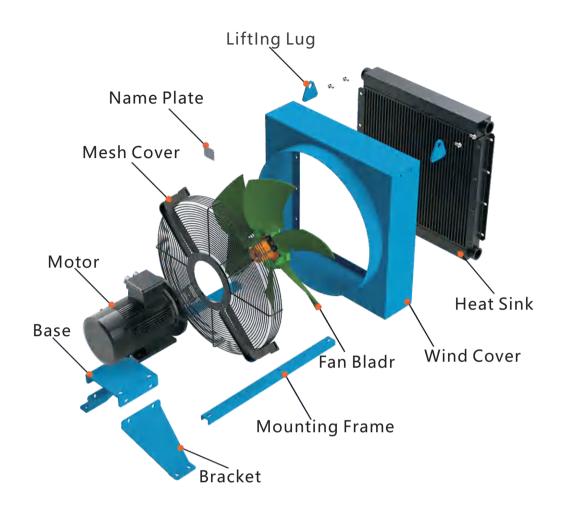
Such as industrial cooling systems for

- Industrial automation & smart manufacturing
- Mining facilities
- Construction machinery & agricultural machinery
- Energy storage & new energies

This is how we become a reliable technology partner for leading companies in Europe, Southeast Asia, North and South America – and, of course, China.



Structure of the air cooler



Selection example

System selection:

T= 30 °C

To select the right cooler, you will need the following data:

Q [kW] Heat quantity to be dissipated
V [L/min] Oil flow
Oil [°C] Inlet temperature of the oil into the cooler
T [°C] Ambient air inlet temperature into the cooler

Calculation example: ATEX version:

Q=12 kW - Gas sector: ⟨⟨⟨⟨⟩| II 2G Ex db IIB T4 Gb or oder db IIc T4 Gb V=75 L/min - Dust area: ⟨⟨⟨⟨⟨⟩| II 2D Ex tb IIIB/IIIC T130 °C Db oder ⟨⟨⟨⟨⟩| II 3D Ex tC IIIB/IIIC T130 °C Dc

Ambient temperature -40°C < Ta < +55 °C
 Motor in corresponding ATEX design

Air-Cooled Cooler

Customised air-cooled heat exchanger

Features: Heat exchanger with copper pipes and copper fins

Application: Conveyor pumps in underground coal mines

Challenges during installation:

The air-cooled heat exchanger is installed in an underground environment characterised by high humidity and significant dust accumulation. The presence of methane gas and coal dust poses inherent fire and explosion hazards, which place stringent demands on the explosion protection capability, dust resistance and operational stability of the system.





DXT Series Air Cooler

Features: Compact design, space-saving

Applications: Oil walkway systems

Challenges during installation:

The installation of air coolers in cooling systems for oil platforms poses challenges in terms of space, operating conditions and integration. These include:

- Compact space constraints make adaptation difficult
- Demanding operating conditions require vibration resistance and clogging protection
- Integration requires interface compatibility without compromising the original layout.

Self-circulating air cooler

Features: Excellent heat dissipation, independent circulation for easy installation

Application: Port machinery gearboxes

Challenges during installation:

In port environments, air coolers are exposed to high humidity, sunlight and rain. Pay attention to the cleanliness of the oil and ensure that independent circuits are compatible with the main system.



Our strength lies in continuous development. This is supported by a highly qualified R&D team with an international background, which works closely with the best technical universities in China – including Tsinghua University, Zhejiang University and South China University of Technology.

The result: over 60 patents that we have successfully transformed into market-ready products. This combination of cutting-edge academic research and practical implementation gives our customers a decisive technical edge.

Air-Cooled Cooler

DXB Air-cooled heat exchanger

Features: Pressure-resistant stability, highly efficient heat dissipation

Application: Test bench at Zhejiang University

Challenges during installation:

The air-cooled heat exchanger was installed on the test bench at Zhejiang University, a central facility for high-precision scientific research. This test bench is primarily used for experiments that require strict environmental parameters, such as material performance tests and simulated operating procedures for energy plants. The heat exchanger is designed to meet the specific requirements of the test bench, including a compact design, high-precision manufacturing, and the ability to withstand extreme environmental conditions.





AH Air-Cooled Cooler

Features: Compact design, excellent heat dissipation

Application: Ridger planting machine

Challenges during installation:

The air cooler is mounted next to the power transmission system of the Ridger planter during field operation and must withstand high temperatures and extremely dusty environments. The main challenges include spatial heat dissipation, maintaining stable dynamic pressure, and preventing clogging and corrosion.

DXC Air-cooled heat exchanger

Features: Stable heat dissipation; heat exchanger can be moved together with the system.

Application: Hydraulic power units

Challenges during installation:

The installation of an air cooler in a hydraulic unit requires consideration of oil circuit pressure loss, return oil pulsation, adjustment of heat dissipation capacity and vibration influences.



Manufacturing & Quality – A Global Advantage

All our processes are certified according to international standards:

- ISO 9001 (quality management)
- ISO 14001 (environmental management)
- ISO 10012 (measurement management)
- GB/T 29490-2013 (intellectual property management)
- CE marking for export to the EU

This enables us to meet our customers' highest demands worldwide for reliability and safety when using our premium products.

Air-Cooled Cooler

DXS Air-Cooled Cooler

Features: Versatile applications, excellent cooling performance, precise temperature control.

Application: Cone crushers in mining

Challenges during installation:

The air cooler is installed in cone crushers in mining in areas with high loads and is therefore subject to restrictions such as limited space, compatibility requirements, dust exposure and thermal fluctuations.





AD Air-Cooled Cooler

Features: Compact overall design, excellent heat dissipation performance

Application: Hydraulic systems in paper manufacturing plants

Challenges during installation:

The air cooler is located in the critical area of the hydraulic system of the paper manufacturing plant and is exposed to moisture and high temperatures. Installation is complicated by confined space, high dust exposure, impaired heat dissipation and system compatibility issues.

DXT Air-Cooled Cooler

Features: Compact design, large heat dissipation surface, significant temperature difference between inlet and outlet.

Application: Construction machinery industry – retrofitting excavators

Challenges during installation:

The device is mounted in the standard engine compartment of the excavator or near the rear of the counterweight cabin and is subject to restrictions in terms of space, environmental conditions, thermal adaptation and accessibility for installation/maintenance.



Driven by the mission to 'create a premium Chinese brand for international manufacturing,' we place customer satisfaction at the heart of everything we do. Through innovation, quality and service, we strive to be valued worldwide as a trusted partner for machinery and plant manufacturers.

For our customers, this means:

- First-class solutions
- Partnership-based cooperation and
- The advantage of production that combines innovative strength and quality at the highest international level.

Dongxu Hydraulics - precision, innovation and reliability for your success.

Plate heat exchanger/tube cooler



Features: Removable for cleaning; individual panels can be replaced independently of each other.

Application: Hydraulic systems in paper manufacturing plants

Challenges during installation:

The plate heat exchanger is installed in the core area of the paper mill's hydraulic station, where it is exposed to an environment with high temperatures, high humidity and strong vibrations. This poses three major challenges: spatial adaptation stability of the system and vibration coordination.





Water Cooler

Features: The copper tube configuration within the product ensures excellent thermal conductivity.

Application: Glass forming machines

Challenges during installation:

The water cooler is installed on glass forming machines located near high-temperature components within the workshop, which imposes restrictions in terms of space, high temperatures and coordination.

Refrigerated Fluid Chiller Systems (RFCS)



Our production and development centres in the important Chinese economic, production and trade centres of Foshan (Guangdong Province), Ningbo (Zhejiang Province) and Wuxi (Jiangsu Province) combine state-of-the-art manufacturing technology with the highest quality standards.



E-Mail: hannah@dxhydraulics.com WhatsApp: +86 139 2992 3909 WED.: www.dongxuyeya.com

Dongxu Jiangsu Co. Ltd.

ADD.: Build. 77, No. 288 HubinNorth Road, Wuxi, Jiangsu, China

TEL: +86 400 8776122

E-Mail: hannah@fsdxyy.com WhatsApp: +86 139 2992 3909

WED.: www.jshlk.com

Dongxu Europa GmbH

ADD.: Vogelsanger Weg 91, 40470 Düsseldorf, Deutschland

TEL: +49 211 2204 4607

E-Mail: europa@dxhydraulics.com WhatsApp: +49 177 6970 861 WED.: www.dongxuhydraulics.com