Hoch
air energy solutions

Total Air Quality Management Solutions

Air Dryers | Air Filters | Auto Drains | After Coolers | Process Chillers

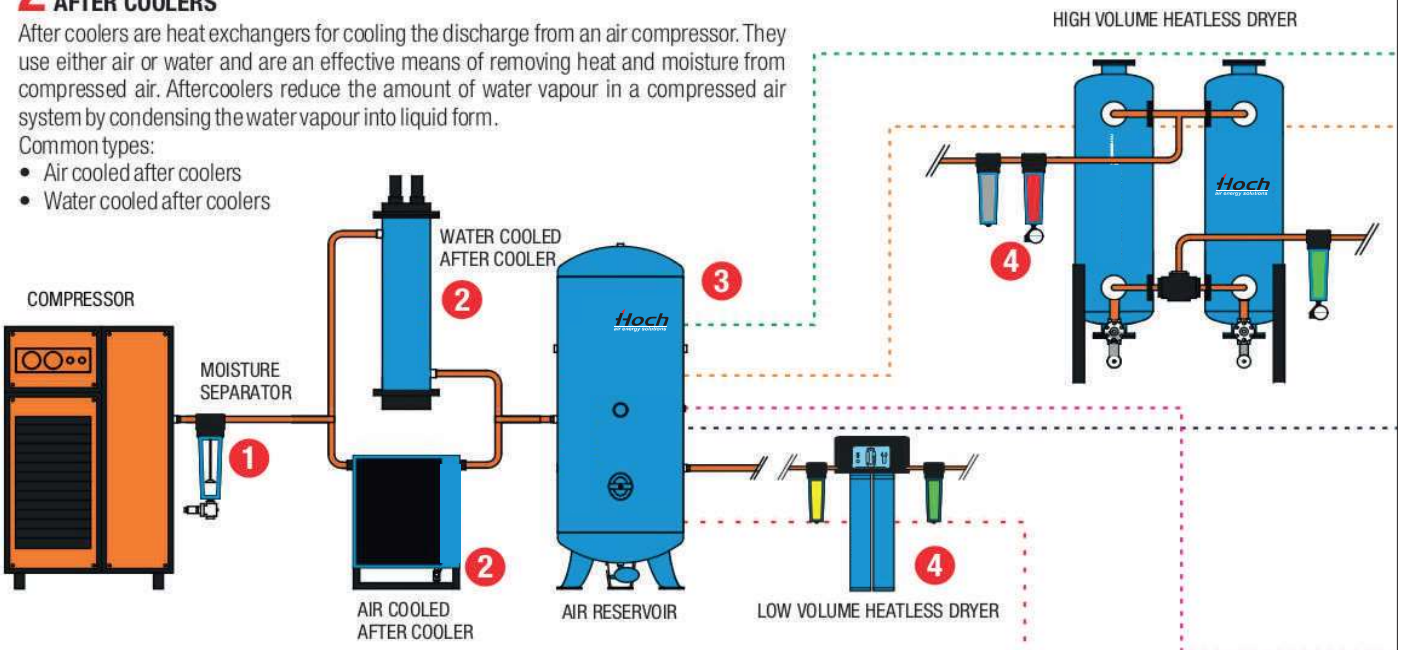
Whatever be the industry, We provide the complete downstream compressed air quality solution

2 AFTER COOLERS

After coolers are heat exchangers for cooling the discharge from an air compressor. They use either air or water and are an effective means of removing heat and moisture from compressed air. Aftercoolers reduce the amount of water vapour in a compressed air system by condensing the water vapour into liquid form.

Common types:

- Air cooled after coolers
- Water cooled after coolers



1 MOISTURE SEPARATOR

Moisture separator, also known as cyclone condensate separators, use centrifugal motion to force liquid water out of compressed air.

They are installed following after coolers to remove the condensed moisture.

3 AIR RESERVOIR

Air reservoir stores compressed air in larger volume and plays important role in compressed air system.

- Supplying peak demands from stored air without needing to run an extra compressor
- Reducing load/unload or start/stop cycle frequencies to help screw compressors run more efficiently and reduce motor starts.
- Slowing system pressure changes to allow better compressor control and more stable system pressures.

4 HEATLESS DESSICANT DRYER

The compressed air is passed through a pressure vessel with two "towers" filled with desiccant material. This desiccant material attracts the water from the compressed air via adsorption. The desiccant will bring the pressure dew point of the compressed air to a level in which the water will no longer condense, or can be removed as much from the compressed air as possible.

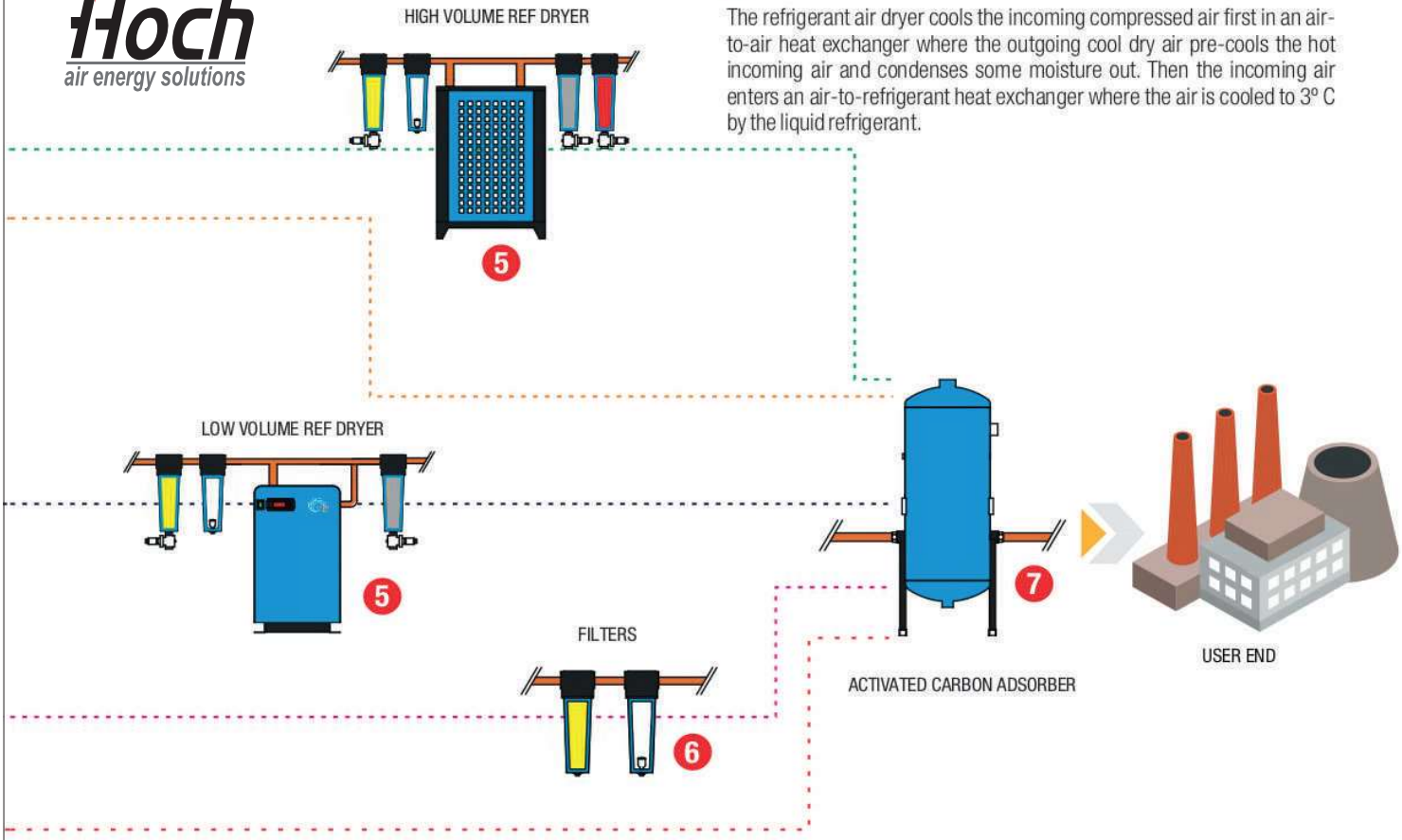
Why air quality management?

The contaminants of compressed air delivered by air compressors include moisture, dust and oil particles which affects the air quality. Most of the compressed air applications require clean air and the quality of air requirement varies with the application. The untreated compressed air is most expensive because it may cause increased machinery down time, product rejection and added maintenance cost. As defined in ISO: 8573.1 high quality of compressed air can be achieved only by filtration, water separation and drying.

Hoch
air energy solutions

5 REFRIGERANT AIR DRYER

The refrigerant air dryer cools the incoming compressed air first in an air-to-air heat exchanger where the outgoing cool dry air pre-cools the hot incoming air and condenses some moisture out. Then the incoming air enters an air-to-refrigerant heat exchanger where the air is cooled to 3° C by the liquid refrigerant.



6 FILTERS

Compressed air filters are used for efficient removal of solid particles, water, oil aerosols, hydrocarbons, odour and vapours from compressed air systems.
To meet the required compressed air quality appropriate filter element must be installed into filter housing.

7 ACTIVATED CARBON ADSORBER

Activated carbon towers can be incorporated in existing compressed air systems significantly minimising the risks of contamination. They are able to absorb oil carry-over (both liquid and vapour) to provide the plant with technically oil-free compressed air eliminating hydrocarbon vapours and odours.

ISO quality air standard (ISO 8573–1:2010)

The quality of compressed air used in industrial processes is specified in the international standard ISO 8573-1, Untreated compressed air typically contains 3 types of contaminants : dirt , water and oil. The Quality Classes specify the maximum allowed limits.

ISO8573-1:2010	Dirt				Water		Oil
	Maximum number of particles per m^3			Mass Concentration mg/m^3	Vapor pressure dew point	Liquid g/m^3	Total (aerosol liquid and vapor) mg/m^3
	0.1-0.5 micron	0.5 - 1 micron	1 - 5 micron				
As specified by the equipment user or supplier and more stringent than Class 1							
1	≤ 20000	≤400	≤10	-	≤ -70°C/-94°F	-	0.01
2	≤400000	≤ 6000	≤100	-	≤ -40°C/-40°F	-	0.1
3	-	≤90000	≤1000	-	≤-20°C/-4°F	-	1
4	-	-	≤10000	-	≤ +3°C/+37.4°F	-	5
5	-	-	≤100000	-	≤+7°C/+44.6°F	-	-
6	-	-	-	≤ 5	≤ +10°C/+50°F	-	-
7	-	-	-	5-10	-	≤ 0.5	-
8	-	-	-	-	-	0.5-5	-
9	-	-	-	-	-	5-10	-
X	-	-	-	> 10	-	> 10	> 10

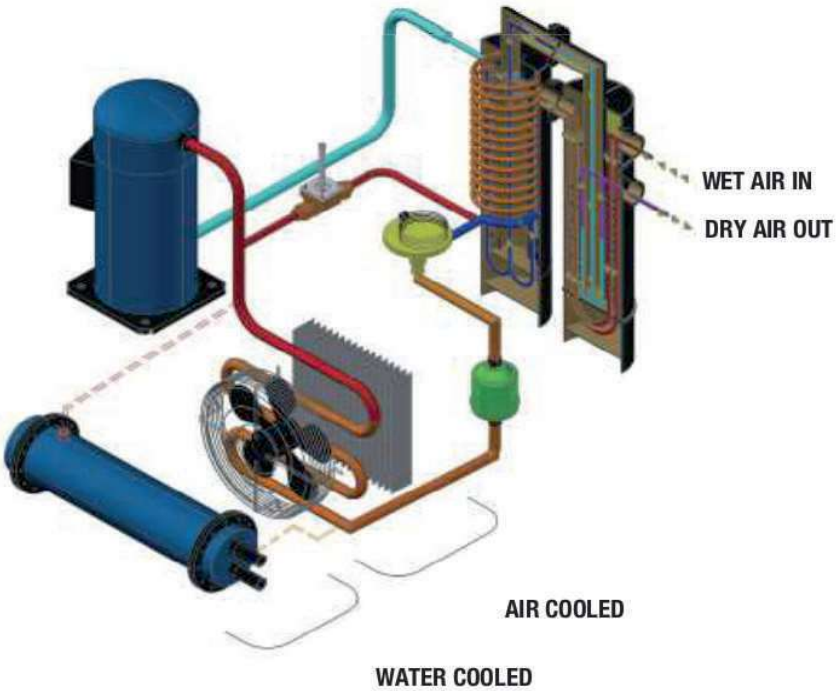
Refrigerant Air Dryers

The Refrigerant Air Dryer that we have developed and designed, stands testimonial to Hoch guiding factors: remarkable attention to detail, effort to provide the best quality and engineering prowess. Our dryer stands out from others by being a core product rather than being an accessory which comes along with a compressor package. A lot of research, planning and effort has gone into the product to make it one for the long run. So when we say it's BUILT TO LAST , we mean it.

Working principle

Refrigerant drying cools the compressed air, whereby a large amount of the water condenses and can be separated. The compressed air is then heated so that condensation does not form on the outside of the pipe work system. The compressed air cooling takes place via a closed coolant system, where a refrigerant cooling agent is employed.

Hoch uses environment-friendly gases for this purpose. By cooling the compressed incoming air using the cooled outgoing air, energy can be saved to a maximum extent. The unique design of integrated evaporator is scaled to the exact requirement of compressed air handling. This gives greater efficiency and ultimately saves power.



Applications

	Maximum pressure dew point	
	°C	°F
0	As specified	
1	-70	-94
2	-40	-40
3	-20	-4
4	3	38
5	7	45
6	10	50

ISO 8573–1 Quality

Hoch Refrigerant Air Dryer models can be used for applications that require ISO 8573 - 1 Class 4 & Class 5 air quality.

Automobile | Cement | Food processing | Injection Moulding | Packaging | Painting | Paper Mills | Pet Bottle Industry | Pharmaceutical Industry | Pneumatic Control system | Pneumatic tools & Equipments | Rice Sorting | Sand Blasting | Textile Industry | Tire Inflation | Power Plants | Steel Plants

Salient Features

Service

Total modular canopy design, interchangeability, easy fitment of all components and the data from microcontroller ensures preventive maintenance and easy serviceability.

Designed for tropical conditions

Designed and manufactured to suit the high temperature condition by careful sizing of coolers, evaporators and selection of suitable refrigeration components.

High Reliability

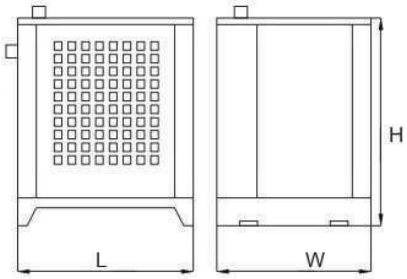
Reliability is ensured through superior quality parts like high grade, thicker copper tubes and processes like powder coating with 7 tank process etc. and through state-of-the-art safety controls and operation monitoring through unique microprocessor controllers.

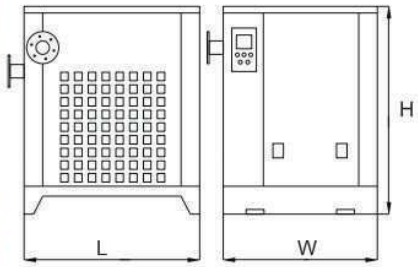
Low Pressure drop

The unique, indigenously designed 3-in-1 evaporator facilitates low pressure drop lesser than 0.2 bar, while providing maximum heat transfer efficiency.

Technical Specifications

Model	Airflow*		Max.Operating Pressure		Power Supply	Version**	End Conn.		Dimensions (mm)		
	m^3/min	cfm	Kg/cm^2	psi	V/Ph/Hz				L	W	H
H20R	0.57	20	12	171	230/1/50	Air Cooled	BSP	½"	480	400	625
H40R	1.13	40	12	171	230/1/50	Air Cooled	BSP	¾"	480	400	625
H60R	1.7	60	12	171	230/1/50	Air Cooled	BSP	¾"	480	400	625
H80R	2.27	80	12	171	230/1/50	Air Cooled	BSP	1"	680	560	850
H100R	2.83	100	12	171	230/1/50	Air Cooled	BSP	1"	680	560	850
H125R	3.54	125	12	171	230/1/50	Air Cooled	BSP	1½"	680	560	850
H150R	4.25	150	12	171	230/1/50	Air Cooled	BSP	1½"	680	560	850
H200R	5.66	200	12	171	230/1/50	Air Cooled	BSP	1½"	750	650	1000
H250R	7.08	250	12	171	230/1/50	Air Cooled	BSP	1½"	750	650	1000
H300R	8.49	300	12	171	415/3/50	Air Cooled	FLANGED	2"	950	850	1250
H350R	9.91	350	12	171	415/3/50	Air Cooled	FLANGED	2"	950	850	1250
H450R	12.74	450	12	171	415/3/50	Air Cooled	FLANGED	2"	950	850	1250
H550R	15.57	550	12	171	415/3/50	Air Cooled	FLANGED	2½"	1000	900	1400
H650R	18.41	650	12	171	415/3/50	Air Cooled	FLANGED	2½"	1000	900	1400
H750R	21.24	750	12	171	415/3/50	Air Cooled	FLANGED	2½"	1000	900	1400
H900R	25.48	900	12	171	415/3/50	Air Cooled	FLANGED	3"	1250	1000	1550
H1000R	28.32	1000	12	171	415/3/50	Air Cooled	FLANGED	3"	1250	1000	1550
H1100R	31.15	1100	12	171	415/3/50	Air Cooled	FLANGED	3"	1250	1000	1550





Note:
Data for the dryers above 1100 cfm are available on request
* FAD based on 55°C inlet temperature and 45°C ambient temperature at 7 Kg/cm^2 operating pressure and 3°C to 7°C pressure dew point
****Water cooled models starting from 550 cfm and above are available on request**
Due to continuous engineering improvements, technical specifications are subject to change without prior notice.

PERFORMANCE DATA BASED ON

Ambient temperature	:	40°C
Inlet temperature	:	45°C
Inlet pressure	:	7 Kg/cm^2
Pressure dew point	:	3-7°C

DESIGN DATA

Max. Ambient temperature	:	45°C
Min. Ambient temperature	:	5°C
Max. Inlet temperature	:	55°C
Max. Inlet pressure	:	12 Kg/cm^2

Flow correction factor

During the selection of the dryer, capacity correction to be used when operating conditions differ from performance data
To get dryer capacity based on conditions divide capacity by correction factors (X, Y, Z)

Ambient temperature (X)

Temp.	25	30	35	40	45
CF	1.12	1.08	1.04	1	0.96

Inlet temperature (Y)

Temp.	30	40	45	50	55
CF	1.06	1.03	1	0.9	0.75

Inlet Pressure (Z)

Pressure	6	7	9	10.5	12.5
CF	0.95	1	1.08	1.13	1.18

High Volume Refrigerant Air Dryers

Hoch Higher Volume Refrigerant Air Dryers are designed for reliable performance in tropical conditions and perfect solution to deliver clean, dry high volume compressed air to suit continuous and variable load. It is designed in accordance with ISO 7183 standard.

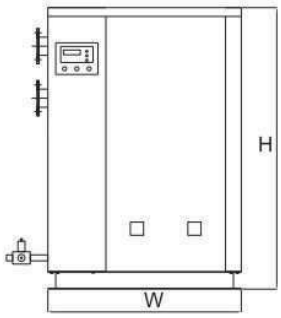


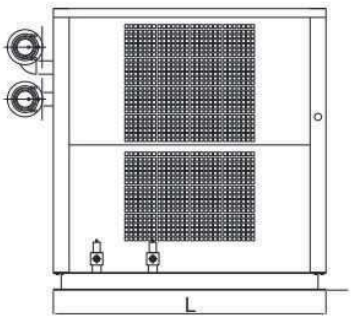

Applications

Pharmaceutical Industry | Process Industry | Textile Industry
Aeronautical Industry | Automobile industry | And Many
Engineering Industries

Technical Specifications

Model	Airflow		Max.Operating Pressure		Power Supply	Version	End Conn.		Dimensions (mm)		
	m^3/min	cfm	Kg/cm^2	psi	V/Ph/Hz				L	W	H
H1250R	35.39	1250	12	171	415/3/50	Air / Water Cooled	FLANGED	4"	1550	1100	1600
H1500R	42.47	1500	12	171	415/3/50	Air / Water Cooled		4"	1550	1100	1600
H1600R	45.31	1600	12	171	415/3/50	Air / Water Cooled		4"	1550	1100	1600
H1800R	50.97	1800	12	171	415/3/50	Air / Water Cooled		6"	1650	1240	2000
H2000R	56.63	2000	12	171	415/3/50	Air / Water Cooled		6"	1650	1240	2000
H2500R	70.79	2500	12	171	415/3/50	Air / Water Cooled		6"	1650	1240	2000
H3000R	84.95	3000	12	171	415/3/50	Air / Water Cooled		6"	1650	1350	2100
H3500R	99.19	3500	12	171	415/3/50	Air / Water Cooled		6"	1650	1350	2100
H4000R	113.26	4000	12	171	415/3/50	Air / Water Cooled		8"	1940	1640	2100
H4500R	127.42	4500	12	171	415/3/50	Air / Water Cooled		8"	1940	1640	2100
H5000R	141.58	5000	12	171	415/3/50	Air / Water Cooled		8"	2300	3400	1800
H6500R	184.05	6500	12	171	415/3/50	Air / Water Cooled		8"	2300	3400	1800
H7000R	198.21	7000	12	171	415/3/50	Air / Water Cooled		8"	2300	3400	1800





Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice

CUTE SERIES

Hoch new CUTE Series Refrigerant Air Dryers are compact and sleek in design. They have the smallest volume and footprint with additional safety features. The compact yet clever design of the CUTE series ensures the best performance along with ease of service.

Salient Features

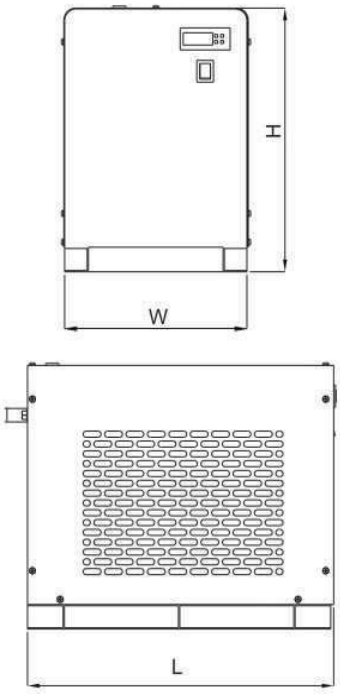
- Small Footprint
- Less Volume
- More Sturdy
- Access to all parts by single cover removal
- Ease of Maintenance
- Excellent Performance

Applications

Automobile Service | CNC Workshops | CMM | Painting Hub | Foundry | Pump Industry | Hospitals

Technical Specifications

Model	Airflow		Max.Operating Pressure		Power Supply	Version	End Conn.	Dimensions (mm)		
	m^3/min	cfm	Kg/cm^2	psi	V/Ph/Hz		BSP	L	W	H
H10RN	0.28	10	12	171	230/1/50	Air Cooled	½"	515	310	430
H20RN	0.57	20	12	171	230/1/50	Air Cooled	½"	515	310	430
H40RN	1.13	40	12	171	230/1/50	Air Cooled	¾"	550	320	530
H60RN	1.7	60	12	171	230/1/50	Air Cooled	¾"	550	320	530
H80RN	2.27	80	12	171	230/1/50	Air Cooled	1"	705	440	600
H100RN	2.83	100	12	171	230/1/50	Air Cooled	1"	705	440	600
H125RN	3.54	125	12	171	230/1/50	Air Cooled	1½"	705	440	600
H150RN	4.25	150	12	171	230/1/50	Air Cooled	1½"	705	440	600
H200RN	5.66	200	12	171	230/1/50	Air Cooled	1½"	810	535	690
H250RN	7.08	250	12	171	230/1/50	Air Cooled	1½"	810	535	690
H300RN	8.49	300	12	171	415/3/50	Air Cooled	1½"	810	535	690



Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice

DESIGN DATA

Max. Ambient temperature : 40°C
Min. Ambient temperature : 5°C
Max. Inlet temperature : 50°C
Max. Inlet pressure : 12 Kg/cm^2

High Pressure Refrigerant Air Dryers




Refrigerant High Pressure Air Dryers are used wherever dry air at high pressure is required. Hoch provides HP Series Dryer with an operating pressure range of 40 Kg/cm^2 with the flow ranging from 20 cfm to 450 cfm (0.57 m^3/ min to 12.74 m^3/min) with reliable high pressure design and unique safety features.

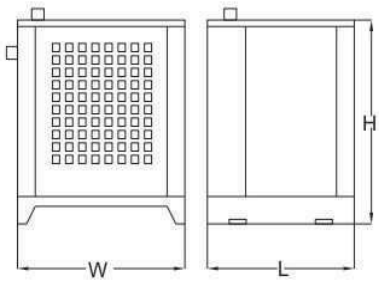
Applications

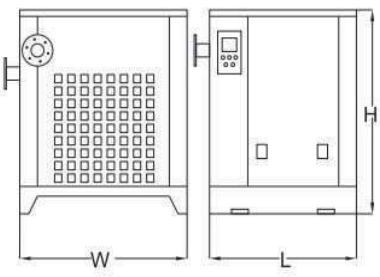
Aeronautical Industry | Circuit Breakers | Generator Starting - High Pressure | High Pressure Engine Starters | High Pressure Testing | Marine Applications | Turbine Cooling | Pet Bottling

Technical Specifications

Model	Airflow		Max.Operating Pressure		Power Supply	Version	End Conn.		Dimensions (mm)		
	m^3/min	cfm	Kg/cm^2	psi	V/Ph/Hz				L	W	H
H40R-HP	1.13	40	40	568	230/1/50	Air Cooled	BSP	½"	480	400	625
H60R-HP	1.7	60	40	568	230/1/50	Air Cooled		½"	480	400	625
H100R-HP	2.83	100	40	568	230/1/50	Air Cooled		¾"	480	400	625
H150R-HP	4.25	150	40	568	230/1/50	Air Cooled		1 "	680	560	850
H200R-HP	5.66	200	40	568	230/1/50	Air Cooled		1 "	680	560	850
H250R-HP	7.08	250	40	568	230/1/50	Air Cooled		1½"	750	650	1000
H300R-HP	8.49	300	40	568	415/3/50	Air Cooled		1½"	750	650	1000
H450R-HP	12.74	450	40	568	415/3/50	Air Cooled		1½"	950	850	1250

Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice





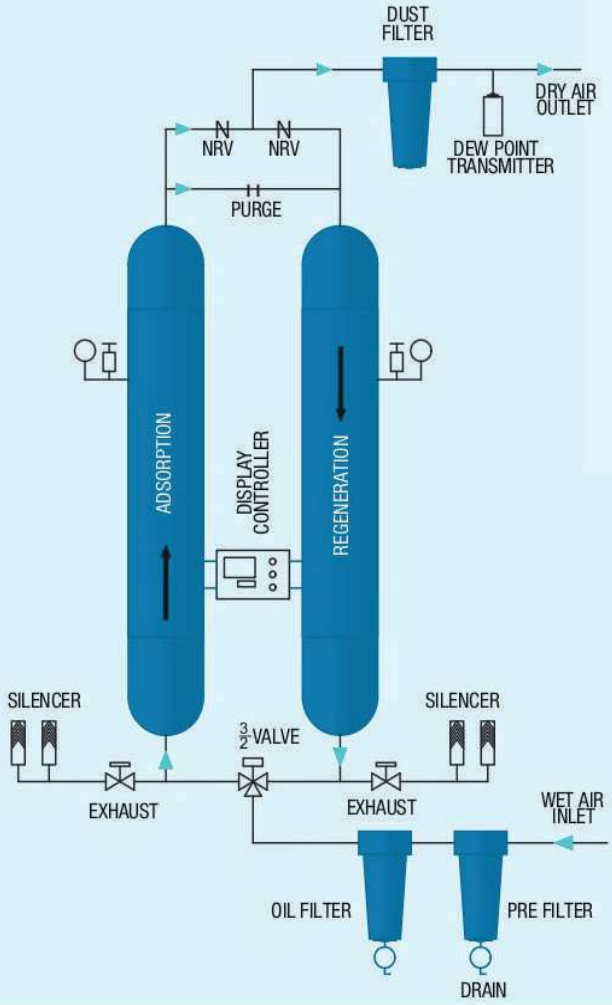
Heatless Adsorption Dryers

Heatless Adsorption Dryers are used when the high quality compressed air is required. With activated alumina the heatless dryer can produce up to - 40°C Pressure Dew Point and can be extended to -70°C by using molecular sieves.

Hoch Heatless Adsorption dryers can be used for applications that require ISO 8573-1 Class 1, 2 & 3

	Maximum pressure dew point	
	°C	°F
0	As specified	
1	-70	-94
2	-40	-40
3	-20	-4
4	3	38
5	7	45
6	10	50

ISO 8573-1 Class



Working principle

The Dryer utilizes two vertical pressure vessels filled with a desiccant such as activated alumina, silica gel or molecular sieve. The compressed air passes through the desiccant bed before being distributed to the plant. As the air passes through the desiccant, water vapour is removed from the air through a process called adsorption.

Adsorption is defined as the binding of molecules or particles to a surface. The binding to the surface is usually weak and reversible. As the compressed air is passing through one vessel where water vapour is being adsorbed, the desiccant in the other vessel is undergoing regeneration where the water vapour that was previously adsorbed is removed. Regeneration is accomplished by extracting a portion of the dry air as it exits the active vessel, expanding this air to atmospheric pressure and passing it over the desiccant that is to be regenerated.

Salient Features

Hoch series Desiccant Dryers follow a modular design to enable augmentation and simplify the service procedures. All components are powder coated with durable quality finish for long life.

Hoch air energy solutions

1 ROBUST CONSTRUCTION

Sturdy box frame with complete floor stand to withstand vibration and transit damage

2 LOW OPERATING COST

- Amply sized to save heat of adsorption and minimize the purge usage.
- Limited velocities through tower prevent bed fluidization, stops desiccant dusting.
- Large desiccant bed ensures sufficient contact time to produce -40°C (-70°C dew point with molecular sieves). Flanged fill and drain ports for ease of desiccant replacement .
- Heavy duty purge exhaust mufflers enable quiet operation.
- The safety of the unit is ensured through pressure gauge and safety valve on both towers.

3 BUILT TO LAST

Every dryer is equipped with pre-filter, oil filter and after-filters with replaceable cartridges to ensure long life

4 USER-FRIENDLY INTERFACE

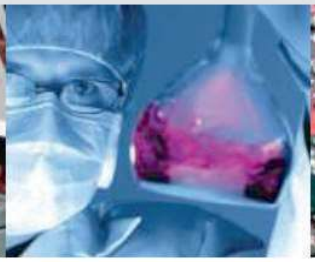
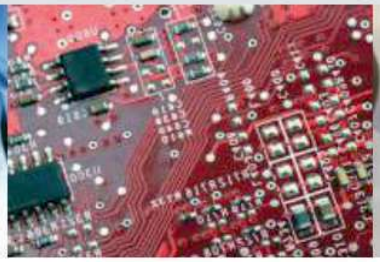
As standard option Hoch provides a digital display controller which provides user-friendly details of the function of the dryer.

5 PURGE ECONOMIZER

Purge economizer is a standard option for Hoch desiccant dryers. Custom purge settings are possible using the interface.

Applications

Micro-electronics Industry | Chemical Industry | Hospitals | Food processing Industry | Pharmaceutical Industry


DEW POINT BASED SWING CONTROL (DPSC)

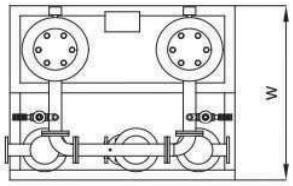
The **Hoch** Heatless Dryers are available with optional DPSC system which reduces purge losses and saves energy.

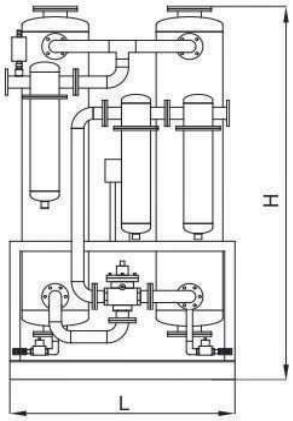
The DPSC system consists of a hygrometer that can reliably measure the dew point of the compressed air at outlet and displays at the control panel. As the exact quality of the output air is measured and displayed, the purge operation of the dryer is controlled based on the output of the air quality.

There is a great energy saving because the switching of the towers is not based on the fixed timing and hence reduces loss of purge air especially during part-load operations.

Technical Specifications

Model	Airflow		Max.Operating Pressure		Power Supply	End Conn.	Dimensions (mm)		
	m^3/min	cfm	Kg/cm^2	psi	V/Ph/Hz	inch	L	W	H
H60-HL	1.7	60	12	171	230/1/50	1"	560	465	1532
H80-HL	2.27	80	12	171	230/1/50	1"	568	465	1826
H100-HL	2.83	100	12	171	230/1/50	1"	680	680	1658
H125-HL	3.54	125	12	171	230/1/50	1½"	740	580	1700
H150-HL	4.25	150	12	171	230/1/50	1½"	740	580	1970
H200-HL	5.66	200	12	171	230/1/50	1½"	870	690	1760
H250-HL	7.08	250	12	171	230/1/50	1½"	870	690	2010
H300-HL	8.49	300	12	171	230/1/50	2"	1090	880	1893
H350-HL	9.91	350	12	171	230/1/50	2"	1010	810	2150
H400-HL	11.32	400	12	171	230/1/50	2"	1300	1100	1570
H500-HL	14.16	500	12	171	230/1/50	2"	1210	1100	1824
H600-HL	16.99	600	12	171	230/1/50	2½"	1220	1110	2160
H750-HL	21.24	750	12	171	230/1/50	2½"	1650	1270	2150
H900-HL	25.48	900	12	171	230/1/50	3"	1900	1350	1850
H1000-HL	31.15	1000	12	171	230/1/50	3"	1800	1540	2095





Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice
Specifications for higher capacity dryers than above models are available on request

Heatless Adsorption Dryers - HLX

Heatless Adsorption Dryer HLX series are designed to provide a high quality compressed air of Pressure dew point (< - 40°C to -70°C) for the most critical of drying applications with the air quality standard of ISO 8573-1.1 by using molecular sieves.

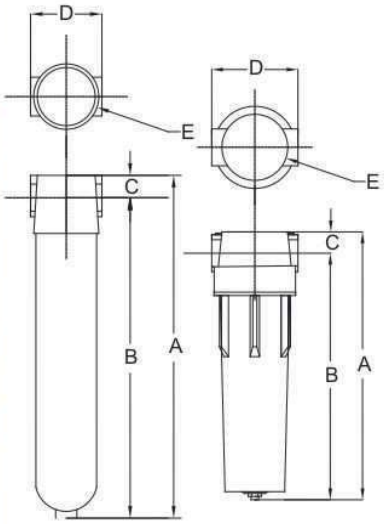
Air Filters

Hoch
air energy solutions

Purification of compressed air is needed because the air we breathe carries contaminants. Airborne particles, water, microbes and chemical gases enter compressors and in a compressed state these contaminants become concentrated and more destructive. In the compressed air system, hard particles assault equipment and piping. The result is damage to the system and generation of more particles. Examples of particles found in a compressed air system include desiccant dust, rust, pipe scale, metal oxides and dirt, which can be eliminated by applying proper filtration system.

Technical Specifications

Model	Max. Flow Rate		Max. Operating Pressure		Dimensions					Weight
					A	B	C	D	E	
	m^3/min	cfm	Kg/cm^2	psi	mm	mm	mm	mm	mm	Kg
HXF-16	0.99	35	12	171	244	220	24	104	100	1.32
HXF-20	1.73	61	12	171	315	287	28	104	100	1.5
HXF-24	2.89	102	12	171	430	390.5	39.5	138	127	2.88
HXF-28	4.90	173	12	171	430	390.5	39.5	138	127	2.88
HXF-32	7.19	254	12	171	628	588.5	39.5	138	130	3.74
HXF-36	10.70	378	12	171	632	592.5	39.5	138	130	3.8
HXF-40	13.99	494	12	171	694	648	46	148	135	9.5
HXF-44	19.11	625	12	171	839	793	46	148	135	12.13
HXF-44	19.11	625	12	171	864	815	49	148	145	12.1
HXF-48	22.00	777	12	171	1001	952	49	148	145	13.77



Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice
Specifications for higher capacity dryers than above models are available on request

Accessories

DELTA P Indicator (Optional)

Indicates filter element replacement and ensures economical operation

Colour Coded Elements

Filter Elements are colour coded for easy identification. They are designed using the latest media and manufacturing technology

Internal Automatic Drain

(Optional: up to 378 cfm)

In-Built, Float type, reliably discharges collected condensate

External Automatic Drain

(Optional: 494 cfm and above)

Flcat type, reliably discharges collected condensate without any air loss

Technical Specifications – **Regular**

FILTER MODEL	HXF*16	HXF*20	HXF*24	HXF*28	HXF*32	HXF*36	HXF*40	HXF*44	HXF*44	HXF*48
AIR FLOW (CFM)**	35	61	102	173	254	378	494	625	625	777
END CONNECTION (BSP)	1/2"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"

Technical Specifications – **High Volume**

FILTER MODEL	HXF*52F	HXF*56F	HXF*58F	HXF*60F	HXF*64F	HXF*68F	HXF*70F	HXF*72F	HXF*74F
AIR FLOW(CFM)**	1000	1271	1600	1907	2542	3178	3814	4499	5000
END CONNECTION (FLANGED))	4"	4"	4"	4"	4"	5"	5"	6"	6"

Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice.
* Suffix with required element -
Example : ONLINE FILTER 35 CFM = SXF7 -16
** Flow rate mentioned are @ 171 psi working pressure

Normal filter comes with manual drain and without Delta P indicator
While ordering, include accessory codes along with filter model. The accessory codes are:
I - Internal automatic drain (up to 378 cfm)
E - External automatic drain (494 cfm & above)
G - Delta P Indicator

EXAMPLE :

SXF*16	Filter Assembly 35 cfm with manual drain
SXF*20 I	Filter Assembly 61 cfm with internal auto drain
SXF*40 E	Filter Assembly 494 cfm with external auto drain
SXF*24 IG	Filter Assembly 102 cfm with Internal Auto drain and Delta P indicator

Salient Features

Modular design
- Easy replaceable filter elements
- Elements are interchangeable between grades

Robust construction
- Total powder coated, dual color body
- Counter flanges supplied with each filter

Reliability
- Hydraulic testing of each filters
- O-ring seating on flanges for 100% leak proof assembly

Application

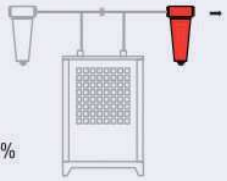
SXF-5

APPLICATION

Upstream position of absorption filter
Downstream position of refrigerant dryer

Elimination: 0.01 micron and bigger solid or liquid particles. Oil mist 99.99%

ISO 8573.1 Quality Classes, Dirt 1, Oil 2



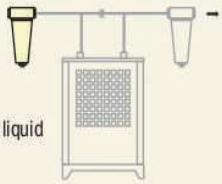
SXF-9

APPLICATION

Downstream position of after cooler
Upstream position of refrigerant dryer

Elimination: 3 micron and bigger solid or liquid particles. Oil content 5 ppm

ISO 8573.1 Quality Classes, Dirt 3, Oil 5



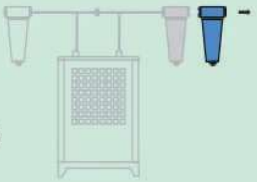
SXF-3

APPLICATION

Upstream position of adsorption dryer
Downstream position of line filter

Elimination: 0.01 micron and bigger solid or liquid particles. Oil mist 99.999%

ISO 8573.1 Quality Classes, Dirt 1, Oil 1



SXF-7

APPLICATION

Upstream position of fine oil mist filter
Downstream position of adsorption dryer

Elimination: 1 micron and bigger solid or liquid particles. Oil content 1 ppm

ISO 8573.1 Quality Classes, Dirt 2, Oil 4

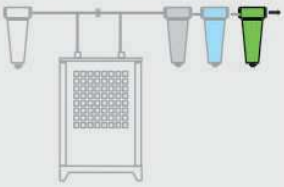
SXF-1 (Carbon Filter)

APPLICATION

Upstream position of fine oil mist filter

Elimination: 0.01 micron and bigger solid or liquid particles. Oil vapour

ISO 8573.1 Quality Classes, Dirt 1, Oil



CATRIDGE IDENTIFICATION

9 SERIES	7 SERIES	5 SERIES	3 SERIES	1 SERIES
WIRE MESH	PERFORATED METAL	RED	BLUE	GREEN
MOISTURE FILTER	ONLINE FILTER	OIL FILTER	HYPER OIL FILTER	HYPER OIL & ODOUR FILTER
3 MICRONS	1 MICRON	0.01 MICRON	0.01 MICRON	0.01 MICRON

Air Filter – High Pressure

Hoch makes high pressure air filters of pressure range up to 40 bar.

Technical Specifications

Airflow		Max.Operating Pressure		End Conn.		Element	Models					
							Moisture Filter	After Filter	Oil Filter	Hyper Oil Filter	Odour Filter	ADV
m^3/min	cfm	Kg/cm^2	psi	Type/Size			3µ	1µ	0.01µ	0.01µ	0.01µ	
1.13	40	40	568	BSP/FLANGED	½"	E*16	HHP9-40	HHP7-40	HHP5-40	HHP3-40	HHP1-40	HHPLD-01
2.83	100	40	568		¾"	E*20	HHP9-100	HHP7-100	HHP5-100	HHP3-100	HHP1-100	HSHPLD-01
5.66	200	40	568		1 "	E*24	HHP9-200	HHP7-200	HHP5-200	HHP3-200	HHP1-200	HSHPLD-01
7.08	250	40	568		1½"	E*28	HHP9-250	HHP7-250	HHP5-250	HHP3-250	HHP1-250	HSHPLD-01
8.49	300	40	568		1½"	E*32	HHP9-300	HHP7-300	HHP5-300	HHP3-300	HHP1-300	HSHPLD-01
12.74	450	40	568		1½"	E*36	HHP9-450	HHP7-450	HHP5-450	HHP3-450	HHP1-450	HSHPLD-01

Note: The filters are fabricated and powder coated ADV (Optional)- Timer based, electrically operated Higher volume, high pressure filters are available on request

Activated Carbon Adsorbers

Activated Carbon Adsorbers are used in the most critical filtration applications for the elimination of residual oil content, odour producing compounds, toxic non-polar compounds, foreign particles and organic contents from the compressed air even with very low residual levels as low as 0.003 mg/m^3. It filters out even the finest oil vapour which may already be present in the intake air to meet the highest standards of compressed air quality.

Salient Features

Built to last

- Long lasting activated carbon
- Chemical impregnation provided to suit critical applications

Easy operation and maintenance

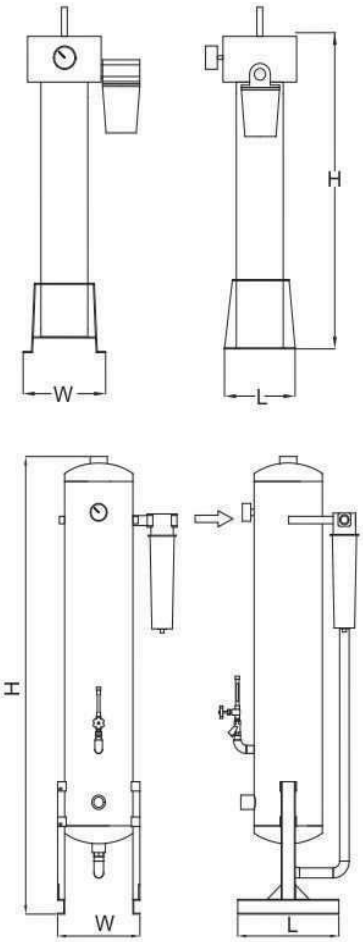
- Oil vapour indicator
- Equipped with downstream pre-filters
- Easy replacement of activated carbon

Optimal design

- Powder coated finish
- Very compact and efficient design
- Minimum pressure drop

Applications

Metal Finishing industry | Medical Industry | Chemical Industry| Mercury Scrubbing



Technical Specifications

Model	Airflow		Max.Operating Pressure		End Conn.	Dimensions (mm)		
	m^3/min	cfm	Kg/cm^2	psi		L	W	H
ACA-10	0.28	10	12	171	½"	200	190	470
ACA-20	0.56	20	12	171	½"	200	190	870
ACA-40	1.13	40	12	171	½"	360	235	1150
ACA-60	1.69	60	12	171	1"	360	235	1520
ACA-80	2.26	80	12	171	1½"	500	360	1250
ACA-100	2.83	100	12	171	1½"	500	360	1480
ACA-125	3.54	125	12	171	1½"	600	450	1330
ACA-150	4.24	150	12	171	1½"	600	450	1450
ACA-200	5.66	200	12	171	1½"	650	500	1450
ACA-250	7.07	250	12	171	1½"	750	600	1370
ACA-300	8.49	300	12	171	1½"	750	600	1530
ACA-350	9.91	350	12	171	1½"	800	650	1450
ACA-450	12.74	450	12	171	2"	800	650	1700
ACA-550	15.57	550	12	171	2"	900	700	1600

Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice

Auto Drain Valves

Hoch
air energy solutions

Condensate drain valves remove condensate moisture from the air system without losing excessive compressed air and without shutting down the system. Condensate can have harmful effects on a system when not removed. For instance, moisture can wash lubrication from air tools and production equipment causing downtime and maintenance; an inconsistent supply of dry air can cause production quality problems; and excessive rust and scale can form in the air distribution system. Also, water can back up into the compressor and wreck the machinery, air dryers can become overloaded, and in-line filters can be destroyed.


SLPLD01


SLPLD02


SLPHD01


SHPLD01


SHPLD02


S20B
Float type
Capacity : 500 L/H


S160B
Float type
Capacity : 850 L/H

Technical Specifications

TYPE	ON LINE MODELS		HIGH DISCHARGE	HIGH PRESSURE		HP/HD
MODEL	HLPLD-01	HLPLD-02	HLPHD-01	HHPLD-01	HHPLD-02	HHPHD-01
VALVE TYPE	Direct Acting, On Line		Pilot operated High Discharge	Direct Acting, High pressure, On line	Direct Acting, High Pressure, On line	Pilot Operated, High pressure & High Discharge
CONTROLLER	Electronic Controller		Electronic Controller	Electronic Controller	Electronic Controller	Micro Controller
CYCLE TIME	1-128 min	0.5-45 min.	1-128 min	1-128 min.	0.5-45 min	1-99 min.
DRAIN TIME	8 sec.	0.5-10 sec.	4 sec.	8 sec.	0.5-10 Sec	1-10 sec.
MANUAL DRAIN	NO	YES	NO	NO	YES	YES
COUNT DOWN(DISPLAY)	NO		NO	NO	NO	YES
ORIFICE	2.5		12.5	0.8	0.8	12.5
MAX.OPERATING PRESSURE	16 bar		16 bar	40 bar	40 bar	40 bar
VALVE BODY	Cast Aluminium		Cast Aluminium	Brass	Brass	Gun metal
END CONNECTION	1/2" BSPF		1/2" BSPF	1/2" BSPF	1/2" BSPF	1/2" BSPF
PILOT END CONNECTION	NA		1/8" BSPF	NA	NA	1/8" BSPF
ELECTRICAL CONNECTOR	DIN 43650 A		DIN 43650 A	DIN 43650 A	DIN 43650 A	DIN 43650 A
POWER	10W		10W	10W	10W	10W
SUPPLY VOLTAGE	230 V +/-10%		230 V +/-10%	230 V +/-10%	230 V +/-10%	230 V +/-10%
ENVIRONMENTAL PROTECTION	IP-65		IP-65	IP-65	IP-65	IP-65
STRAINER	YES		NA	YES	YES	NA

Note: Due to continuous engineering improvements, technical specifications are subject to change without prior notice

Air Cooled After Coolers

Air Cooled After coolers by Hoch reduce compressed air temperature upto 25°C. Air cooled after coolers can reduce the size of a dryer necessary to meet system output air requirements, extend the life of the dryer and filters and reduce maintenance.

Salient Features

Mobile and modular
- Compact design
- Smaller footprint

Efficient operation
- Maximum heat transfer
- Minimum pressure drop

Optimal design
- Corrosion resistant construction
- Horizontal airflow standard with vertical airflow optional
- In-built condensate drain available

Technical Specifications

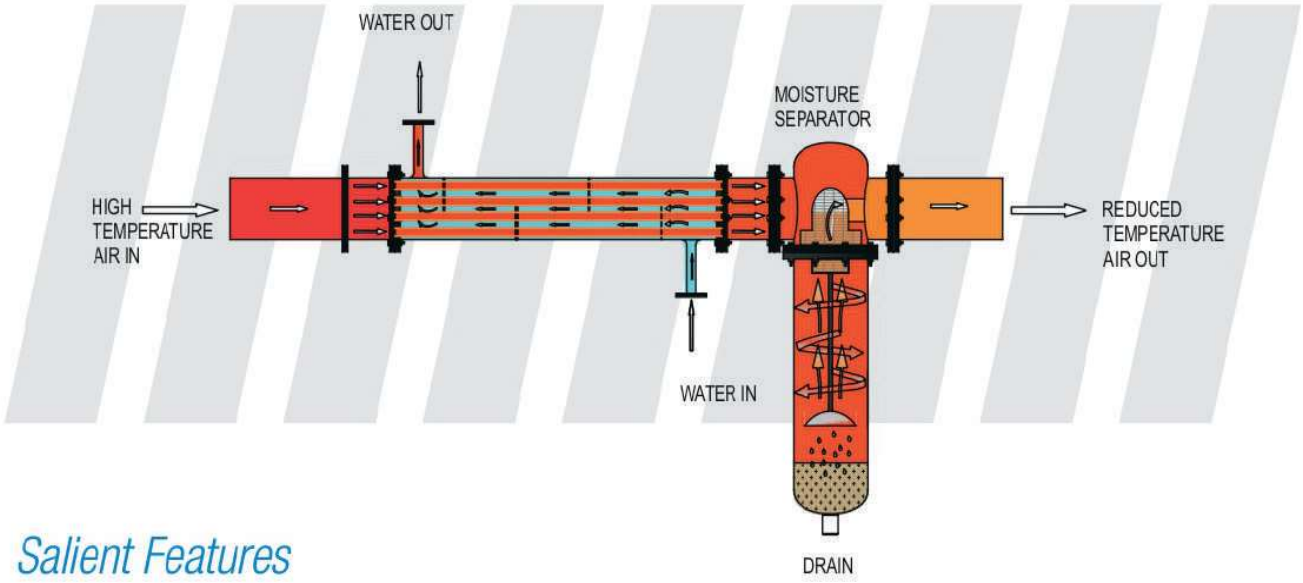
Capacity	Dimensions(mm)			End Connections	Fan (Axial)	Power Supply	Power	Operating Pressure
cfm	L	B	H			V/Ph/Hz		Kg/cm^2
100	540	350	825	1 ½" BSP	20"	230/1/50	450 W	7-10
150	580	350	930	1 ½" BSP	22"	230/1/50	600 W	7-10
200	675	350	930	1 ½" BSP	22"	230/1/50	600 W	7-10
300	725	350	980	1 ½" BSP	24"	230/1/50	780 W	7-10
500	870	475	1100	2" BSP	26"	230/1/50	1000W	7-10
1000	1700	475	1100	4" FLANGED	2 X 24"	230/1/50	1560W	7-10

Note: Specific requirements can be accomodated, On request , 3 Phase system can be provided

Water Cooled After Coolers

Hoch Water-Cooled After Coolers along with Moisture separators are an ideal combination for reducing the considerable air temperature from the compressor. It is built with moisture separator to remove the maximum moisture condensate. Proper installation of after coolers and matching moisture separators, effectively assist in maintaining trouble-free operation of compressed air equipment.

Working principle



Salient Features

Easy maintenance

- Removable end bonnets facilitate cleaning and servicing
- Drain ports on shell side for easy maintenance

Efficient operation

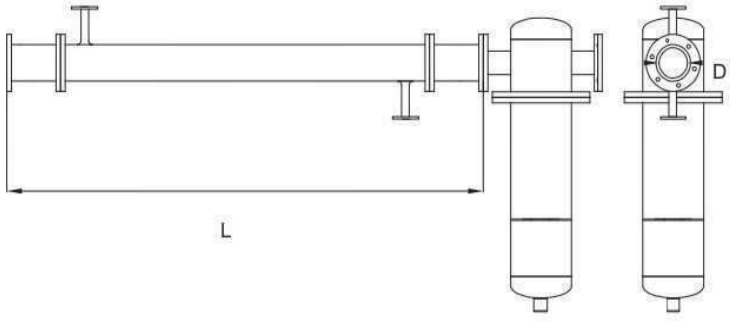
- Gains maximum heat removal benefit from expensive cooling water
- Copper heat exchanger surfaces provide excellent heat transfer

Optimal design

- Single pass design with smooth surface copper tubes minimizes fouling and allows lower pressure drop
- Counter-flow shell and tube design provides close approach temperature

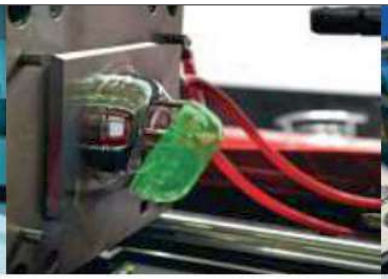
Technical Specifications

Capacity	Dimensions (mm)		Operating Pressure
cfm	D	L	kg/cm²
50	NB 100	850	7-10
100	NB 125	1050	7-10
150	NB 125	1350	7-10
200	NB 150	1050	7-10
250	NB 150	1350	7-10
300	NB 150	1350	7-10
400	NB 200	1350	7-10
500	NB 200	1550	7-10



Note:
Due to continuous engineering improvements, technical specifications are subject to change without prior notice
Detailed specifications can be provided on request






Process Chillers

Smart, Simple and Quiet

Hoch Technologies, as a specialist in refrigerant and heat exchanging systems, delivers Process Chillers for industrial process application needs. These Chillers are equipped with latest developments in technology.

In close co-operation with customers of various industrial branches, a new machine concept in modular design has been created. One major strength of our company is our know-how in cooling technology by means of which we can convert thermal process requirements into constructive solutions in order to design tailor-made solutions for our customers with a high level of vertical integration.

Our experts are highly capable of strongly recommending and precisely implementing the suitable type of chiller as per customer requirements.

Applications

Automotive : Induction, EDM, Paint booth, Hydraulics, Quenching, Test chamber | **Machine Tool** : Grinding, Cutting, Milling, Honing, Welding, Drilling, Hobbing | **Plastics** : Extrusion, Forming, Molding, Press | **Medical** : MRI, PET, Linear Accelerator | **Pharma and Chemical** : Reactor jacket, X-ray spectrometers | **Food and Beverage** : Bakery, Brewery, Winery | **Paper** : Printing, Labelling, Gluing

Design Directives

We are concerned more about and deliver:

- Rigidity
- Aesthetics
- Maximum Control and Safety Features
- Easy Serviceability

Strength

Our Major strengths are:

- Strong technical team to provide customized solutions for the chilling applications
- Strong technical service team

Salient Features

Optimal design and construction

- Compact design, convenient for installation and operation
- Built-in SS water tank and water pump

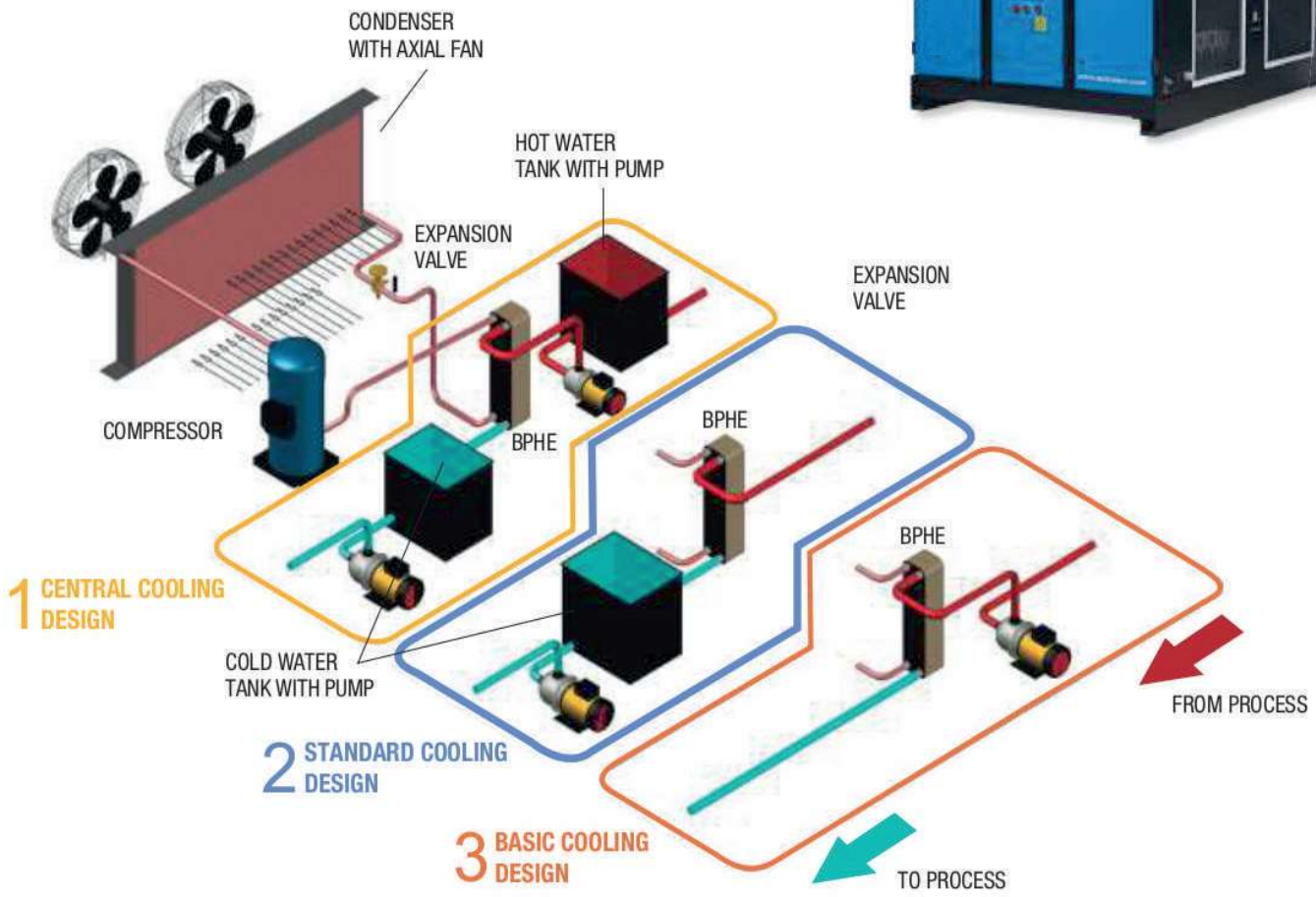
Easy operation and maintenance

- Integrated electronic control, digital display
- Modular design for simple maintenance

Efficient

- Brazed plate Heat Exchanger for excellent performance
- Temperature control accuracy +/- 0.1 to 0.3°C

Hoch Chillers come in three configurations for specific applications. The design schematic below explains the variations for the three customized offerings. This customizable modular design ensures development of products to suit a wide spectrum of applications. Shell and tube models are also available on request.



Technical Specifications - Water Cooled / Air Cooled

Model	Nominal Cooling Capacity	Ambient Temperature	Operating Temp.(Fluid)	Tank Capacity	End Conn.	Dimensions(mm)		
	K Cal/hr ~ Ton	°C	°C	Litres	BSP	L	B	H
H2-TRAT	6000-2	2~45	5~35	125	3/4"	880	760	1410
H3-TRAT	9000-3	2~45	5~35	150	3/4"	880	760	1410
H5-TRAT	15000-5	2~45	5~35	200	1"	1340	765	1450
H6-TRAT	18000-6	2~45	5~35	200	1"	1340	765	1450
H8-TRAT	22500-7.5	2~45	5~35	250	1 1/4"	1532	1000	1490
H12-TRAT	36500-12	2~45	5~35	250	1 1/2"	1724	1230	1530
H16-TRAT	48500-16	2~45	5~35	300	1 1/2"	2000	1355	1990
H22-TRAT	66500-22	2~45	5~35	400	2"	2490	1450	2125

Note:

* Subject to technical modification without notice

*** In between models and customized chillers are available on request**

*** Mentioned above are standard models, Technical Specification for non–standard and higher capacity upto 60TR will be provided on request**

Our Network

Hoch
air energy solutions

Distributor :
Ektelon Engineering and Projects Private Limited
A-16, Scheme No.78, Part I
Indore 452010 Madhya Pradesh, India
Tel. : 738 990 5333, 738 990 7333
Email : ektelonprojects@gmail.com
Web. : www.ektelonairpower.com

Marketed By: