ANNAIR®

Steady Performance • Maximum Reliability • Installation Simplified • Less Maintenance • Cost Effectiveness

REFRIGERATED
AIR DRYER
Ranging from 20 to 400 CFM

A Thalakott GROUP ENTERPRISE

IMPORTANCE OF COMPRESSED AIR DRYING

Compressed air contains a significant percentage of water vapour, which can create many problems in pneumatic instruments and cause breakdown in processes, leading to higher running costs and lower quality finished products.

- Water vapour present in compressed air can cause corrosion, scaling, and rust in pipelines, which leads to the clogging of valves and cylinders.
- The excess moisture can reduce the life and lubrication ability of soft seals inside the valves and cylinders, which eventually leads to leakages and non-movement of the piston.
- Process material or fluid can be spoiled once it comes into contact with humid compressed air.

WORKING PRINCIPLE

The humid and high-temperature compressed air enters the pre-exchanger (air-to-air exchanger), where it is pre-cooled by outgoing cool and dry air. The pre-exchanger reduces the air temperature to a great extent, which enables the use of a relatively small and economical refrigeration system. Then the pre-cooled compressed air enters the evaporator (Air to Refrigerant Exchanger), where it cools down further, up to - 20 °C (Atmospheric Dew Point Temperature), by taking away the compressed air heat using a refrigerant cycle. At this temperature, moisture in vapour form condenses into water particles and enters the moisture separator. Water droplets will be separated from the air stream in the moisture separator and guided out through an automatic drain valve. Finally, the cold and moisture-free compressed air passes through the pre-exchanger, and heat exchange will take place with the incoming compressed air. The quality of air coming out of the refrigerated air dryer is Class 4, suitable for instrument and process air application as per ISO 8573.1.

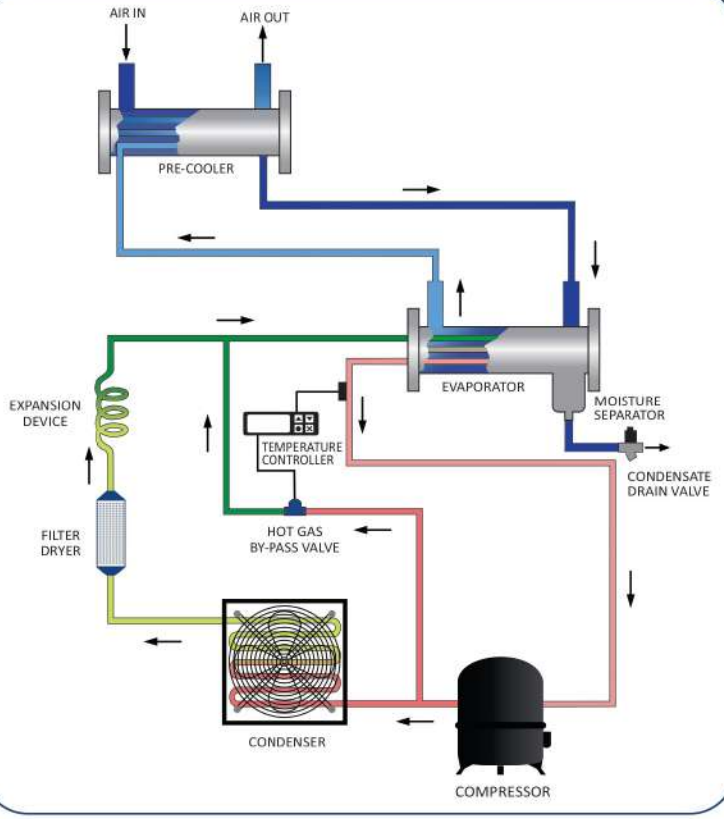
APPLICATIONS

- Automobile
- Breweries & Distilleries
- Cement | CNC Machines
- CMM | Chemical
- Food Processing
- Foundry
- General Instrumentation
- Hospital | Laser Machines
- Nitrogen Generator
- Oxygen Generator
- Packaging | Paper | Spray Painting
- Pharmaceutical | Power Plant
- Printing | Rice Mill
- Sugar Mill | Textiles
- Tool Room | VMC
- Wood Working Machines

SALIENT FEATURES

- CFC free, eco-friendly refrigerant
- Constant dew point at all varying load
- Two stage effective moisture separation
- Lower power consumption
- Built with necessary protectors for electrical and refrigeration systems
- Modern refrigerant system components and pressure switches
- Automatic, maintenance free and user friendly
- Compact design and requires less floor space

SCHEMATIC DIAGRAM ▶▶



Future A

FUTURE A SERIES (20 CFM - 400 CFM)

TECHNICAL DATA											
Model	Capacity CFM	Working Pressure kg.cm²	Connection Size BSP/F	Refrigerant	Power Supply v/ph	Condenser Type	Nominal Power Consumption kw	Overall Dimensions in mm			Approx. Weight (kgs.)
								L	B	H	
AFAR-20	20	14	1"	R 134a	230/1	Air	0.18	530	430	610	45
AFAR-40	40	14	1"	R 134a	230/1	Air	0.18	530	430	610	47
AFAR-60	60	14	1"	R 134a	230/1	Air	0.35	530	430	610	50
AFAR-80	80	14	1"	R 134a	230/1	Air	0.74	570	700	900	90
AFAR-100	100	14	1"	R 134a	230/1	Air	0.74	570	700	900	95
AFAR-125	125	14	1½"	R 134a	230/1	Air	0.74	570	700	900	100
AFAR-150	150	14	1½"	R 134a	230/1	Air	1.05	570	700	900	105
AFAR-200	200	14	1½"	R 134a	230/1	Air	1.05	570	700	900	110
AFAR-250	250	14	1½"	R 407c	230/1	Air	1.64	570	1030	940	145
AFAR-300	300	14	1½"	R 407c	230/1	Air	1.64	570	1030	940	150
AFAR-400	400	14	2"	R 407c	230/1	Air	1.64	570	1030	940	160

Data refer to the following nominal condition

Ambient temperature of 40°C, with intel air at 7 barg and 45°C and 3°C pressure dew point (-22°C atmosphere pressure dew point)

CORRECTION FACTOR								
CORRECTION FACTOR (BAR)	4	5	6	7	8	10	12	16
CORRECTION FACTOR (K_1)	0.82	0.89	0.95	1	1.05	10.09	1.13	1.18
AMBIENT TEMPERATURE (°C)	15	20	25	30	35	40	45	50
CORRECTION FACTOR (K_2)	1.2	1.16	1.1	1.05	1	0.93	0.85	0.76
INLET TEMPERATURE (°C)	25	30	35	40	45	50	55	60
CORRECTION FACTOR (K_3)	1.21	1.15	1.08	1	0.92	0.83	0.73	0.62

ABOUT US

Annair Drychill Tech (India) Private Limited, Mumbai, is a world-class manufacturer, exporter and solution provider for Compressed Air Treatment and Industrial Cooling. We are committed to designing, manufacturing, delivering and servicing technically proven, commercially viable products and solutions to industrial needs in line with international standards. Annair Air Dryers and Water Chillers are one of the most trusted brands in India since 2005, with more than 10,000 successful installations and a satisfied client base in all spectrums of industries. Our products and services are easily available all over India through our branch offices and authorised dealer network.

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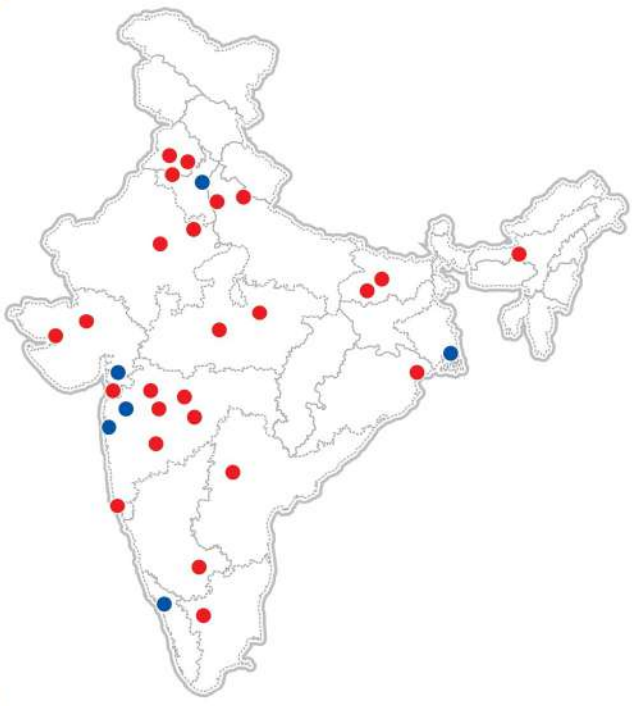
ISO 9001 REGISTERED

OUR CLIENTS

Ambuja Cement · BARC · BMM · CEAT · Defence R&D Organisation · EXIDE · FDC Limited · Godrej · IndianOil · JSW · MACLEODS · MALABAR GOLD & DIAMONDS · MILLENNIUM TOYOTA · NPCIL



OUR NETWORK

We have a well established network of Channel Partners & Service Franchises at various locations.

BRANCH LOCATIONS

Ahmedabad, Delhi, Kochi, Kolkata, Mumbai & Pune.

AUTHORISED DEALERS

Ahmedabad, Alwar, Aurangabad, Bangalore, Bhubaneswar, Chandigarh, Coimbatore, Delhi, Faridabad, Gandhidham, Goa, Guwahati, Haryana, Hyderabad, Indore, Jaipur, Jamshedpar, Kanpur, Kolhapur, Kolkata, Ludhiana, Mumbai, Nashik, Nagpur, Noida, Patna, Pune, Rajkot, Raipur, Thane & Vapi.

Annair Drychill Tech India Pvt. Ltd.

(An ISO 9001:2015 Certified Co.)

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