

REFRIGERATED AIR DRYER

Ranging from: 15 to 2000 CFM













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, will leads to higher running cost and low quality of finished products.

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

WORKING PRINCIPLE



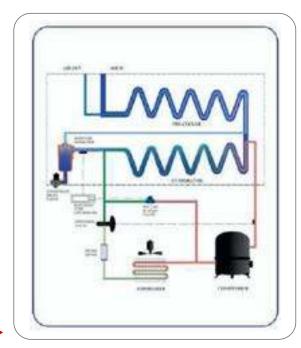
The humid and high temperature compressed air enters to the pre-exchanger (Air to Air Exchanger), where it is pre cooled by outgoing cool and dry air. The Pre-exchanger reduces the air temperature to a great extent, which enables to use relatively small and economical refrigeration system. Then the pre cooled compressed air enters to the evaporator (Air to Refrigerant Exchanger) where it is cools down further up to - 20 °C (Atmospheric dew point Temperature) by taking away the compressed air heat using refrigerant cycle. At this temperature moisture in vapour form condenses to water particles and enters to the moisture separator. Water droplets separate 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; there heat exchange takes place with the incoming compressed air. The quality of air coming out from the refrigerant type air dryer is Class 4, suitable for instrument and process air application according to ISO 8573.1.

APPLICATIONS

- Automobile Breweries & Distilleries Cement CNC Machining CMM Machines
- Chemical Food Processing Foundry General Instrumentation Hospital
- Packaging Paper Painting Pharmaceutical Power Plants Printing
- Rice Mill Sugar Textiles Tool Room

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



SILVER STAR SERIES (15 CFM - 300 CFM)

TECHNICAL DATA											
Model	Capacity CFM	Working Pressure kg/cm²	Connection Size BSP	Refrigerant	Power Supply v/ph	Condenser Type	Nominal Power Consumption kw	Overall Dimensions in mm		Approx. Weight (kgs.)	
ASSR-15	15	16	1/2"	R 134a	230/1	Air	0.19	L	B 500	H 610	40
ASSR-25	25	16	1/2"	R 134a	230/1	Air	0.19	410	500	610	42
ASSR-45	45	16	1/2"	R 134a	230/1	Air	0.37	410	500	610	48
ASSR-60	60	16	3/4"	R 134a	230/1	Air	0.37	520	570	785	62
ASSR-80	80	16	3/4"	R 134a	230/1	Air	0.78	520	570	785	76
ASSR-100	100	16	1"	R 134a	230/1	Air	0.78	700	750	980	110
ASSR-125	125	16	11/2"	R 134a	230/1	Air	0.78	700	750	980	117
ASSR-150	150	16	11/2"	R 134a	230/1	Air	1.15	700	750	980	125
ASSR-200	200	16	11/2"	R 134a	230/1	Air	1.15	700	750	980	132
ASSR-250	250	16	11/2"	R 407c	230/1	Air	1.70	700	750	980	145
ASSR-300	300	16	2"	R 407c	230/1	Air	2.20	700	750	980	158

GOLD STAR SERIES (400 CFM - 2000 CFM)

TECHNICAL DATA											
Model	Capacity CFM	Working Pressure kg/cm²	Connection Size BSP	Refrigerant	Power Supply v/ph	Condenser Type	Nominal Power Consumption kw	Overall Dimensions in mm L B H		Approx. Weight (kgs.)	
AGSR-400	400	16	2"	R 407c	440/3/50	Air	2.55	815	990	1400	165
AGSR-500	500	16	2"	R 407c	440/3/50	Air	2.70	915	1145	1475	185
AGSR-600	600	16	3"	R 407c	440/3/50	Air	3.70	915	1145	1475	210
AGSR-800	800	16	3"	R 407c	440/3/50	Air	4.55	1100	1300	1700	350
AGSR-1000	1000	16	4"	R 407c	440/3/50	Air/Water	5.15	1400	1800	1475	400
AGSR-1250	1250	16	5"	R 407c	440/3/50	Air/Water	6.80	1400	1800	1475	450
AGSR-1500	1500	16	5"	R 407c	440/3/50	Air/Water	8.10	1400	1920	1700	575
AGSR-2000	2000	16	6"	R 407c	440/3/50	Air/Water	9.60	1625	2200	2095	650

CORRECTION FACTOR										
INLET PRESSURE (BAR)	4	5	6	7	8	10	12	16		
CORRECTION FACTOR (K ₁)	0.82	0.89	0.95	1.00	1.05	1.09	1.13	1.18		
AMBIENT TEMPERATURE (°C)	25	30	35	40	45	50	-	_		
CORRECTION FACTOR (K ₂)	1.19	1.11	1.09	1.00	0.91	0.83	-	_		
INLET TEMPERATURE (°C)	35	40	45	50	55	60	-	_		
CORRECTION FACTOR (K ₃)	1.34	1.15	1.00	0.88	0.79	0.71	_	-		

ABOUT US

Annair Drychill Tech (India) Private Limited, Mumbai is a world class manufacturer, exporter and solution provider for compressed air treatment & industrial cooling. We are committed to design, manufacture, deliver and service of technically proven, commercially viable products and solution to the industrial needs in line with international standards. Annair air dryers & water chillers are one of the most trusted brands in India since 2005, more than 10000 successful installations and satisfied client base in all spectrum of industries. Annair products & services are easily available all over India through our Branch Offices and Dealer Network.



OUR CLIENTS



















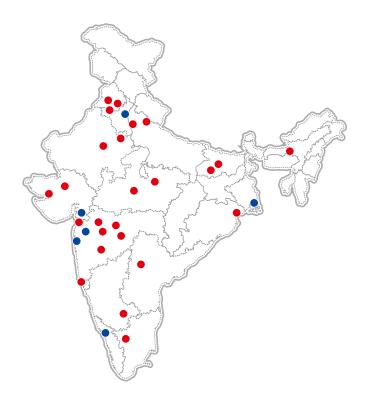












OUR NETWORK

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

Branch Locations: Mumbai, Kolkata, Ahmedabad, Pune, Delhi & Kochi

Authorised Dealers: Ahmedabad, Alwar, Aurangabad, Bangalore, Bhubaneswar, Chandigarh, Coimbatore, Delhi, Faridabad, Gandhidham, Goa, Guwahati, Haryana, Hyderabad, Indore, Jaipur, Jamshedpur, 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.)

Unit No. 101, I Wing, Plot - K1, Udyog Bhavan-2, Additional M.I.D.C, Anandnagar Ambernath (East), Thane- 421506, Maharshtra, India.

T:+91251-2620660 • +919320950116
E: sales@annair.co.in • admin@annair.co.in
W: www.annair.com • www.annair.co.in

Authorised Dealer