





Ningbo Dekon Refrigeration Equipment Co., Ltd, a large-scale industry and trade integrated company , is one of the leading manufacture and supplier for air conditioner products and ventilation systems in China. Products focus on air cooled or water cooled chiller; air handling units; water fan coil units; VRF air conditioner; light commercial air conditioner and special function industrial air conditioner.

Designing and manufacturing a wide range of A/C and ventilation products, we can supply models for use in residential apartments, houses, commercial buildings, hotels, shopping malls and public venues. Marketing all series under our proprietary brand "DEKON" , we can also complete ODM and OEM orders as per customers' requirements.

DEKON strives for better air in your home, hotel, shopping Center and office buildings. And our aim is to supply our air conditioner product to each corner of the world !



Introduction of Dekon Chongqing Production base

ZT as production base of DEKON in Chongqing, is a state-owned enterprise for centrifugal chillers in China. ZT is also a large-sized centrifugal compressor, blower and fan manufacturer in China.

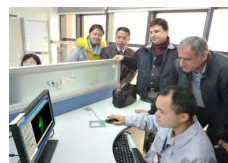
Technology Development Track

§ Technology Source.

ZT devotes to the technology innovation, design and production level can keep the pace of international level. ZT accordingly imported compressor technology from Italy Nuovo Pignone, design& manufacture know-how of centrifugal refrigeration machine from Hitachi Co., Japan, design &manufacture know-how of high temperature fan from Howden,UK and world leading centrifugal compressor design software and technology from CONCEPTS NREC.



§ Technology Force



ZT's aerodynamic design level of 3D impeller for fluid machinery has reached the world leading level based on the digestion, absorption and innovation. The design and manufacture level has been up to world leading level in the high, medium and key equipment industry.

Turbo machinery digitalization design platform of total investment of 10 million RMB Yuan has been set up in our company. It makes the research& development capacity and tools improve greatly.



ZT introduced centrifugal compressor, especially special refrigeration compressor units for nuclear power station and marine applications. The process compressor for petrochemical and coal chemical industry are also increasing.

ZT has product test workshop occupied 4000 square meters. There are 5 centrifugal compressor test stands, 3 centrifugal chillers test positions, fan performance test and fluid machinery aerodynamic performance simulation test platforms.

Main Products

§ Refrigeration Machine Series



LB series centrifugal chiller

cooling capacity: $60 \sim 360 \times 10^4 \text{Kcal/h}$
Refrigerant: R123
Application: Department stores, hotel, office building
theatre and cinema, hospital etc.



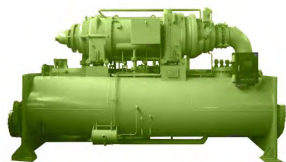
Special refrigeration machine for Nuclear power station

cooling capacity: $170 \sim 600 \times 10^4 \text{Kcal/h}$
Refrigerant: R134a
Application: cooled water system for nuclear power
station nuclear island



Low temperature centrifugal chiller

cooling capacity: $90 \sim 275 \times 10^4 \text{Kcal/h}$
Refrigerant outlet temperature: $0 \sim -35^\circ\text{C}$
Refrigerant: R134a/R22
Application: Chemical process flow, chlor-alkali industry etc.



LC series Centrifugal Chiller

cooling capacity: $105 \sim 605 \times 10^4 \text{Kcal/h}$
Refrigerant: R134a
Application: Department stores, hotel, office building, theatre and
cinema, hospital etc.



Twin-compressor centrifugal chiller

cooling capacity: $605 \times 10^4 \text{Kcal/h}$
Refrigerant: R134a
Application: Department stores, hotel, office building,
theatre and cinema, hospital etc.



Semi-hermetic screw chiller

cooling capacity: $15.6 \sim 297 \times 10^4 \text{Kcal/h}$ ($182 \sim 3458 \text{KW}$)
Refrigerant: R22
Application: Department stores, hotel, office building, theatre and
cinema, hospital etc.



Low temperature semi-hermetic screw chiller

cooling capacity: $6.9 \sim 82 \times 10^4 \text{Kcal/h}$ ($80 \sim 960 \text{KW}$)
Refrigerant outlet temperature: $-5 \sim -20^\circ\text{C}$
Application: chemical process flow, medicine etc.

Advanced Equipment



Italy PAMA NC Floor-type Boring and Milling Machining Center



BeiYi Group CNC Double Column Boring and Milling Machining Center



Germany Decel Mahoa 5-axis Machining Center



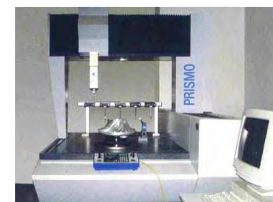
Germany Hermle 5-axis Machining Center



Taiwan AWA CNC Machining Center



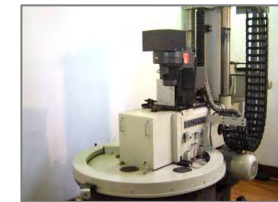
Denmark CNC Flange Machine



Germany Zeiss 4 Coordinate Measuring Machine



Centrifugal Blower/Fan Performance Test Stand



Germany Schenck Spin Test Stand



Centrifugal Chiller Total Performance Test Stand



Φ6m



1200 tons of 4-column Oil Press



Germany Schenck Dynamic Balancing Machine



Fan Total Performance Test Stand

Production Site



LCS564-P Centrifugal Water Chiller for Zhongrun Pharmaceutical Factory in Inner Mongolia



Centrifugal Chiller for Fuqing Nuclear Power Station



Commissioning of Centrifugal Chiller on site

Machining of Impeller for Ammonia Compressor Unit on Germany Hermle 5-axis Machining Center



Production Site



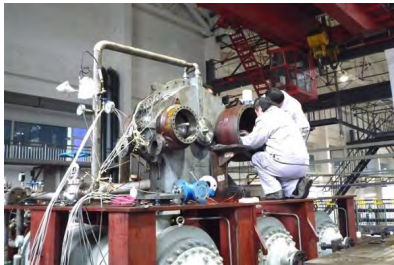
Machining of Six-stage Compressor Rotor in the workshop



Machining of Cylinder of Compressor on the CNC Dragon Milling and Boring Machine Center



Compressor Assembly



■ Features

§ . Reliability: Safety and long service life

- Good quality parts and few moving parts of compressor can make sure long service life (above 20 years).
- Impeller is made of special aluminum alloy, so it has adequate strength and stability after dynamic test and spin test.
- Impeller and main shaft is keyless connected, so avoid stress concentration in key plot and rotor unbalance, and ensure high reliable operation of chiller.
- Motor cooled by refrigerant injection can extend the service life.
- Unique lubrication oil system and microcomputer control system can ensure safety and reliable operation of bearing either during normal operation or sudden stop.



Impeller is doing on dynamic balancing test on Schenck Dynamic Balancing Machine (Germany)



Advanced microcomputer Control cabinet

§ . Advanced microcomputer control system

- Advanced microcomputer control system can optimize logic control; improve efficiency of operation and reliability.
- Simple and visual tactile screen.
- Operation data and status can be displayed on the screen including fault cause so as to monitor at any time.
- The electric control cabinet has more than 30 control and safety functions and records failures data of the last 10 shutdowns. Imported key parts with interference free can make sure safety and reliable operation.
- With built-in RS422 interface, multi-unit control, also connection with building automation system (BAS) to remote control start/stop of chiller.

§ . Low noise and smooth operation



Multi-unit central control

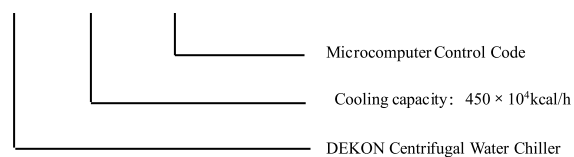
- Crown gear reduced the noise of gear engagement.
- Double acoustic gear box reduced noise of gear drive
- Optimum gas flow passage can largely reduce gas flow noise at high speed
- A silencing device is mounted on the condenser inlet, reducing flow noise.

§ . Good sealing, compact, easy installation and transportation

- Unique closed-type motor, dimensions is smaller than that of open-type motor.
- Compressor, speed-increasing gear box are mounted integrally, no shaft-end seal,
- After strict tight-gas and vacuum tests, seal of chiller is very good.
- Closed-type construction, small dimensions, small occupied area, easy installation and transportation.

■ Unit name

DCT 450 — P



Performance Data for Centrifugal Water Chillers

(350-450RT)

Chiller Model		Unit	DCT105-P	DCT120-P	DCT135-P
Cooling Capacity		RT	350	400	450
		kW	1230	1406	1582
		10 ³ kcal/h	105	120	136
Evaporator	Chilled Water Flow Rate	m ³ /h	212	242	272
	Nozzle Diameter		DN200	DN200	DN200
	Pass Number		3	3	3
	Pressure Drop	kPa	115	115	105
Condenser	Cooling Water Flow Rate	m ³ /h	265	302	340
	Nozzle Diameter		DN200	DN200	DN200
	Pass Number		3	3	3
	Pressure Drop	kPa	85	85	85
Motor Rated Power		kW	225	257	289
Dimension	(A) Length	mm	4310	4310	4310
	(B) Width	mm	1620	1620	1775
	(C) Height	mm	2395	2395	2460
Pedestal	D	mm	3340	3340	3340
	E	mm	1420	1420	1575
Nozzle Arrangement and size	F	mm	510	510	510
	G	mm	490	490	500
	H	mm	460	460	510
	J	mm	790	790	855
	L	mm	760	760	790
	L	mm	1060	1060	1140

- Note: 1. Entering/Leaving chilled water temperature: 12/7℃;
 Entering/leaving cooling water temperature: 32/37℃;
 Fouling factor: 0.086m²/kW; Designed pressure (water side): 1.0MPa
 2. The above data may be changed, subject to drawing provided.
 3. Voltage: 380V/6000V/10000V-3P-50Hz
 4. Refrigerant: R134a
 5. Our company can provide special centrifugal chiller according to your requirements.

Performance Data for Centrifugal Water Chillers

(500-600RT)

Chiller Model		Unit	DCT150-P	DCT165-P	DCT180-P
Cooling Capacity		RT	500	550	600
		kW	1758	1934	2110
		10 ³ kcal/h	150	166	181
Evaporator	Chilled Water Flow Rate	m ³ /h	302	332	362
	Nozzle Diameter		DN200	DN250	DN250
	Pass Number		3	3	3
	Pressure Drop	kPa	110	110	115
Condenser	Cooling Water Flow Rate	m ³ /h	378	415	452
	Nozzle Diameter		DN200	DN250	DN250
	Pass Number		3	3	3
	Pressure Drop	kPa	85	85	85
Motor Rated Power		kW	316	348	373
Dimension	(A) Length	mm	4310	4390	4390
	(B) Width	mm	1775	1965	1965
	(C) Height	mm	2460	2666	2666
Pedestal	D	mm	3340	3340	3340
	E	mm	1575	1730	1730
Nozzle Arrangement and size	F	mm	510	585	585
	G	mm	500	540	540
	H	mm	510	620	620
	J	mm	855	940	940
	L	mm	790	877	877
	L	mm	1140	1277	1277

- Note: 1. Entering/Leaving chilled water temperature: 12/7℃;
 Entering/leaving cooling water temperature: 32/37℃;
 Fouling factor: 0.086m²/kW; Designed pressure (water side): 1.0MPa
 2. The above data may be changed, subject to drawing provided.
 3. Voltage : 380V/6000V/10000V-3P-50Hz
 4. Refrigerant: R134a
 5. Our company can provide special centrifugal chiller according to your requirements.