

APT INDUSTRIAL CHILLER

Custom Industrial Chiller Catalog

Project-based process cooling systems for special industrial applications.

High ambient chillers

Explosion-proof chillers

Stainless steel chillers

Mobile and vertical chillers

OEM integrated cooling systems

Engineering selection support

<https://applied-chiller.com/>



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IMAGE

PROJECT-BASED PROCESS COOLING SYSTEMS

APT Custom Industrial Chiller Overview

Custom process cooling support for projects where standard chiller models cannot fully match the application.

APT Industrial Chiller provides custom industrial chillers for process cooling projects where standard chiller models cannot fully match the cooling capacity, temperature, pump, voltage, material, structure, safety, installation, or OEM integration requirements. Each custom chiller project should be reviewed according to real application conditions before quotation.

- Factory direct industrial chiller manufacturer
- Standard and custom process cooling systems
- Air cooled and water cooled custom configurations
- Engineering review before model recommendation
- Support for high ambient, stainless steel, explosion-proof, mobile, vertical, and OEM cooling projects

Engineering Review Entry

Send your cooling application and site conditions for engineering review before quotation and final model confirmation.



COOLING METHOD

Air cooled and water cooled custom review

SELECTION BASIS

Project conditions and process needs

APPLICATION FOCUS

Special structure, material, safety, and OEM integration

QUOTATION NOTE

Final sizing after engineering review

Custom Industrial Chiller Solution Range

Typical custom directions reviewed according to cooling capacity, process fluid, site conditions, voltage, structure, and safety requirements.

CUSTOM DIRECTION	TYPICAL REQUIREMENT	TYPICAL APPLICATIONS	BEST FOR
High Ambient Industrial Chillers	Hot climate, high workshop temperature, outdoor or semi-outdoor installation	Middle East projects, tropical areas, hot factories, demanding condenser conditions	Projects where ambient temperature affects chiller selection
Explosion-Proof Industrial Chillers	Special safety-classified environment	Chemical plants, coating lines, solvent areas, dust environments, hazardous production areas	Applications requiring explosion-proof electrical review
Stainless Steel Industrial Chillers	Clean, corrosive, food-related, or special water quality cooling	Food processing, chemical process cooling, clean process water, corrosive environments	Projects requiring stainless steel tank, piping, frame, or wetted parts
Vertical Industrial Chillers	Limited floor space or compact machine-side installation	Production machines, equipment-side cooling, compact factory layouts	Projects with limited installation space
Mobile Industrial Chillers	Movable cooling equipment	Testing, maintenance, temporary process cooling, multi-station factory use	Projects requiring flexible cooling location
Solar or Special Power Chillers	Special voltage, remote site, solar-related application, or non-standard power condition	Remote cooling, solar-assisted systems, special electrical supply projects	Projects requiring electrical design review
OEM Integrated Chiller Systems	Chiller integrated into customer equipment	Industrial equipment manufacturers, test systems, OEM machines	Machine builders requiring customized size, control, pump, and layout

Main Custom Chiller Categories

Representative custom directions commonly reviewed for project-based industrial cooling.

High Ambient Industrial Chillers

High ambient chillers are designed for hot climates, high workshop temperature, outdoor or semi-outdoor installation, and demanding condenser conditions. Review focuses on ambient temperature, condenser capacity, ventilation, compressor protection, and operating stability.

Explosion-Proof Industrial Chillers

Explosion-proof industrial chillers are reviewed for safety-classified environments where electrical configuration, control components, installation condition, and process risk need careful evaluation before quotation.

Stainless Steel Industrial Chillers

Stainless steel chillers can be configured for food processing, clean process cooling, corrosive environments, and special water quality conditions with project-reviewed tank, piping, frame, or wetted part direction.

Vertical Industrial Chillers

Vertical chillers are suitable for compact machine-side installation where floor space is limited. Review includes airflow, service access, tank layout, pump location, and installation clearance.

Mobile Industrial Chillers

Mobile chillers are used for flexible cooling, test stations, temporary process cooling, and equipment that may need to move between production areas or maintenance zones.

OEM Integrated Chiller Systems

OEM integrated chillers are configured for machine builders requiring special dimensions, control interface, voltage, pump selection, and installation layout to match the host equipment.



STAINLESS STEEL PROCESS COOLING DIRECTION



EXPLOSION-PROOF PROJECT DIRECTION

What Can Be Customized in an Industrial Chiller?

Typical configuration points that may be reviewed before finalizing a custom industrial chiller.

Cooling Capacity Matched to actual heat load and operating duty.	Target Temperature Reviewed by process setpoint and temperature stability needs.	Condenser Type Air cooled or water cooled direction according to site utilities.	Refrigeration Design Compressor, refrigerant, and control logic by application direction.
Pump Flow and Pressure Selected according to circuit resistance, flow, and loop distance.	Tank Volume Included when buffer or process reserve is required.	Tank and Piping Material Standard, stainless steel, or process-compatible material review.	Stainless Steel Structure Applied when corrosion or hygiene review is needed.
Voltage and Frequency Adjusted to destination country or project power condition.	Electrical Control Controller, alarms, interface, and protection logic review.	Multiple Cooling Loops Considered when equipment requires separate circuits.	High Ambient Design Condenser margin and protection review for hot environments.

Additional Customization Review Items

Additional project-specific items that may affect cabinet layout, installation method, controls, safety logic, and process-side compatibility.

Explosion-Proof Direction Electrical and installation review for safety-classified areas.	Mobile Frame Wheel base, stability, and movement path consideration.	Vertical Structure Compact layout review for machine-side installation.	Outdoor Review Weather, ventilation, and service access condition review.
OEM Interface Communication, footprint, cable exit, and piping layout review.	Fluid Compatibility Matched to clean water, process water, or special fluid needs.	Heat Exchanger Selection Chosen by water quality, fluid side, and operating condition.	Protection Logic Special alarms and interlocks by project or equipment requirement.

Customization Note

Final customization should be confirmed according to cooling capacity, temperature range, fluid type, pump requirements, ambient condition, voltage, installation space, and safety requirements.

Typical Applications for Custom Industrial Chillers

Application directions commonly associated with custom industrial cooling review.

Thermal Spray Cooling

Custom chillers can support plasma spray, HVOF, power supply, torch, and auxiliary equipment cooling where temperature stability and pump performance are important.

Chemical Process Cooling

Custom chillers can be reviewed for chemical tanks, reactors, special fluids, corrosion resistance, and safety-related process cooling.

Food Processing Cooling

Stainless steel or customized chillers may be used for clean process cooling, food-related cooling, and special water quality requirements.

Laser and CNC Equipment Cooling

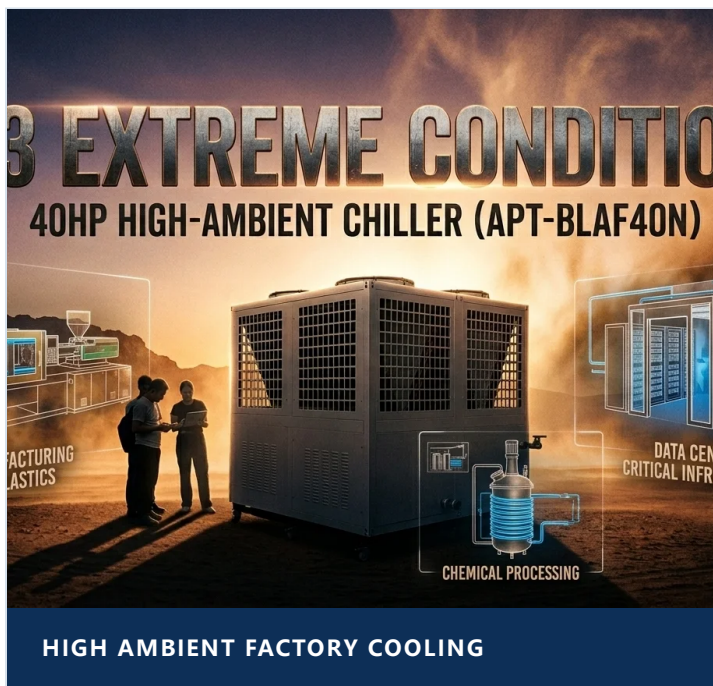
Compact, vertical, or OEM integrated chillers can support machine-side cooling with limited space and stable temperature control.

High Ambient Factory Cooling

High ambient custom chillers are used when workshop temperature, outdoor installation, or condenser ventilation conditions are demanding.

OEM Equipment Cooling

Custom chillers can be configured for machine builders requiring special size, control interface, pump performance, voltage, or installation layout.



How APT Reviews a Custom Chiller Project

A practical six-step engineering path from application review to quotation discussion.

STEP 1

Application Review

Understand the process, equipment, heat load, temperature target, and operating condition.

STEP 2

Cooling Method Selection

Review whether air cooled, water cooled, compact, stainless steel, high ambient, or another custom direction is suitable.

STEP 3

Pump and Fluid Review

Confirm process fluid, pump flow, pump pressure, tank volume, pipe distance, and compatibility requirements.

STEP 4

Site Condition Review

Review ambient temperature, ventilation, condenser water, installation space, voltage, and maintenance access.

STEP 5

Custom Configuration Proposal

Recommend standard modification or custom chiller configuration according to the confirmed project requirements.

STEP 6

Quotation and Technical Discussion

Prepare quotation, technical notes, and further discussion based on confirmed information.

Project Discussion Note

Custom projects may start from a modified standard chiller direction before finalizing a fully custom configuration.

Information Needed for Custom Chiller Selection

Prepare the following data before requesting quotation or engineering review.

- Cooling application or equipment type
- Required cooling capacity or heat load
- Target water or fluid temperature
- Inlet and outlet temperature if available
- Process fluid type
- Pump flow and pressure requirements
- Tank volume if required
- Pipe distance or pressure loss if available
- Ambient temperature
- Air cooled or water cooled preference

- Condenser water condition if water cooled
- Voltage and frequency
- Installation space and ventilation condition
- Indoor, outdoor, or semi-outdoor installation
- Material requirements such as stainless steel
- Safety requirements such as explosion-proof configuration
- Mobility or vertical structure requirement
- OEM integration or control interface requirement
- Operating hours or duty cycle

Starting Point

If the exact cooling capacity is not available, APT can help review your process conditions and recommend a suitable starting configuration.

Example Custom Chiller Directions

Concise project-style custom directions for early discussion and internal review.

High Ambient Air Cooled Chiller

A custom air cooled chiller direction for hot climate or high workshop ambient temperature where condenser capacity, airflow, and compressor protection require additional review.

Explosion-Proof Industrial Chiller

A custom chiller direction for safety-classified environments where electrical components, control design, and installation conditions need project-specific evaluation.

Stainless Steel Water Cooled Chiller

A custom water cooled chiller direction for clean process cooling, food processing, corrosive environments, or projects requiring stainless steel tank and piping.

Vertical or Mobile Chiller

A custom structure direction for limited installation space, equipment-side cooling, testing, maintenance, or flexible production use.



STAINLESS STEEL
DIRECTION



EXPLOSION-PROOF
DIRECTION



SPECIAL POWER DIRECTION

Need a Custom Industrial Chiller for Your Project?

Send your application, cooling capacity, target temperature, process fluid, pump requirements, voltage, ambient temperature, installation condition, and special requirements. APT can review your project and recommend a suitable custom industrial chiller configuration.

<https://applied-chiller.com/request-a-quote/>

Contact: <https://applied-chiller.com/contact-us/>

Industrial Process Cooling Systems for Real Factory Applications
