



Holtop Industrial Air Handling Unit

Holtop · International BAQ Team

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Product

Main category Main AHU section
50B series Heating Section
80C series Coil and its vavels group
80B series Filter Section
Spray Section

Application

Automotive Manufacturing Industry
High-Speed Train Manufacturing Industry
Aircraft Manufacturing Industry
Large Size Vehicle (Truck, Trailer)
Manufacturing Industry
Other Industry

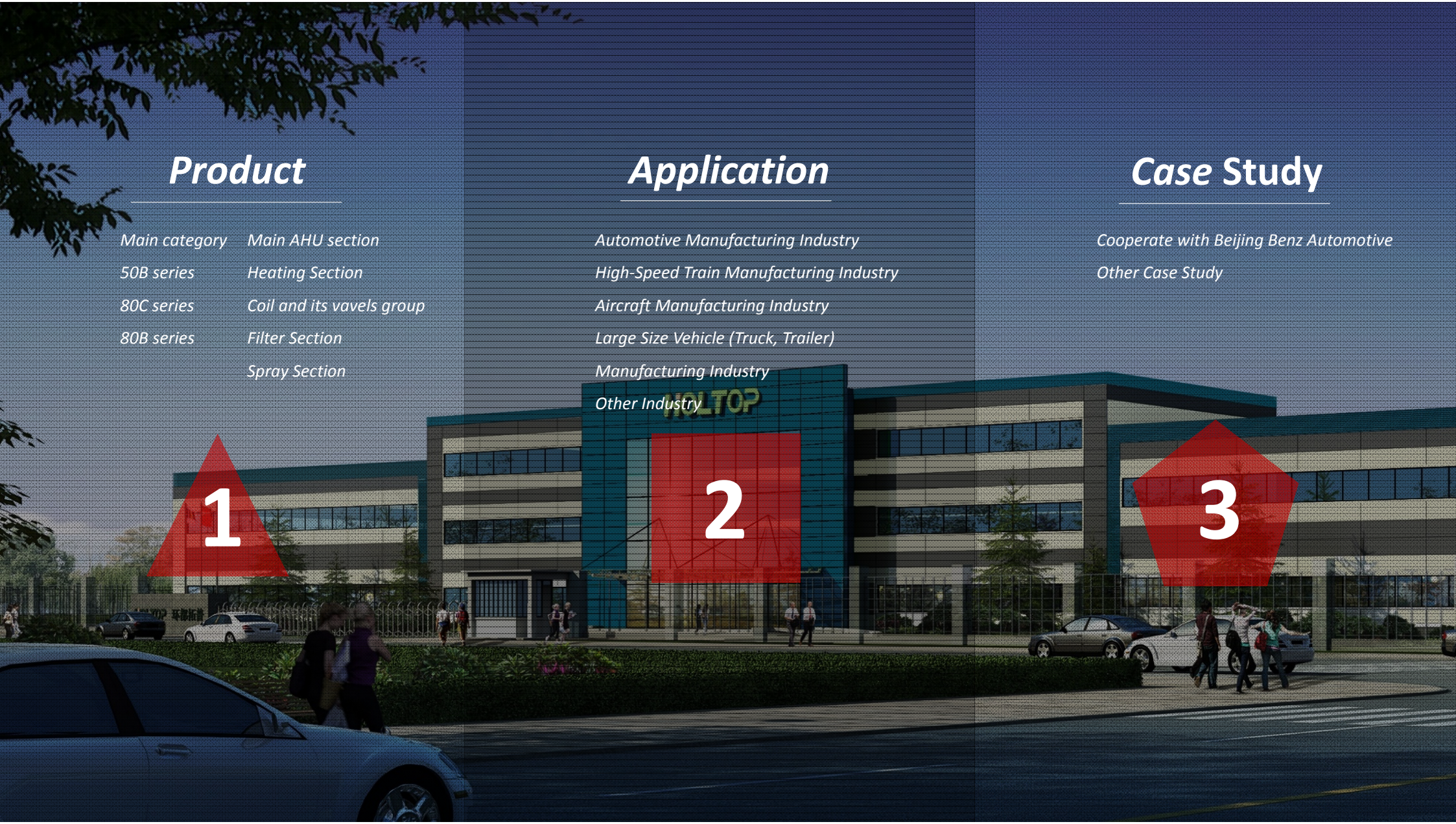
Case Study

Cooperate with Beijing Benz Automotive
Other Case Study

1

2

3



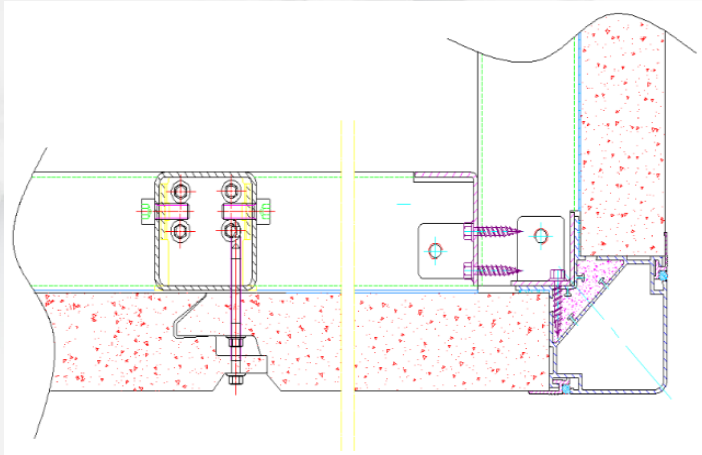


Product

- ⊙ **Product Category**
- ⊙ **50B Series**
- ⊙ **80C Series**
- ⊙ **80B Series**
- ⊙ **Main AHU Section**
- ⊙ **Heating Section**
- ⊙ **Coil Heating & Valve Module**
- ⊙ **Filter Section**
- ⊙ **Spray Section**

Product**Air Flow Range****50B****10,000~280,000CMH****80C****20,000~320,000CMH****80B****100,000~320,000CMH**

50B Series



► 50B series panel assemble diagram



► 50B series panel project picture

Feature

● Panel

- Thickness: **50mm**. Internal and external panel is made of combined bite-type structure panel
- Panel connection port by "Z" style
- External panel with color coated steel, thickness of **0.6mm/0.8mm**
- Internal panel: Galvanized steel, stainless steel optional, thickness of **0.6 mm (optional 0.75mm)**
- Flexible to dis-assemble and easy to re-assemble at project site.
- Insulation material: Flame retardant PU or Rockwool

● Framework

- High-strength composite aluminum alloy framework
- Frame beam and expose beam are made of aluminum alloy and injected with PU for cold bridge breaking.
- Cold bridge factor meets TB2 grade, Thermal transmittance meets T2
- Internal panel equipped with rectangular galvanized tube to enhance the AHU structure strength.

80C Series



▶ 80C series AHU



▶ 80C series AHU

Feature

● Panel

- Thickness: **80mm**. Internal and external panel is made of combined bite-type structure panel.
- Panel connection port by "Z" style.
- External panel is with color coated steel, thickness of **0.6mm/0.8mm**
- internal panel: Galvanized steel, stainless steel optional, thickness of **0.6 mm (optional 0.75mm)**.
- Flexible to dis-assemble and easy to re-assemble at project site.
- Insulation material: Flame retardant PU or Rockwool.

● Framework

- High-strength composite aluminum alloy framework.
- Frame beam and expose beam are made of aluminum alloy and injected with PU for cold bridge break.
- Cold bridge factor meets TB2 class, Thermal transmittance meets T2 class.
- Internal panel is equipped with rectangular galvanized pipe to enhance the AHU structure strength.

80B Series



▶ 80B series panel



▶ 80B series rock wool insulation

AHU Comply Standard

- EN1886:2007

Air Handling Unit Mechanical Performance

- EN13053:2001

Air Handling Unit Ratings and Performance for units, components and Sections

Features

- HJK-80B Air Handling Unit is using pure panel structure with 80mm rock wool insulation material. The framework is with modular design.
- Internal panel is galvanized steel/stainless steel with thickness of **2.0/1.5mm**, external panel is **0.8/0.6mm** corrugated galvanized steel.
- **AHU bottom is with fully welded to guarantee ZERO water and air leakage. Top panel and side panel is connected by bolt.**
- Insulation material with rockwool. Use "Z" type reinforce structure, panel connection with bolt. Surface panel us corrugated galvanized steel.
- All components inside the AHU is connected by bolt.

80B Series

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Test By EN1886:2007 Standard

- *Mechanical Strength D1*
- *Thermal Transmittance T2*
- *Filter By-pass Air Leakage Rate F9*
- *AHU Air Leakage Rate L1*
- *Cold Bridge TB2*

80B Series

Compression Resistance & Leakproofness

80B series AHU is designed for large airflow (100,000 - 320,000 m³/h). It is with "Z" type reinforced structure to enhance the strength of each section in the AHU.

Panel connection is sealed with bolts, which are covered by insulation rubber to prevent air leakage from gaps. External panel is made of corrugated galvanized steel with great strength.

Noise Reduction & Anti-Vibration

Dual centrifugal fans are equipped inside the AHU, with high efficiency, low working noise and pure cleanliness. At the bottom of the fan, there are absorbers to soften the vibration. Air outlet and AHU panel are with flexible connection, so the vibration is effectively blocked.

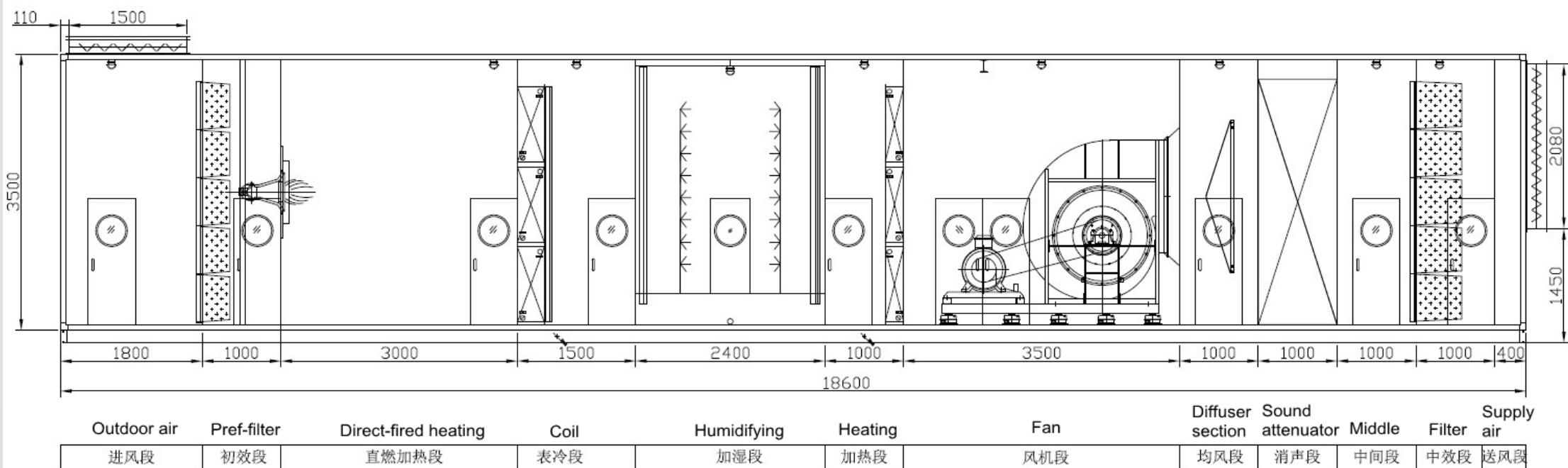


Series Summary



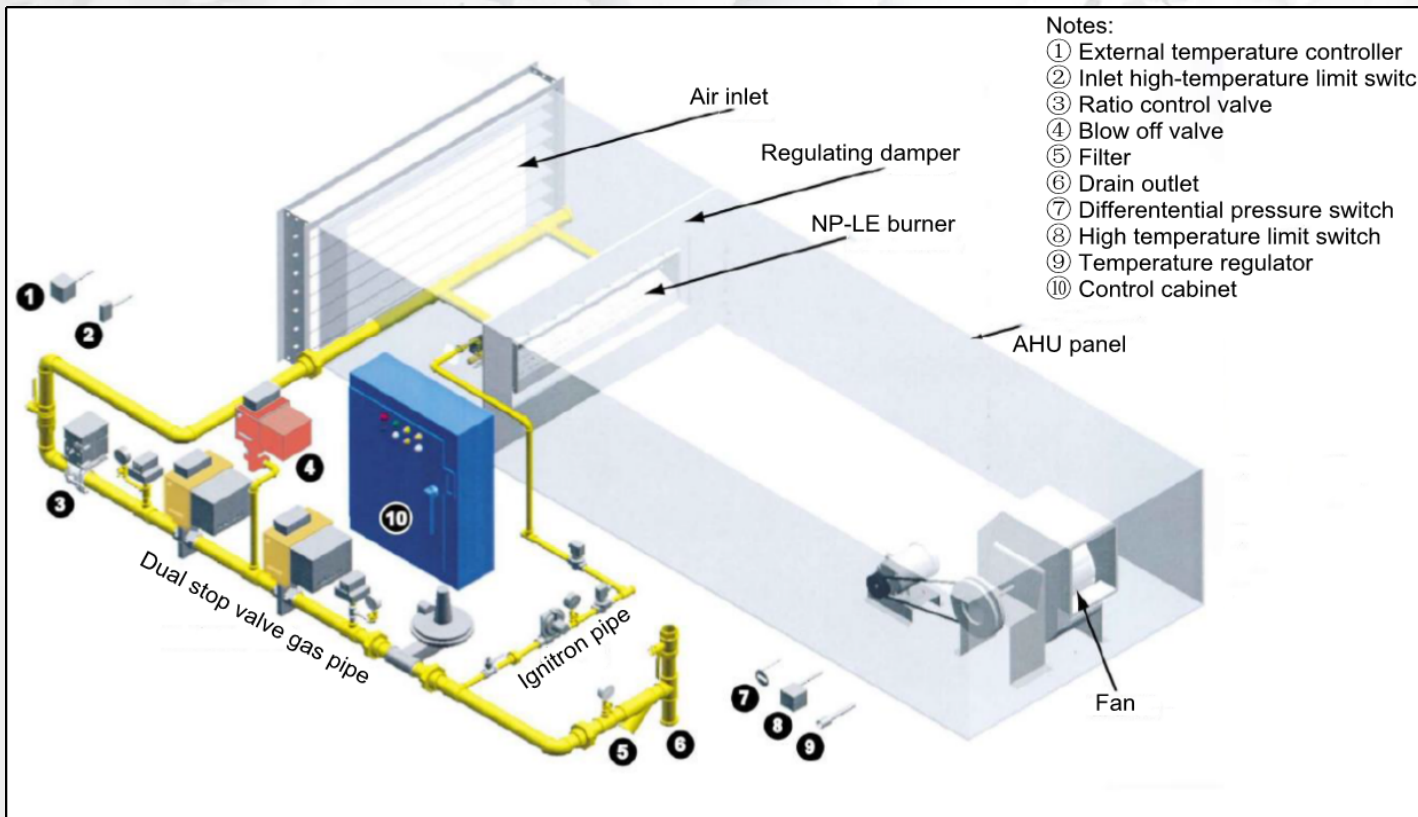
Type	50B	80C	80B
Structure	Frame structure Expose beam connection	Frame structure Expose beam connection	Pure panel structure smooth internal side
Insulation material	PU/Rockwool	PU/Rockwool	Rockwool
Insulation thickness (mm)	50	80	80
Density (kg/m ³)	≥45/60-120	≥45/60-120	60-120
Flame retarded class	B1/A	B1/A	A
Airflow range (m ³ /h)	10000-280000	20000-320000	100000-320000
Total pressure (Pa)	≤2800	≤3200	≤4000
Casing mechanical strength	GB14294-2008	GB14294-2008	EN1886-2007 D1
Thermal transmittance	EN1886-2007 T2	EN1886-2007 T2	EN1886-2007 T2
Cold bridge	EN1886-2007 TB2	EN1886-2007 TB2	EN1886-2007 TB2
Air leakage	Smaller than clean room AHU	Smaller than clean room AHU	EN1886-2007 L1
Comply standard	GB	GB	European

AHU Main Section



Heating Section

Natural Gas Heating System



Cost Analysis between Natural Gas Heating & Steam Heating

Heating type	Natural Gas Heating (MAXON NP-LE/APX direct heating device)	Steam Heating
Heating method	Direct heating	Indirect heating
Heating efficiency	100%	50%
Max Heating capacity	1,600,000 kcal/hr	3,200,000 kcal/hr
Consumption (Max heating cap)	188m ³ /hr of natural gas (This is the max output gas consumption) (Normally it is only 50% in daily running)	5.33T/hr of steam
Cost(Chinese local price)	\$0.2736/m ³ (natural gas)	\$15.20/T (Steam)
Cost for a year (8 hours/250 working days)	\$102,857	\$162,006

Basic Info.

- ① Temperature increase : -5°C to +25°C
- ② Max heating capacity (Heating power):
160 million kcal/hr
- ③ NG heat value: 8500 kcal/m³
- ④ Unit price: 1.8 rmb/m³
- ⑤ Steam heating: 600,000 kcal/T,
- ⑥ Unit price: 100 Rmb/T

Heating Section

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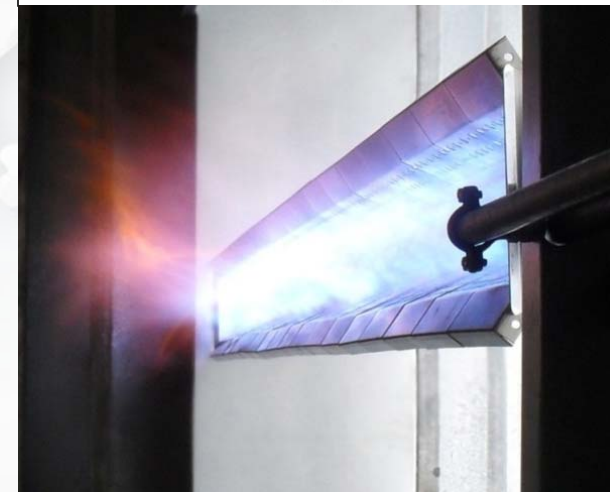
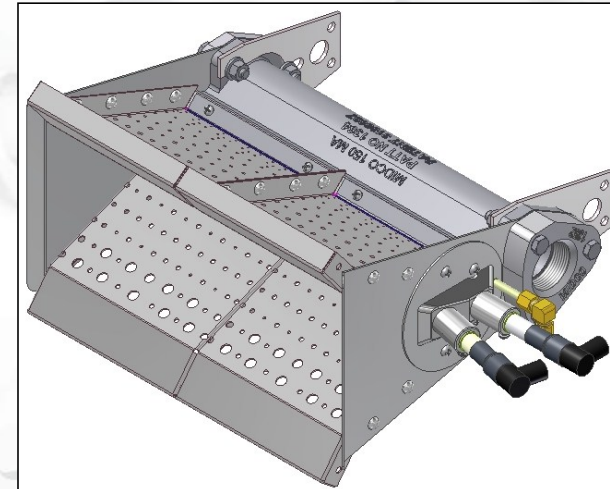
Natural Gas Direct-Fired Heating System

Main Applications

- *Air handling & heating for paint spray workshop*
- *Heating for HVAC replacement air in factory and warehouse*
- *Drying & heating for grain and cereal*
- *Paint drying, curing oven, recirculation furnace*
- *Drying for printing newspaper*

Advantages Over Steam Heating System

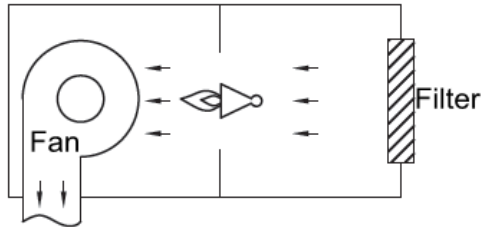
- *Lower up-front investment*
- *More energy saving during heating process*
- *Lower maintenance cost, fewer easily-damaged parts*
- *Simple installation of pipe network, less space occupation in workshop*
- *Shorter time to heat up outdoor fresh air, higher accuracy on supply air temperature control*



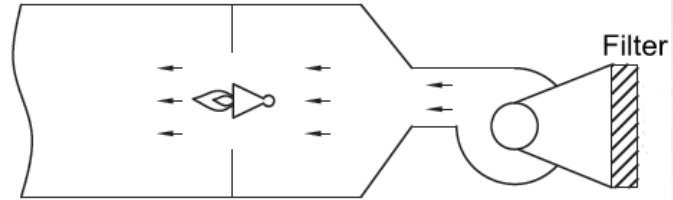
Heating Section

NG direct heating system

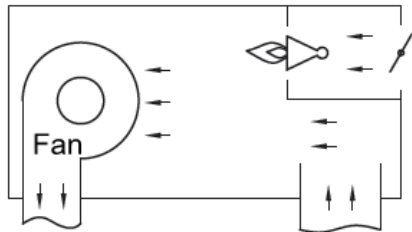
Full fresh air inhale type system



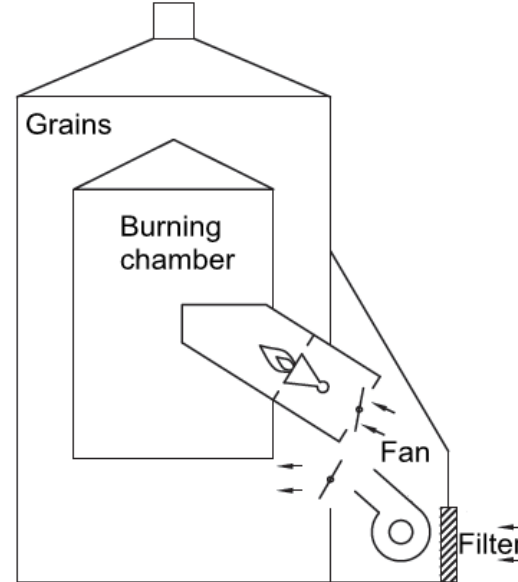
Full fresh air blast type system



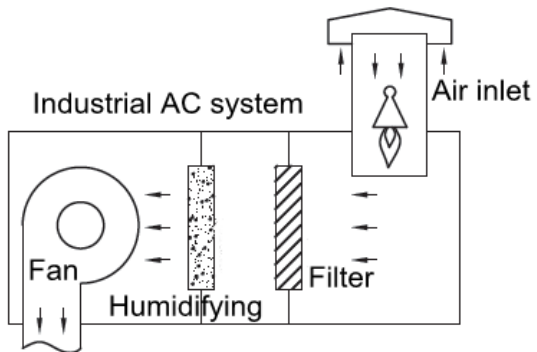
Partial air recirculation system



Grain drying system



Industrial AC system



Heating Section

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Onsite Picture: Geely Auto Belarus Painting Factory



Heating Section

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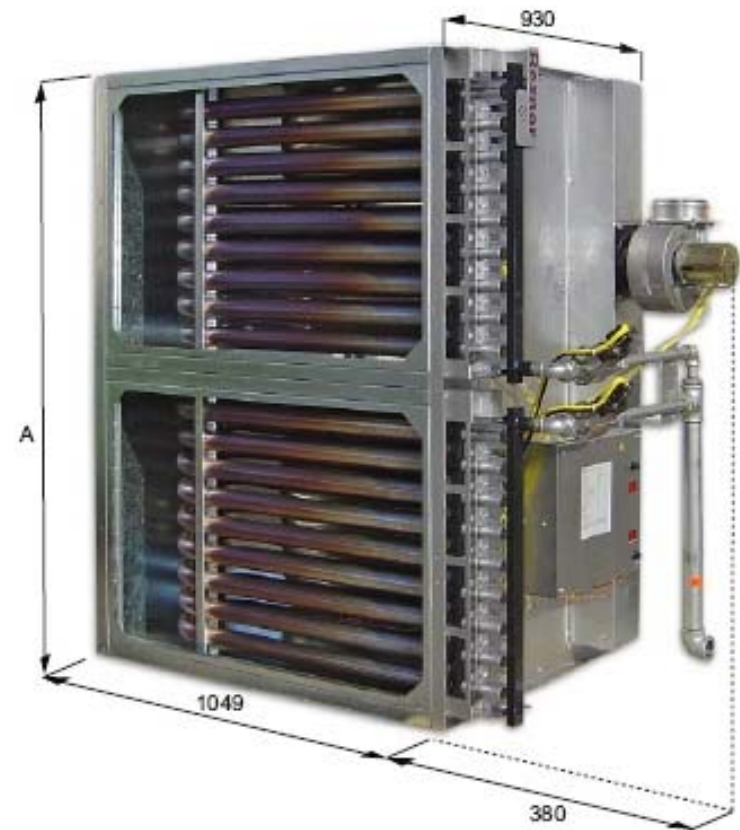
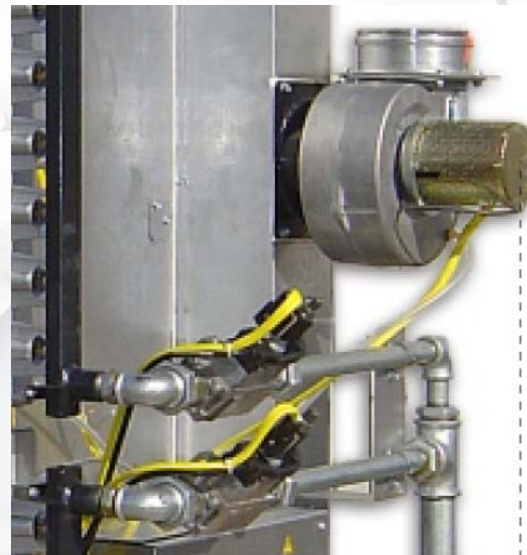
❖ NG Indirect Heating System

Application:

- Lower airflow
- Densely populated place
- Areas require high air quality

Heating way:

Gas burning inside the coil. There is independent ventilation, and the sweep gas was exhausted to outside



Coil Heating & Valves Module

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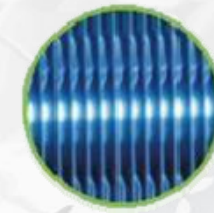
- ▶ *Frame work is made of anti-corrosive galvanized steel.*
- ▶ *With integral set drain pan, and the coil can be moved from the drain pan, easy maintainence.*
- ▶ *PVC, aluminum and stainless steel water eliminator are optional*



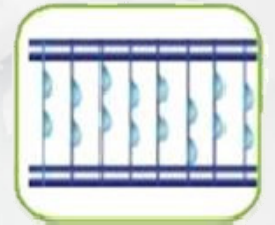
Cooper tube with aluminum fin water heating coil



Aluminum fin



Hydrophilic coating

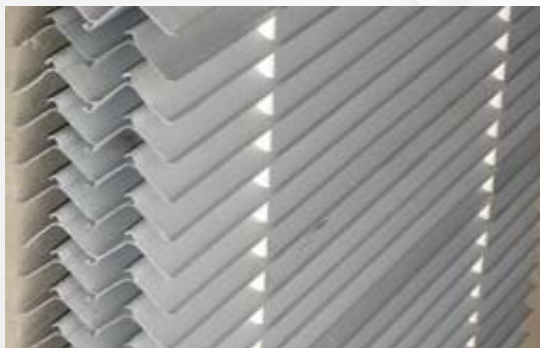


- ▶ *Copper pipe fixed with oblique ripple double flanged aluminum fin*
Hydrophilic coated fin to increase 5% heat exchange efficiency
- ▶ *High thermal exchange of copper tube with aluminum fin is fixed with mechanical expand*
- ▶ *Equipped with release valve and drain valve for easy drainage and maintenance.*
- ▶ *2.0Mpa Pressure for leakage inspection at factory production line*

Coil Heating & Valves Module

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- Designed working pressure **1.6MPa** , with **2.4MPa** water pressure testing
- Coil header equipped with drain valves at lowest side, and air release valves at highest side.
- **Cooper tube with aluminum fin** (Hydrophilic fin or cooper fin)
- Seamless steel coil header (Optional of cooper or stainless steel)
- No.of coil rows (2~10rows)
- Galvanized steel frame work of coil (Stainless steel optional)
- **Slop drain pan, stainless steel**
- Aluminum water eliminator (PVC or Stainless steel optional)



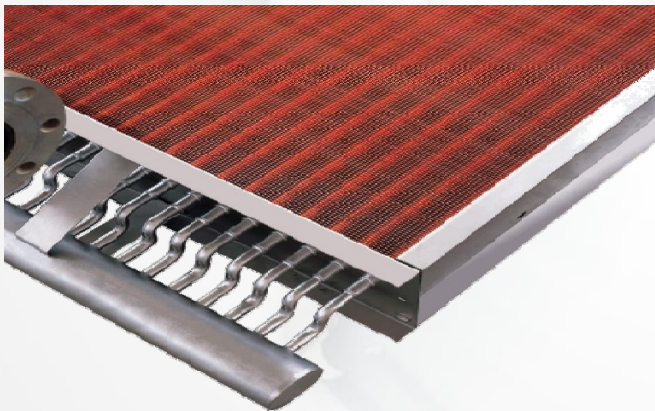
Coil Heating & Valves Module

HOLTOP



Steam Coil Heater

- 1-2 rows
- Cooper tube with cooper fin to prevent thermal stress from stringing

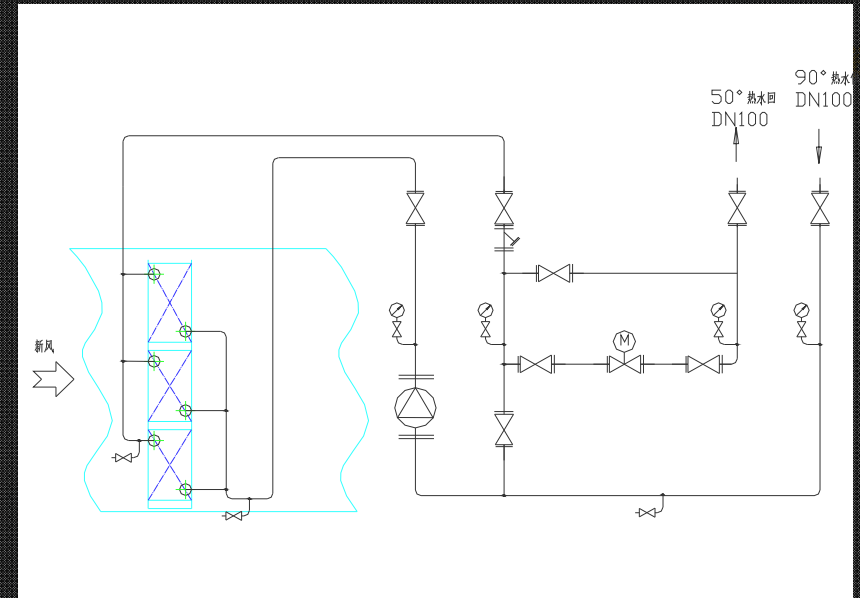
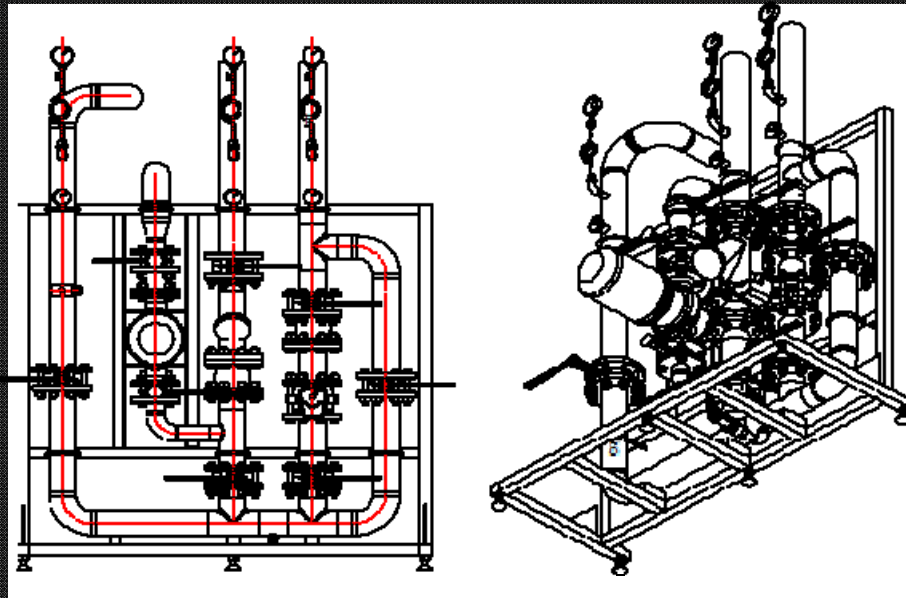


Electric Heater

- ① Equipped 90 °C thermal protection switch
- ② Steel pipe or stainless steel pipe
- ③ Pure pipe or pipe with fin
- ④ Control by segmented or silicon controlled rectifier

Coil Heating & Valves Module

Holtop Industrial Recirculation Water Pump



Note:

Hot water inlet/outlet temperature difference is 40C, by the help of internal circulation system, the circulation water temperature difference of entering/leaving the coil changes to 10C, and the water flow rate increase for 4 times

Coil Heating & Valves Module

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- ▶ *Seamless steel pipe (SUS304 pipe/ Galvanized steel pipe).*
- ▶ *Electrical regulating valve for DN200 or smaller pipe. Electrical butterfly valve for pipe bigger than DN200*
- ▶ *Dual pipe lines is recommended for DN200 or above, to have more accurate control of water flow.*
- ▶ *Use PID to regulate valve opening degree, adjust water flow, control temperature and humidity.*



In order to help client reduce initial investment and equipment operation cost in winter season, Holtop designed large-temperature-difference and small-water-flow solution for the AHU's heater, to meet anti-freezing requirements in highland or cold area.

On top of the large-temperature-difference and small-water-flow solution, Holtop then developed circulating water pump solution, which can effectively protect the heating coil from being frozen caused by lack of water flow.

Coil Heating & Valves Module

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Antifreezing of Air Conditioning Heater

Case Study : VOLVO Factory Heater Internal Circulating Pump

Location : Zhangjiakou, China



Filter Section

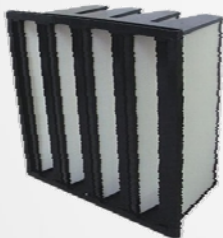


- **Filter Class :** G2-G4
- **Material & Structure:**
- *The non-woven fabric is arranged in the frame of PVC or aluminium alloy in W shape, and the filter material of non-woven fabric is washable.*



- **Filter Class :** F5-F9
- **Material & structure:**
- *The frame of medium-effect bag filter is made of aluminium alloy. There are two kinds of filter materials, chemical fiber filter material and glass fiber filter material. The filter material is disposable.*

Secondary filter



- **Filter Class :** H10-H13
- **Material & structure:**
- *Ultra-fine fibre filter paper for filter material, and galvanized steel plate for frame.*

HEPA filter



Automatic Winding Air Filter and Automatic Back Blowing Barrel Filter

Filter Section

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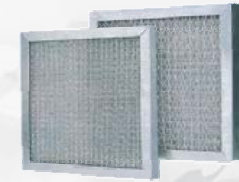
Unit Framework



Pressure Gauge



Electronic Purification Filter



Metal mesh filter

Other Types of Filter That Holtop Can Also Provide

Electronic Purification Filter, Activated Carbon Filter, Metal Mesh Filter, High-Temperature-Resistant High-Efficiency Filter, Chemical Filter, etc

- All filters of Holtop HJK unit are made of materials that are not conducive to microbial growth.
- The sizes of filters adopt general specifications to facilitate user maintenance and replacement.
- The filter is installed by frame unit or pulling type, which is convenient for installation and disassembly.
- Differential pressure gauge or differential pressure switch is equipped to remind the user to maintain or replace the filter.

Spray Section

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Operation Display of Double Pressure Gauge



All stainless steel material, water level control and overflow filtration system



Large nozzle structure



Optional dual pump system

The humidifier can be equipped according to the customer's requirements.

- *Isothermal dry steam humidification*
- *Isothermal spraying humidification*

Overview:

- **Section length: 2000 mm**
- **Spraying system: Mist Spray and Wide Spray, isoenthalpy humidification**
- **Optional Sterilization function: Chemical Sterilization or UV Lamp**

Holtop Spraying System Feature

- Adopt **German Dürr** spray humidifier technology, providing good outcome with stable performance.
- Using **large spray holes** to improve the effect of humidification and cooling
- Optional **dual pump structure**, proportional electric valve for humidifying control
- Water pump separate control and **dual linkage humidification control** mode
- **Dual pressure gauges** display pressure and working state.
- All **stainless steel** structure, automatic protection of high and low water level
- **Overflow filtration system**
- **Circulating water tank**, deodorization, antiseptis and disinfection
- Perfect design, constant temperature hot water supply, humidifying and cooling mode

Spray Section

HOLTOP

High-Efficiency Spray Humidification Section



Competitor Comparison



MAC.W



Trane Quantum XP



AT-9



Carrier 39XT



XDM-XT



Competitor Comparison



Parameter Table Comparison

Brand	CLIMAVENETA-MAC. W	TRANE Quantum-XP	CARRIER-39XT	MCQUAY-XDM-XE	AL-KO AT4	HOLTOP 80B
standard	Priority EN1886:2007	Priority EN1886:2007	Priority EN1886:2007	Priority EN1886:2007	Priority EN1886:2007	Priority EN1886:2007
Air volume range	200000m3/h	200000m3/h	200000m3/h	200000m3/h	200000m3/h	350000m3/h
Cold Bridge Coefficient of Frame	European standard TB2 Grade	European standard TB1 Grade	European standard TB2 Grade	European standard TB2 Grade	European standard TB3 Grade	European standard TB2 Grade
Frame strength	European standard D1 Grade	European standard D1 Grade	European standard D1 Grade	European standard D1 Grade	European standard D1 Grade	European standard D1 Grade
Air leakage rate	European standard L1 Grade	European standard L1 Grade	European standard L1 Grade	European standard L2 Grade	European standard L1 Grade	European standard L1 Grade
Box Panel	Density:48KG/M3, European Standard:D1 Grade(the highest)	Density:48KG/M3	Density:48KG/M3	Density:48KG/M3	Density:48KG/M3	Density:60-120KG/M3 (Optional)
Box Plate Thickness	50mm	50mm	50mm	50mm	45MM	80mm
Wall panel thickness	Internal&external 0.5-1.2mm	Internal&external 0.5-1.0mm	Internal&external 0.5-1.0mm	Internal&external 0.5-1.0mm	Internal&external 0.5-1.5mm	external:0.6/0.8mm Internal:1.5/2.0mm
Heat preservation	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Rockwool or glass wool	Rockwool or glass wool
Flame resistan class	B1	B1	B1	B1	A	A
Unit structure	Frame plate	Frame plate	Frame plate	Frame plate	Frame plate	Plate frameless
Application	Factory Clean Workshop, High-end commercial buildings, etc.	Factory Clean Workshop, High-end commercial buildings, etc.	Factory Clean Workshop, High-end commercial buildings, etc.	Factory Clean Workshop, High-end commercial buildings, etc.	Factory Clean Workshop, High-end commercial buildings, Automobile painting workshop, etc.	Factory Clean Workshop, High-end commercial buildings, Automobile painting workshop, etc.
Unit commonality	Standard unit, Non-standard design is not available	Standard unit, Non-standard design is not available	Standard unit, Non-standard design is not available	Standard unit, Non-standard design is not available	Standard unit, Non-standard design is not available	Non-standard design is available

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Application

- ① *Automotive Manufacturing Industry*
- ① *Oversize Vehicles Industry*
- ① *Aircraft Manufacturing Industry*
- ① *Other Industries*

Applications

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Automotive Manufacturing Industry



Punching Workshop



Welding workshop



Painting workshop



Engine Production workshop



Assembly workshop

Applications

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High-Speed Train Manufacturing Industry



Grinding workshop



Painting workshop



Drying workshop

Applications

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Aircraft Manufacturing Industry

Due to the size of the aircraft, all process should be completed in the same workshop. Using **Multi-Condition Air Handling System** as solution.



Painting workshop



Painting process



Grinding process

Applications

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Other Industry



Electronics



Tobacco



Textile



Project Refererence

- ① *Cooperation with Beijing Benz Automotive Co., Ltd*
- ② *Other Cases*

Project Reference

HOLTOP

Follow the German “Daimler” Automotive Manufacturing HVAC Standard

Daimler AG with a-hundred-year history, has developed its unique automotive workshop HVAC design and standard, which is considered the highest and best standard in the industry.

1. Strictest environmental standard

- No poisonous/harmful medium in equipment ;
- No harmful medium generated during running ;
- Rejected material should be environment friendly.

2. Strictest certificate for company and product.

- Supplier should fully run the Management System Certification(Quality, Environment, Occupational health, etc)
- Necessary certification by local government
- Core item should have CE and Eurovent certification

3. Strictest standard on technical and energy saving.

- Cold bridge factor: TB2(EU standard) ;
- With efficient energy recovery system ;
- Fan and motor energy efficiency: IE2(EU standard) ;
- Air leakage <1%(Purification HVAC standard) ;
- 4 conditions designed for 4 seasons ;
- Heat recovery wheel with automatic cleaning device.

4. Easy control and maintenance

- AHU with digital automatic control system
- Unit should perform stably and less failure, simple structure, easy maintenance(such as access door, observation window, inspection lamp, movable hanger, anti-skid pedal, etc)

5. Longest service life standard

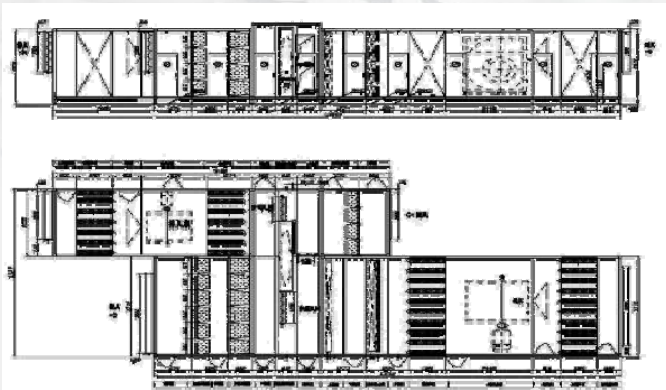
- Service life>15 years for regular running
- Main component service life>50,000 hours

6. Highest after-sale service standard

- Above the average warranty period in the industry ;
- Supplier should comply the service system guarantee, and provide service to “Daimler” in 365 days.

Project Reference

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Solution design



Centralized control system



Project site communication

Project Reference

Mercedes-Benz & Holtop Cooperation Timeline

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2011

*First cooperation:
Production plant and
auxiliary plant.*

*Holtop gained the trust
from Mercedes-Benz for
providing high quality
solution and reliable
services.*

2012

*Assembly workshop and
Engine workshop*

*Contract value: 19.41 million
RMB*

AHU quantity: 99 sets

Total airflow: 22 million m³/h

2016

FMA Welding Workshop.

*Contract value: 14.71 million
RMB*

AHU quantity: 21 sets

*Total airflow: 1.68 million
m³/h*

2017

Press Workshop Renovation

*8 years along the way,
Holtop use the best product
and service to help
Mercedes-Benz manufacture
world's top class cars.*

2013

*R&D Center and Welding
Workshop*

*Contract value: 42.26 million
RMB*

AHU quantity: 93 sets

Total airflow: 4.15 million m³/h

2018

Office Building

*Electric Car's Battery
Workshop*

Project Reference



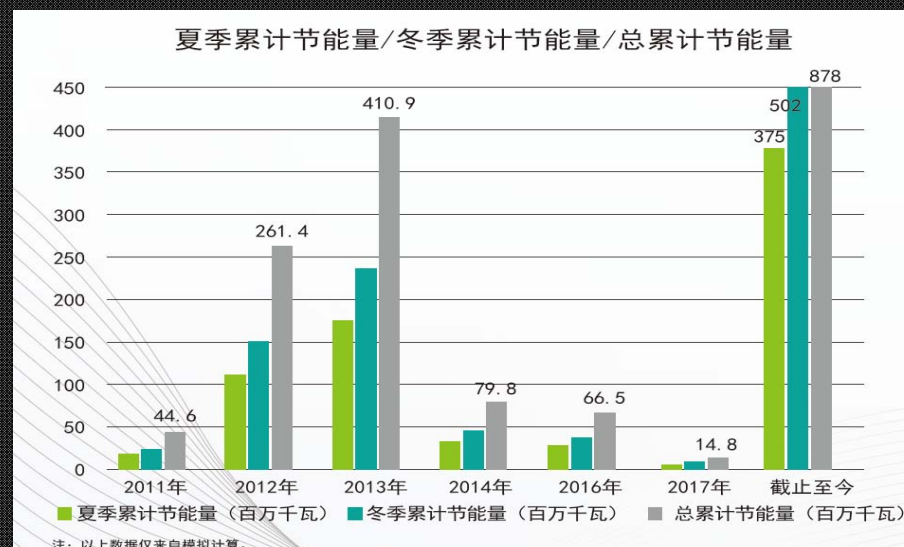
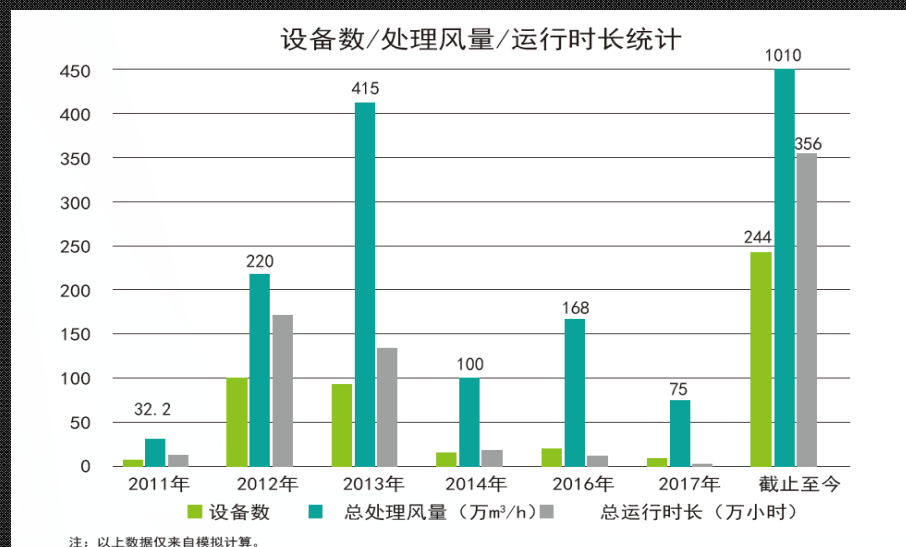
Mercedes-Benz & Holtop Cooperation

Supply AHU over **200** units

Handle air over **10,000,000** m³/h

Serve time over **3,000,000** hours

Save energy over **100,000,000** RMB



Project Reference

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BMW Brilliance Automotive Ltd.

*2009, provide rotary heat recovery AHU with 80,000 m³/h;
2011, successfully provide solution for assembly workshop.*



Project Reference

HOLTOP



Zhongtong Bus Holding Liaochen New Factory

2013, supply 10 units of AHU (airflow 133700~164000 m³/h) specially designed for the automotive painting Workshop.

▶ Spray Humidifying

▶ Gas Direct Heating



Project Feature:

- ✓ Dual pumps with proportional electric valve to adjust humidifying capacity
- ✓ Pumps with separate and gang control to switch the humidifying method
- ✓ Stainless steel structure, water over/under limitation protection
- ✓ Overflow and filtration protection
- ✓ Circulation water tank with deodorization and anti-corrosion

Project Reference



Baic Motor Corporation - R&D Base

- 2011, supply R&D Center with 35 units of heat recovery AHU.
- 2013, supply BAIC - SAAB powertrain R&D project with 37 units of heat recovery AHU and FAHU.



▶ Onsite Picture: AHU Commissioning



Chery Automobile

- 2012, supply Dalian base punching&welding plant with 4 units of AHU(airflow 60,000m³/h, gas heating)

- ▶ Unit On-Site installation
Picture: Heating
Method: Gas direct heating
Gas type: Natural Gas

Project Reference

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Changan Ford - Hangzhou Base

- March 2014, supply the base with 6 units of AHU (airflow: 100,000m³/h)



Beijing General Aviation Co.

- 2016, supply the painting workshop of BGAC Changzhou Base with 5 units of multi-condition AHU.

Project Reference

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Geely Automobile - Belarus Base

- 2016, supply the production plant with 42 units of large-capacity AHU.



VOLVO - Zhangjiakou Base

- 2016, supply the painting workshop with 13 units of large-capacity AHU with constant temperature control.

Project Reference



Automobile

BENZ	FORD	VOLVO	BMW	TOYATO
DAS AUTO	BAIC	IVECO	DONG FENG	CHERY
ZHONG TONG	GEELY	JAC	XCMG	GREAT WALL

Aerospace

CASIC, Second Research Institute - Branch No.25	AVIC - Institute No.613
CASIC, Second Research Institute - Factory No.230	China Institute of Atomic Energy
CASIC, Second Research Institute - Factory No.200	AVIC I Group - Northern Aeronautical Materials Research Institute
CASIC, Third Research Institute - Complex Building	CASC - Guiyang Project 361
Beijing Spacecrafts	CASC, Fifth Research Institute - Project 921-3
China Air-to-Air Missile Academy - Factory No.820	China Space City - Project 668

Pharmaceutical

Beijing Biological Products Institute Co.,Ltd	HuaiBei Pharmaceutical Factory, Jiangsu
Beijing Pharmaceutical Factory	Xinhua Pharmaceutical Factory
Xie He Second Pharmaceutical Factory	Huanghe Pharmaceutical Co.,Ltd, Inner Mongolia
DCPC, Beijing	Tianjin Sixth Pharmaceutical Factory
Xie He Pharmaceutical Factory	Zhangjiakou First Pharmaceutical Factory
Beijing Tongrentang Pharmaceutical Factory	Zhengzhou Zhulinan Pharmaceutical Factory
Beijing Second Pharmaceutical Factory	Shanxi 505 Research Base
Tianjin Lerentang Pharmaceutical Factory	Xinfeng Pharmaceutical Factory
Suzhou Gelansu Pharmaceutical Factory	SK&F (Tianjin)
Keju Biopharmaceutical Factory, Tianjin	Sande Pharmaceutical Factory, Liaoling
Jisheng Pharmaceutical, Jilin	Hainan Pharmaceutical Factory
Shuyang Pharmaceutical, Chengdu	

Petrochemical

Vinyon Factory, Beijing	Feiyang Ink, Shanxi Province
Optical Fiber Factory, Zhoukoudian City	Sodium Carbonate factory, Lianyungang City
Petroleum And Chemical Fiber Factory, Liaoyang City	Changyi Specialty Paper, Shanghai

Project Reference

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Metallurgy, Electric Power

Guohua Power Plant, Zhungeer City
Yuan Bao Shan Power Plant, Inner Mongolia
KOTRL Power Plant, Pakistan
Lv Neng Power Plant, Suzhou City
Guohua Dingzhou Power Plant
Shuang Liao Power Plant

Guohua Power Plant, Dingzhou
Pan Shan Power Plant - Phase II
Xin Wen Mining Group, Shandong Province
Tong Ling Power Plant, Anhui Province
FAISALABAD Power Plant, Pakistan
Nuclear Power Station, Lianyungang City

Tobacco

Beijing Cigarettes Factory
Anyang Cigarettes Factory
Xuchang Cigarettes Factory
Chegnzhou Cigarettes Factory
Xiangfan Cigarettes Factory
Yanan Cigarettes Factory
Yuxi Cigarettes Factory
Wuming Cigarettes Factory

Shijiazhuang Cigarettes Factory
Nanyang Cigarettes Factory
Changsha Cigarettes Factory
Changde Cigarettes Factory
Hongan Cigarettes Factory
Longyan Cigarettes Factory
Qujing Cigarettes Factory
Xintian Cigarettes Factory

Electronics

Nanjing Mint
Bright Crystals Technology Co.,Ltd
Renshi Electrical & Mechanical Equipment Factory
Chegndu Xuguang Electronics Co.,Ltd
Beijing E-Science Co.,Ltd

Central Iron & Steel Research Institute
China Banknote Printing And Minting - Beijing Factory
Shandong Himin Solar Energy Group
WatchData - Beijing Factory

Others

Anfei Glass Bulb Factory
Baote Metal Material Co.,Ltd
Jade Bird Fire
Chongqing Lafarge Cement Co.,Ltd
Lejian Dairy Products Co.,Ltd
Aluminum Corporation of China - Zhengzhou Branch
Tianjin Intex Auto Parts Ltd

Sunday Brewery Co'Ltd
Chongqing Cement Co.,Ltd
Beijing Asahi Beer Factory
China Great Wall Wine Co.,Ltd - Xian Manufacturing Base
Beijing Jingxinte Blower Factory
Beijing Xingjie Construction and Installation Engineering Co.,Ltd

More projects are on the way...Stay tuned!

The HOLTOP logo is located in the top right corner. It features the word "HOLTOP" in a bold, green, sans-serif font. The letter "O" is stylized with a horizontal line through it.

We Long For Your Coming...

让空气处理更加健康节能

Making air treatment healthier and more energy efficient

A large sign is positioned in the foreground, partially obscuring the view of the building. The sign features the HOLTOP logo on the left, followed by the Chinese characters "环都集团 八达岭制造基地" and the English text "Holtop Group Fudaling Manufacturing Base".

HOLTOP 环都集团 八达岭制造基地
环都招晋 Holtop Group Fudaling Manufacturing Base