

High Pressure Air Treatment



Reliability, Efficiency, Productivity

Utilizing eco-friendly and reliable designs to maximize high efficiency process of high-pressure compressed air, while lowering failure rates and reducing overall operating costs.

High Pressure Refrigerated Dryer

Low Maintenance Air Treatment Products

Ingersoll Rand high pressure refrigerated dryer offers a supreme ease of installation, simply attaching the inlet and outlet piping to the dryer unit and enjoying clean dry air right away.

Corrosion proof heat exchanger and built in high-efficiency water separator ensure a long operating lifespan and provide a long steady stream of clean dry air. Benefits of usage include reduced condensation on machinery, materials spoilage, replacement of pneumatic tools and a variety of workflow issues where moisture is the culprit.

Despite the small footprint of these dryers, they are fully capable to operate in environments such as food/beverage processing, PET blowing, natural gas, maritime applications and so forth, while providing the utmost ease of operation.

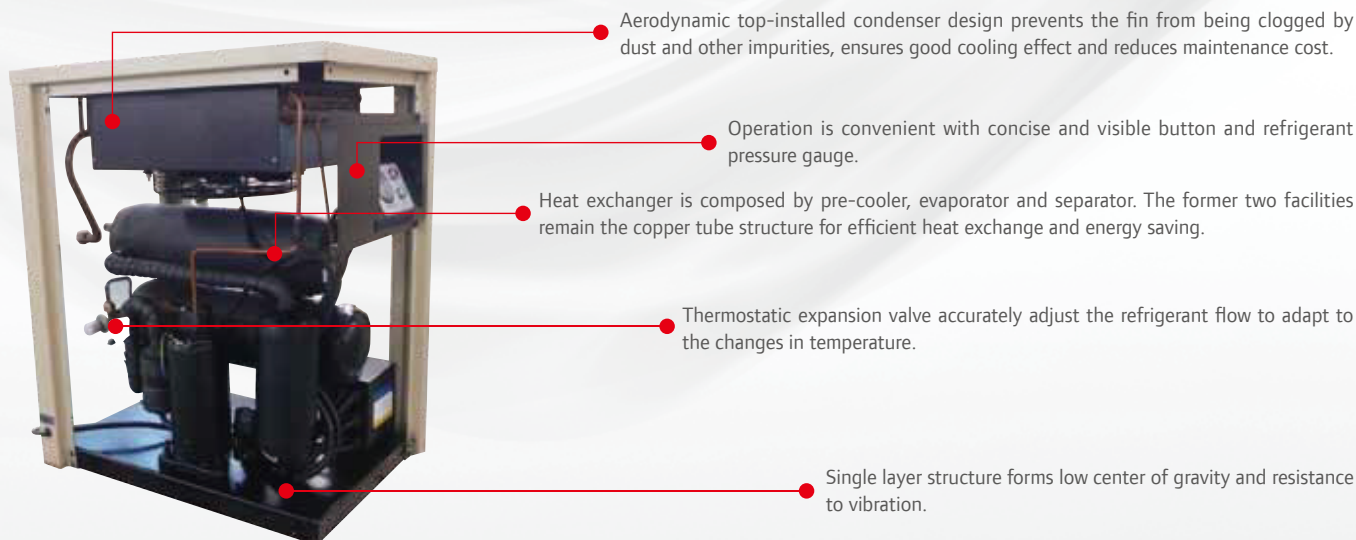
Maximum Efficiency Design

Industry leading standards ensures a stable dew point even under full load capacities. Every unit undergoes operation and pressure leakage testing for quality control. The standard design ambient temperature is 45°C , allowing it for usage in a large variety of conditions and applications.



The Lowest Operation Costs

Ingersoll Rand high-pressure refrigerated dryers offer the following benefits that are not only energy efficient but highly reliable in the field.



Aerodynamic top-installed condenser design prevents the fin from being clogged by dust and other impurities, ensures good cooling effect and reduces maintenance cost.

Operation is convenient with concise and visible button and refrigerant pressure gauge.

Heat exchanger is composed by pre-cooler, evaporator and separator. The former two facilities remain the copper tube structure for efficient heat exchange and energy saving.

Thermostatic expansion valve accurately adjust the refrigerant flow to adapt to the changes in temperature.

Single layer structure forms low center of gravity and resistance to vibration.

High Pressure Desiccant Dryer

Ingersoll Rand high pressure desiccant dryer with steel component provides. Intelligent features to realize maximum operation reliability. While one stainless steel vessel is drying the incoming air, the other vessel is regenerating the desiccant material, and this process cycles throughout the operating period to provide high quality clean air.

Designed for the most demanding applications

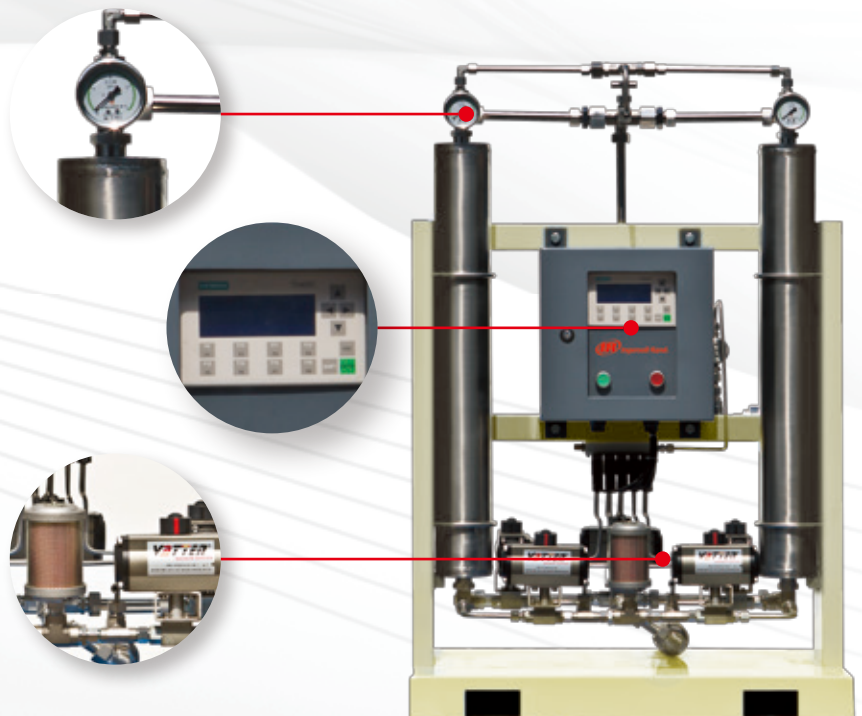
Ingersoll Rand High-pressure desiccant dryers are made of stainless steel. Every detail is considered from using the highest quality components to incorporating cutting edge dryer design. The inlet pressure is rated up to 360bar.

Wide Application of Uses

Due to the high quality nature of the Ingersoll Rand High pressure desiccant dryer, it can be applied in military spec service, petroleum refineries, deep-sea drilling applications, air supply for high-pressure pneumatic tools, etc. Other applications include aviation wind tunnel testing, high-pressure nitrogen filling, and fulfills traditional PET blowing needs. All measuring gauges are tested under pressure for accuracy.

Product Highlights:

- Utilizes superb quality high pressure switches for error-free operation
- Automatic pressure loading and purging cycles, ensuring operation safety
- High pressure desiccant materials used provides efficient drying and resistant to breakdown in order to guarantee a long lifespan
- High efficiency silencers are used in conjunction with flow limiters to significantly lower job site noise.
- PLC automatic controller for ease of end customer operation
- Reliable robust pneumatic valves ensure no sudden pressure swings and maintains a stable outlet pressure
- Combination filtration plus desiccant dryer design, small footprint with visually appealing compact design. Mounted on engineered skids for ease of transport.



High Pressure Refrigerated Dryer

Model	Capacity m³/hr Max Working Pressure bar				Power V/Ph/hz	Air Connections (In/Out)	Dimensions (mm)			Weight (kg)
	HP30A	HP35A	HP40A	HP55A			L	W	H	
Air-cooled										
D	32	36	40	44	220/1/50	NPT 1/2"	660	465	800	87
	67	74	83	92	220/1/50	NPT 1/2"	660	465	800	92
	116	128	143	158	220/1/50	NPT 1/2"	660	465	800	98
	173	193	214	238	220/1/50	NPT 1/2"	720	520	800	105
	232	257	285	316	220/1/50	NPT 1"	720	520	800	125
	289	321	356	395	220/1/50	NPT 1"	720	520	800	135
	347	385	428	475	220/1/50	NPT 1"	760	560	820	145
	405	449	499	554	220/1/50	NPT 1"	760	560	820	160
	463	514	570	633	380/3/50	NPT 1-1/4"	760	560	820	175
	521	578	641	712	380/3/50	NPT 1-1/4"	960	590	980	190
	578	642	713	791	380/3/50	NPT 1-1/4"	960	590	980	205
	636	706	784	870	380/3/50	NPT 1-1/4"	960	590	980	215
	694	770	855	949	380/3/50	NPT 1-1/4"	1060	620	1180	225
	810	899	998	1108	380/3/50	DN40	1060	620	1180	245
	925	1027	1140	1265	380/3/50	DN40	1060	620	1180	265
	1041	1156	1283	1424	380/3/50	DN40	1400	800	1300	290
	1157	1284	1425	1582	380/3/50	DN50	1400	800	1300	330
	1273	1412	1568	1740	380/3/50	DN50	1400	800	1300	350
	1388	1541	1710	1898	380/3/50	DN50	1520	890	1400	380
	1619	1798	1996	2215	380/3/50	DN50	1520	890	1400	420
	1851	2054	2281	2531	380/3/50	DN65	1520	890	1400	460
	2082	2311	2566	2848	380/3/50	DN65	1640	980	1520	510
	2314	2568	2851	3164	380/3/50	DN65	1640	980	1520	580
	2438	2706	3004	3334	380/3/50	DN65	1640	980	1520	630
	2703	3000	3330		380/3/50	DN65	1640	980	1520	670

Model	Capacity m³/hr Max Working Pressure bar				Power V/Ph/hz	Air Connections (In/Out)	Dimensions (mm)			Weight (kg)
	HP70A		HP80A				L	W	H	
Air-cooled										
D	51				220/1/50	NPT 1/2"	680	350	600	98
	102				220/1/50	NPT 1/2"	680	350	600	98
	153				220/1/50	NPT 1/2"	680	350	600	112
	204				220/1/50	NPT 1/2"	680	350	600	112
	255				220/1/50	NPT 1"	680	450	680	126
	306				220/1/50	NPT 1"	680	450	680	126
	357				220/1/50	NPT 1"	680	450	680	150
	408				220/1/50	NPT 1"	680	450	680	150
					220/1/50	NPT 1/2"	600	300	550	98
					220/1/50	NPT 1/2"	600	300	550	98

Model	Capacity m³/hr Max Working Pressure bar				Power V/Ph/hz	Air Connections (In/Out)	L	W	H	Weight (kg)		
	HP30W	HP35W	HP40W	HP55W								
Water-cooled												
D					633	380/3/50	NPT 1-1/4"	680	450	680	175	
					641	380/3/50	NPT 1-1/4"	680	450	680	190	
	642				713	791	380/3/50	NPT 1-1/4"	770	540	800	205
	636	706	784	870	380/3/50	NPT 1-1/4"	770	540	800	215		
	694	770	855	949	380/3/50	NPT 1-1/4"	770	540	800	225		
	810	899	998	1108	380/3/50	DN40	1080	700	1130	245		
	925	1027	1140	1265	380/3/50	DN40	1080	700	1130	265		
	1041	1156	1283	1424	380/3/50	DN40	1080	700	1130	290		
	1157	1284	1425	1582	380/3/50	DN50	1250	800	1300	330		
	1273	1412	1568	1740	380/3/50	DN50	1450	890	1420	350		
	1388	1541	1710	1898	380/3/50	DN50	1450	890	1420	380		
	1619	1798	1996	2215	380/3/50	DN50	1560	980	1500	420		
	1851	2054	2281	2531	380/3/50	DN65	1750	1005	1550	460		
	2082	2311	2566	2848	380/3/50	DN65	1910	1050	1600	510		
	2314	2568	2851	3164	380/3/50	DN65	2100	1080	1700	580		
	2438	2706	3004	3334	380/3/50	DN65	2100	1080	1700	630		
	2703	3000	3330		380/3/50	DN65	2100	1080	1700	670		

Notes:

- 1) Stated pressure dew points in accordance with ISO8573-1 grade 6.
- 2) Data refers to following conditions: ambient temperature 40 °C, air inlet temperature 80 °C.

High Pressure Desiccant Dryer

Model	Capacity	Max Working Pressure	Power	Air Connections (In/Out)	Dimensions (mm)			Weight
	m ³ /hr	bar	V/Ph/hz		L	W	H	kg
D42IHPD035	42	35	220/1/50	1/4"	800	500	1300	120
D66IHPD035	66	35	220/1/50	1/4"	800	500	1500	124
D126IHPD035	126	35	220/1/50	1/2"	800	500	1500	147
D198IHPD035	198	35	220/1/50	1/2"	860	550	1600	163
D282IHPD035	282	35	220/1/50	1/2"	860	550	1600	195
D312IHPD035	312	35	220/1/50	1"	860	550	1600	228
D408IHPD035	408	35	220/1/50	1"	1000	600	1700	260
D42IHPD055	42	55	220/1/50	1/4"	800	500	1300	120
D66IHPD055	66	55	220/1/50	1/4"	800	500	1500	123
D126IHPD055	126	55	220/1/50	1/2"	800	500	1500	148
D198IHPD055	198	55	220/1/50	1/2"	860	550	1600	172
D282IHPD055	282	55	220/1/50	1/2"	860	550	1600	204
D312IHPD055	312	55	220/1/50	1"	860	550	1600	230
D408IHPD055	408	55	220/1/50	1"	1000	600	1700	265
D42IHPD080	42	80	220/1/50	1/4"	800	500	1200	102
D66IHPD080	66	80	220/1/50	1/4"	800	500	1200	106
D126IHPD080	126	80	220/1/50	1/2"	800	500	1300	128
D198IHPD080	198	80	220/1/50	1/2"	800	500	1300	154
D282IHPD080	282	80	220/1/50	1/2"	800	500	1300	185
D42IHPD120	42	120	220/1/50	1/4"	800	500	1200	102
D66IHPD120	66	120	220/1/50	1/4"	800	500	1200	104
D126IHPD120	126	120	220/1/50	1/4"	800	500	1300	126
D198IHPD120	198	120	220/1/50	1/4"	800	500	1300	150
D42IHPD250	42	250	220/1/50	1/4"	800	500	1200	96
D66IHPD250	66	250	220/1/50	1/4"	800	500	1200	100
D126IHPD250	126	250	220/1/50	1/4"	800	500	1300	135
D42IHPD360	42	360	220/1/50	1/4"	800	500	1200	92
D66IHPD360	66	360	220/1/50	1/4"	800	500	1200	95
D126IHPD360	126	360	220/1/50	1/4"	800	500	1300	128

Notes:

1) Data refers to following conditions: ambient temperature 40 °C, air inlet temperature 45 °C.

High Pressure Filter

Ingersoll Rand high pressure filter is developed for particle pollutant removal including dust and oil aerosols with efficiency, safety and corrosion resistance design.

- Max Operating Pressure: 360bar
- Max Operating Temperature: 66°C
- Manual valve and optional high pressure electronic drain

Grade D

- Particle removal down to 3 micron including water
- Two stage filtration
 - » Stage one: Stainless steel pore pipe
 - » Stage two: Fiber layer



Grade H

- Particle removal down to 0.01 micron including oil aerosols.
- Two stage filtration
 - » Stage one: Multi-layer fiber and filter screen
 - » Stage two: Glue mixing fiber layer



Conventional High Pressure Filter							
Dust Removal(D)/ High Efficiency Oil Removal(H)							
Model	Grade(D/H)	Rated Operating Pressure	Capacity	Max Operating Pressure	Dimensions (mm*mm)	Air Connection	Weight
	μm	bar	m³/min	bar	W*H		kg
IRG-180-15(x)-35	3μm/0.01μm	35 bar	0.8	80 bar	118*260	G1/2	3kg
IRG-180-15(x)-40	3μm/0.01μm	40 bar	1.0		118*260	G1/2	3kg
IRG-180-15(x)-55	3μm/0.01μm	55 bar	2.0		118*260	G1/2	3kg
IRG-180-15(x)-70	3μm/0.01μm	70 bar	3.0		118*260	G1/2	3kg
IRG-480-25(x)-35	3μm/0.01μm	35 bar	3.5		128*260	G1	6kg
IRG-480-25(x)-40	3μm/0.01μm	40 bar	4.7		128*260	G1	6kg
IRG-480-25(x)-55	3μm/0.01μm	55 bar	6.2		128*260	G1	6kg
IRG-480-25(x)-70	3μm/0.01μm	70 bar	8.0		128*260	G1	6kg
IRG-900-40(x)-35	3μm/0.01μm	35 bar	8.5		146*504	G1-1/2	13kg
IRG-900-40(x)-40	3μm/0.01μm	40 bar	9.8		146*504	G1-1/2	13kg
IRG-900-40(x)-55	3μm/0.01μm	55 bar	12.5		146*504	G1-1/2	13kg
IRG-900-40(x)-70	3μm/0.01μm	70 bar	15.0		146*504	G1-1/2	13kg
IRG-1800-50(x)-35	3μm/0.01μm	35 bar	16.0		206*530	G2	30kg
IRG-1800-50(x)-40	3μm/0.01μm	40 bar	19.5		206*530	G2	30kg
IRG-1800-50(x)-55	3μm/0.01μm	55 bar	25.5		206*530	G2	30kg
IRG-1800-50(x)-70	3μm/0.01μm	70 bar	30.0		206*530	G2	30kg
Super High Pressure Filter							
Dust Removal(D)/ High Efficiency Oil Removal(H)							
Model	Grade(D/H)	Rated Operating Pressure	Capacity	Max Operating Pressure	Dimensions (mm*mm)	Air Connection	Weight
	μm	bar	m³/min	bar	W*H		kg
IRG-42-8(x)-080	3μm/0.01μm	80 bar	0.7	100 bar	92*205	G1/4"	4.5kg
IRG-66-8(x)-080	3μm/0.01μm	80 bar	1.1		92*205	G1/4"	4.5kg
IRG-126-15(x)-080	3μm/0.01μm	80 bar	2.1		92*205	G1/2"	4.5kg
IRG-198-15(x)-080	3μm/0.01μm	80 bar	3.3		92*205	G1/2"	4.5kg
IRG-282-15(x)-080	3μm/0.01μm	80 bar	4.7		92*205	G1/2"	4.5kg
IRG-42-8(x)-120	3μm/0.01μm	120 bar	0.7	150 bar	92*205	G1/4"	4.5kg
IRG-66-8(x)-120	3μm/0.01μm	120 bar	1.1		92*205	G1/4"	4.5kg
IRG-126-8(x)-120	3μm/0.01μm	120 bar	2.1		92*205	G1/4"	4.5kg
IRG-198-15(x)-120	3μm/0.01μm	120 bar	3.3		92*205	G1/2"	4.5kg
IRG-42-8(x)-250	3μm/0.01μm	250 bar	0.7	300 bar	92*205	G1/4"	4.5kg
IRG-66-8(x)-250	3μm/0.01μm	250 bar	1.1		92*205	G1/4"	4.5kg
IRG-126-8(x)-250	3μm/0.01μm	250 bar	2.1		92*205	G1/4"	4.5kg
IRG-42-8(x)-360	3μm/0.01μm	360 bar	0.7	450 bar	92*205	G1/4"	4.5kg
IRG-66-8(x)-360	3μm/0.01μm	360 bar	1.1		92*205	G1/4"	4.5kg
IRG-126-8(x)-360	3μm/0.01μm	360 bar	2.1		92*205	G1/4"	4.5kg

Notes:

Before use the high pressure filter, please note whether the pressure of compressed air is within the scope of high pressure filter. If exceed, it will be strictly prohibited.



Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands — including Club Car®, Ingersoll Rand®, Thermo King® and Trane® — work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$13 billion global business committed to a world of sustainable progress and enduring results.



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