Mfg. All Type of Chiller & Refrigeration Equipment
Installation Services & Maintenance for HVAC Project

OZONE
AIR SOLUTION LIMITED



Air Cooled Screw Chiller

Applications :

- Engineering & Industrial
- Electroplating Industry
- Food Process Industry
- Dye and Pigment Manufacturing
- Foundries

Ozone Air Solution Ltd. offers high-performance air-cooled screw chillers designed to meet a wide range of cooling capacities, from 30 tons to 400 tons. Ideal for comfort cooling and process cooling applications, these chillers operate efficiently across a temperature range of 20°C to -10°C, and are available with medium-GWP HFC refrigerants such as R407C and R134A.

Our air-cooled screw chillers are engineered to reduce your total cost of ownership with lower life cycle costs and exceptional reliability through a design that emphasizes simplicity and service-friendliness. These systems are commonly used in commercial, industrial, and institutional environments such as hotels, offices, hospitals, and heavy industries. Their versatility and energy efficiency make them the perfect solution for a variety of cooling needs.

Built with semi-hermetic screw compressors and multiple refrigeration circuits, our chillers offer a distinct advantage in energy efficiency and reliability. The direct drive compressor technology, operating at low speed (3600 rpm) with only one rotating part, ensures enhanced durability and optimal performance. Our optimized compressor parts profiles are specifically designed for chilled water and brine applications, enhancing both full-load and part-load efficiency.

The H Smart PLC Controller provides fully automatic operation, boosting reliability through a proactive control strategy and advanced safety functions. With easy-to-use diagnostics and RS485 or Ethernet/LAN connectivity, the system integrates seamlessly into any building automation or energy management system.

Equipped with DX or flooded evaporators, air-cooled condensers, electronic expansion valves, and VFD options, our air-cooled screw chillers ensure precise refrigerant flow and maximum efficiency. The use of electronic expansion valves optimizes performance by precisely controlling refrigerant flow under both full-load and part-load conditions, preventing liquid flood back to the compressor.

Ozone Air Solution Ltd. is your trusted partner for high-efficiency cooling solutions in any application, delivering superior performance and sustainable temperature control.

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Prominent Features :

High-Efficiency Cooling Systems – Superior Reliability, Energy Efficiency & Custom Solutions Our high-efficiency cooling systems are designed to offer superior reliability, high energy efficiency, and long equipment life, making them ideal for industrial and commercial applications. These systems are engineered to provide optimal performance, reduce operational costs, and ensure a sustainable solution for your cooling needs.

Key Features :

- **Superior reliability** with **best-in-class COP (Coefficient of Performance)** for maximum energy savings and long-term performance.
- **High energy efficiency** that lowers operational costs while maintaining consistent performance.
- **Long equipment life**, reducing maintenance and replacement costs for extended operational use.
- **Variable frequency drive (VFD)** option for enhanced **energy optimization** and **load adaptability.**
- **User-friendly interface** with a **graphical display,** allowing for easy monitoring and operation.
- **Clean energy solutions** and **intelligent management** for eco-conscious and efficient operations.
- Tailored as the **ideal solution for energy-saving equipment,** delivering optimized performance with minimal environmental impact.
- **Easy integration with BMS (Building Management Systems)** using standard communication protocols.
- Uses **ozone-friendly refrigerant HFC-134a,** reducing environmental footprint.
- **H-Smart PLC-based controller** for fully **automatic operation**, remote management, and **data logging** for real-time monitoring.
- **Stepless capacity control** from **25% to 100%,** adjusting precisely to varying process loads for energy efficiency.
- **Universal temperature range of +20°C to -10°C with brine,** offering flexibility in temperature control.
- Includes **anti-freeze safety** and **water flow switches** for operational safety and protection.
- Equipped with **world-class safety controllers** for both **equipment** and **compressors,** ensuring maximum reliability.
- **Custom-built machines** available based on specific project requirements, offering tailored solutions.
- **100% functionally tested** to ensure top performance and quality.
- Designed and manufactured in compliance with **superior design and manufacturing standards,** ensuring the highest level of quality.
- **Extended warranty options** available for up to **10 years**, providing peace of mind.
- Comprehensive **site support** and **AMC (Annual Maintenance Contract)** options available for the entire **life of the equipment.**

Maximize your cooling efficiency and **long-term performance** with our **energy-efficient cooling systems,** engineered for reliability, sustainability, and **cost-effective operation.**

Air Cooled Screw Chiller

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Air Cooled Screw Chiller Technical Specifications																	
Description	**Model**	**OAS480TSAC**	**OAS600TSAC**	**OAS720TSAC**	**OAS780TSAC**	**OAS900TSAC**	**OAS1020TSAC**	**OAS1200TSAC**	**OAS1320TSAC**	**OAS1500TSAC**	**OAS1680TSAC**	**OAS1980TSAC**	**OAS2220TSAC**	**OAS2580TSAC**	**OAS3000TSAC**	**OAS3300TSAC**	**OAS3720TSAC**
Cooling Capacity	**kcal/h**	120378	150472	180567	195184	225279	255374	300945	331040	375752	421324	496130	556319	646603	752364	827171	932932
	KW	140	175	210	227	262	297	350	385	437	490	577	647	752	875	962	1085
Max. Input Power	KW	55	65	78	88	96	102	112	132	150	160	186	246	255	280	280	332
Max Current	A	86	108	128	144	162		180	216	246	260	310	370	420	450	450	566
Power Supply		380-420V/3PH,50Hz															
Refrigerant	Type	R-134A / R-407C / R-404A / R-22A															
Compressor	Type	Compact Screw Compressors															
	Make	Bitzer / Ref-com / Hanbell / frascold															
	Power(KW)	37.1 KW	45 KW	52.9 KW	59.7 KW	65.9KW	77.9 KW	88.3 KW	96 KW	107 KW	122 KW	134 KW	152 KW	175 KW	201 KW	218 KW	264 KW
	Capacity Control	100-75-50-25% (Standard)															
Condensor	Type	Air Cooled Condensor Externally Finned Copper															
	Tubes	3/8" OD Copper inner grooved for better heat transfer															
	Heating Capacity(KW)	175	215	255	285	320	379	423	466	525	596	692	785	912	1049	1165	1327
	Condensing Temp.	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C	50 C
Fan	Air blower (KW)	4.8	4.8	6.4	6.4	12	20	25.5	25.5	25.5	30.6	35.7	18.5	22.2	25.9	29.6	33.3
	Air Flow (CFM)	36000	40800	48000	54400	70600	80400	81600	100500	111300	120600	140070	144000	160000	200000	220000	248000
Evaporator	Type	Shell and Tube type heat exchanger															
	Tubes	1/2 "OD Copper Seamless Integrally finned & Inner Grooved for better heat transfer.															
	Cooling Capacity(KW)	140	175	210	227	262	297	350	385	437	490	577	647	752	875	962	1085
	Temperature at outlet	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C	7 C
	Temperature at Inlet	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C	12 C
	inlet/outlet	3"	3"	3"	4"	4"	4"	5"	5"	5"	5"	6"	6"	8"	10"	10"	12"
	Flow m3/h	24.1	30.1	36.2	39.1	45.1	51.2	60.3	66.3	75.3	84.4	99.4	111.5	129.6	150.8	165.8	187
Control Panel	HMI 7" Disply PLC Delta Programenabal Fully Automotic Safety Controller , MCB / Contactor / Relay/ SPPR , All Make Schneider and Sensor, RTD Type,Cables- Make Polycab																
Safety protection	Compressor inner protection, over current protection, high/low pressure protection, over temperature protection, flow rate protection, phase sequence/phase missing protection, low level coolant protection, anti freezing protection, exhaust overheat protection																
Dimension	Length	2900	3050	3900	4100	4100	4500	5550	5600	5650	6770	7900	6200	7400	8630	9850	11080
	Width	1775	1930	1775	1930	1980	2080	2080	2080	2080	2080	2080	2350	2350	2350	2350	2350
	Height	1875	1950	1965	2000	2200	2200	2200	2300	2550	2550	2550	3000	3000	3000	3000	3000