

Protect your investment and allow you to rest assured.

TACUMEN is an industry leader, at the same time, we are always focused on customer communication, innovation technology, is committed to developing new products and pre-sales and after sales customer experience. Our products cover a minimum to 5.5kw, maximum 350kw; high-quality stationary screw air compressors, variable frequency screw compressors and matching compressed air purification equipment.

Genuine Parts

Only use genuine parts and service of TACT ACUMEN(M) SDN BHD to ensure the normal operation of the compressor group and normal life to the greatest extent.

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COMPANY INTRODUCTION

TACT ACUMEN(M) SDN BHD is the professional manufacturing and exporter. We are specialized in air compressor research, development and production. The main products including screw air compressor, piston air compressor and air dryer etc. With the advanced design, high reliability, low noise, long running life time, our products are widely used in power generation, semi conductor, shipping, ship building, oil field, rubber, food, pharmacy, package, electronic, communication, cement, glasses, chemical, textile, papermaking, gas, oil refining etc.

With 30 years's profound researches and experience in this line, and the join of high-technical from Germany and Italy, We produce the very good quality screw air compressor and our goods were selling more than 100 countries and area. We are famous with "Superior quality, competitive price and high-grade service".

We have obtained the approval of ISO9001-2000 international quality management system, ISO14001 Enviroment management system authentication, CE quality system, UL quality system ASME quality system etc.



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HIGH QUALITY ACCESSORIES SHOW



Air End

(German Technology)

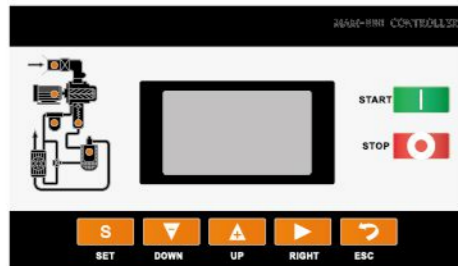
Original air end from Germany and Italy, the powerful heart decides the high performance of the whole machine, to make sure bigger air capacity, higher efficiency, high precision process rotor, extend the life of the moving parts efficiently



GHH Air End

Control Panel

(Chinese, English, Russian, Spanish etc. available)



The TACUMEN Control System offers single-point control and access to your compressed air system. With the improved overall diagnostic capabilities to pinpoint service needs, it is almost like having a built-in service technician. Simplify your serving. Your air solutions provide will recommend the most cost effective maintenance program, to ensure trouble-free operation.

Sequential Cooling



Large heat exchange area of design, release the 30% margin, can effectively prevent the machine from high temperature, reduce the carbon deposition phenomenon caused by high temperature, inner wall do anti-corrosion processing, can adapt to bad working conditions and prolong the service life.

Air Fliter (Germany MANN)

Efficient heavy air filter to ensure the quality of inlet air and safety of the air end, improved the life greatly.

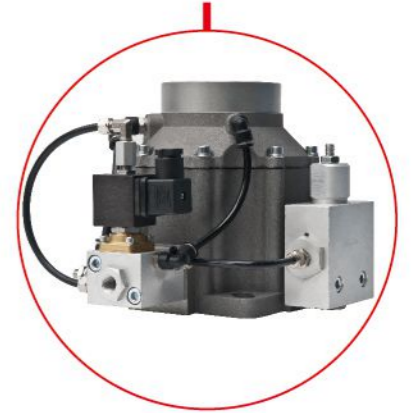


Motor (Jiangtian, Qingjiang, same quality as Sullair of USA)

Using well-know brand high performance motor, protection class IP54, F Class insulation, SKF load bearing, higher efficiency than similar products by 3%-5%.

Intake Valve (Hoerbiger from Austria)

Automatically adjust based on gas consumption, low maintenance, good stability, large inlet air.





Electricity Board
(Siemens/ABB PLC)

Main electrical components use the world famous brand Schneider, Simens etc., professional wire input design, strong function to diagnose fault and protect automatically.

Oil Filter
(Germany MANN)

The efficiency is 20% higher than normal one, filter accuracy up to 9 microns, protect the air end better, and extend the service life.



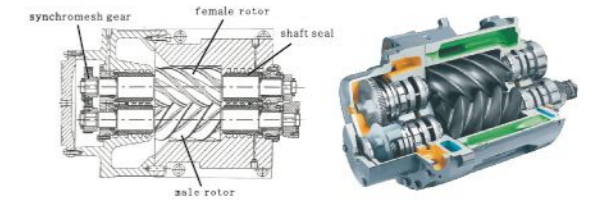
Bearing
(Sweden SKF)

Perfect stability, adapting to changeable load well, extending the life of rotor; Lower running speed, decreasing abrasion of bearing; Lower running temperature, decreasing load of bearing; Higher accuracy of bearing, longer lifespan.



Three Grade Air and Oil Separator
(Germany MANN)

Built-in high efficiency air and oil separator core, to ensure the oil content of compressed air below 3PPM, fix and replace easily, good sealing, bearing high pressure.



Screw Compressor Structure

Double Screw

High efficiency, high quality and durable.



• Parts Improve

A totally integrated, leak-free connections Vibration isolation system and metal-flex hoses extend compressor life and reduce noise Reduces downstream contamination with stainless steel air piping.





TACUMEN DIRECT DRIVEN SCREW AIR COMPRESSOR (30HP-350HP)

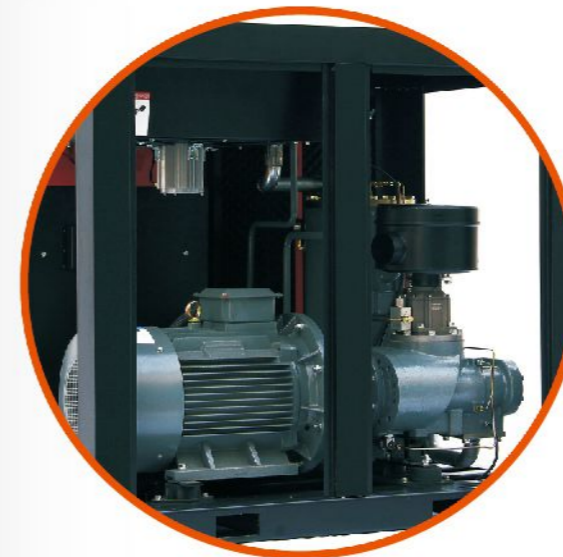


TA Direct Type Screw Air Compressor

TACUMEN screw air compressor provides high-quality air you can rely on to avoid costly downtime and production delays. The robust design ensures your processes will function continuously even in the harshest conditions such as temperature up to 55°C. Furthermore, AirHorse air compressors are easy to install and use, they require minimal on-site installation work and simple to operate and maintain. AIRHORSE screw air compressor selling all over the world, we can supply different electricity such as 380V 50HZ 3PH, 220V 60HZ 3PH, 440V 60HZ 3PH, 415V 50HZ 3PH, and 230V/460V 60HZ 3PH,. And 2 pole motor and 4 pole motor. Also we have CE certificate, UL certificate, ISO 9001 certificate, ASME certificate.

■ Features of Direct Coupled Screw Air Compressor

- ※ Double Screw with low noise, Super Silenced Enclosure
- ※ Progressive Adaptive Control (PAC) Protection
- ※ Elegant compact design
- ※ V-Shield Technology
- ※ Fully open access door to inner parts for easy service
- ※ provides a totally integrated, leak-free design
- ※ Sequential Cooling System
- ※ 100% Continuous duty operation. Load/No Load operation
- ※ 1year full machine warranty,3years air end warranty
- ※ significantly improves efficiency, serviceability and noise level
- ※ Machine was CE and UL certificated ,Machines under ISO9001 quality management standard system
- ※ continuously monitors key operating parameters and adapts to prevent unexpected downtime
- ※ LCD control panel with easy use and read.PLC control for load/no load and auto shut-off according to the air flow which save much energy



Open the map



side elevation

RELIABILITY

Superior Design, Superior Life.Optimized cooler performance reduces thermal stress, energy consumption and downstream dryer requirements, Leak-free elastomeric seals, stainless steel pipes and long-life metal-flex hoses provide reliable and repeatable internal connections Intelligent controls that both monitor and adapt key operating parameters to prevent unexpected downtime .

EFFICIENCY

Optimized Components and Systems High performance single stage airends Class-leading induction and high-efficiency Hybrid Permanent motors Minimized installation costs and complexity with single cooling air inlet and outlet, and easy exhaust heat management for lower utility costs .

PRODUCTIVITY

User-Friendly Operation and Accessibility Intuitive high-resolution controller with web-enabled remote access, compressor control and on-screen performance analysis Removable hinged doors, swig out separator lid and easy-slide heat exchangers make maintenance easy and safe .



TACUMEN SCREW AIR COMPRESSOR (Belt Type)



TA Belt type screw machine TA-30A

TACUMEN was one of the first grade screw compressor manufactures to implement the V-belt drive. AirHorse screw compressors with V-Belt drive are economical and reliable. The belt driven screw air compressor use Germany technique which provide high quality air, low noise and high efficiency. The belt driven screw air compressor is more elegant, easy to install, simple operation and maintain.



■ Features of Belt driven Screw Air Compressor

- ※ Air end with high-efficiency
- ※ Double Screw with low noise, Super Silenced Enclosure
- ※ 100% Continuous duty operation. Load/No Load operation
- ※ Easy to use and read LCD control panel
- ※ High temperature, high pressure and anti-rotation shutdown
- ※ Energy efficient operation
- ※ 5 micron, water-resistant air filtration material
- ※ 1year full machine warranty,3years air end warranty
- ※ Elegant compact design. Fully open access door to inner parts for easy service
- ※ High quality CE Certificate industrial electric motors. ISO,CE,UL Certificate
- ※ Supply the machine with different working voltage according to customer's request, such as:
380Volt,3phase,50hz ; 420Volt,3phase,50hz
380Volt,3phase,60hz ; 220Volt, 3phase, 60hz etc



side elevation





TACUMEN VARIABLE FREQUENCY SCREW AIR COMPRESSOR

Use TACUMEN Variable Speed Drive screw air compressor, you don't need to worry about the complex of electrical installation and programming for the machine. All parts of compressor are assembled before shipment, as long as the main power supply is connected, it can work immediately.

Through the powerful intelligent controller test the pressure of the air system changes continuously, accurate to change the speed, air flow of the air compressor always consistent to the demand of the user's system. Intelligent controller of reaction rate is calculated by milliseconds, and at the same time for speed correction can be made within the 3 ms, make its outlet air pressure control within the minimum range.



HOLIP--Danfoss Frequency Converter



※ Intel Drive Features

High-efficiency induction motor. Integrated Variable Speed Driven(VSD) with speed control. Leading control and protection. Soft starting eliminates drive stress.

※ Multiple Machine Operation

When operating as a pressure trim machine, the power savings achieved by a single compressor is multiplied by additional savings achieved over the full installation.

※ Economy of Use

Saves your money by lowering your operation cost. These saving will continue to be delivered to your bottom line year after year.

※ Best Efficiency at Part-load

When operating at part-load, the performance is top in class. The variable speed IntelliDriven avoids load cycling and maintains a steady state of operation, reducing operating and maintenance costs.

※ Soft Start Lowers your Operating Cost

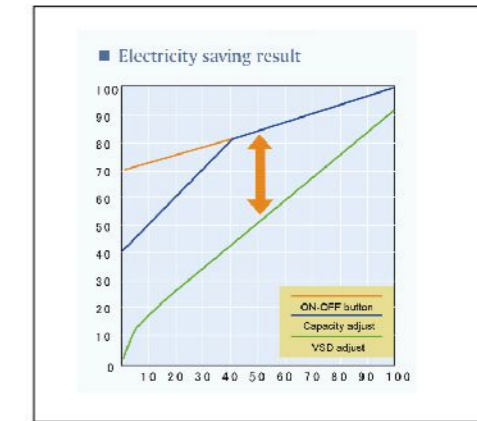
The gentle start cycle of the IntelliDrive increases the service life, meaning that frequent stop and restart cycles are permitted, without the risk of over-heating.

※ High Full-load Operating Efficiency

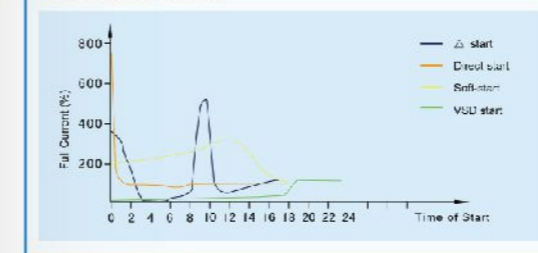
Class-leading performance achieved by state-of-the-art aircend design and manufacturing processes, coupled with the reduction of internal losses, means that aircend full-load performance.

※ Electricity Saving Result

According to the research between the VSD screw air compressor and a normal screw air compressor, there are two fields which can display the result of energy saving, the loss of no-loading and loss of fluctuating pressure. For example, for a 55KW screw air compressor, 70% air delivery in a year, the VSD type can save about 80000KWH energy. The cost of VSD can be taken back within two years.



Start and Operation

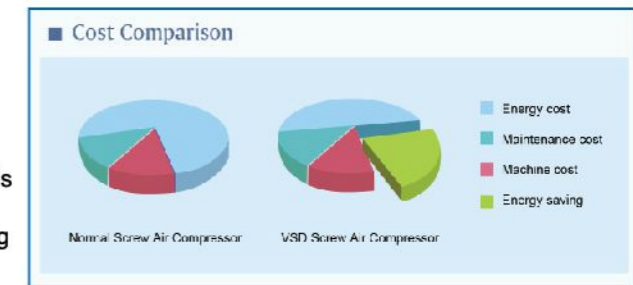


※ Start and Operation

The figure shows a comparison of several types of start up. We can see that the VSD air compressor is slowly accelerating started, more stable than the soft-start compressor, completely avoiding the current peak. Variable speed screw air compressor is ideal for use in areas lacking of electricity.

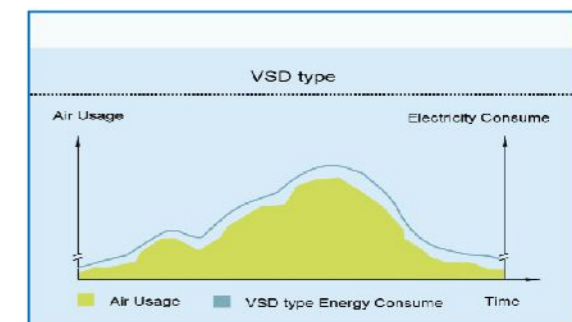
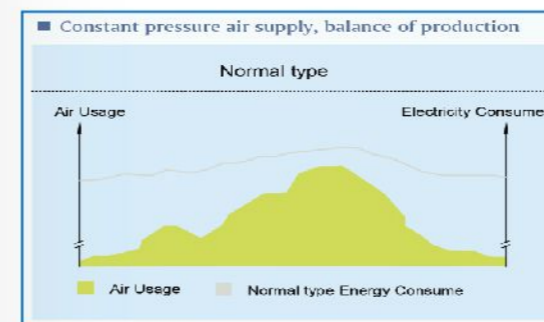
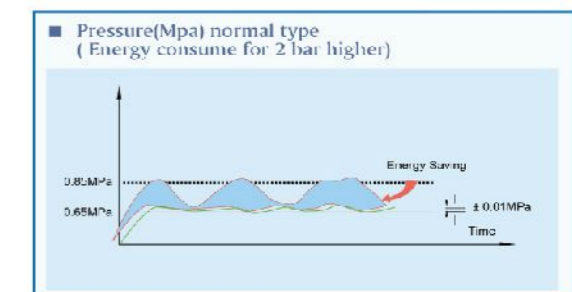
※ Cost Comparison

The TACUMEN VSD screw air compressor can change the motor RPM precisely according to the air consumption under stable discharge pressure. The compressor only delivers the required air, and only consumers the energy of necessary compressed air. That's why the VSD type screw air compressor can save energy during the whole set machine operation. The cost of saving energy is much higher than the cost of machine itself.



※ Constant pressure air supply, with the balance of production

The figure shows the energy consumption comparison between the general air compressor and VSD air compressor. The VSD screw air compressor changes the rotating speed according to air consumption and balance the air supply and air usage. Thus avoiding the machine frequent loading and unloading, making the VSD machine save more than 35% energy compared to normal compressor. Stable pressure delivery controlled the pressure zone with 0.01 Mpa-0.02 Mpa, avoid energy loss under high pressure in the normal type air compressor.

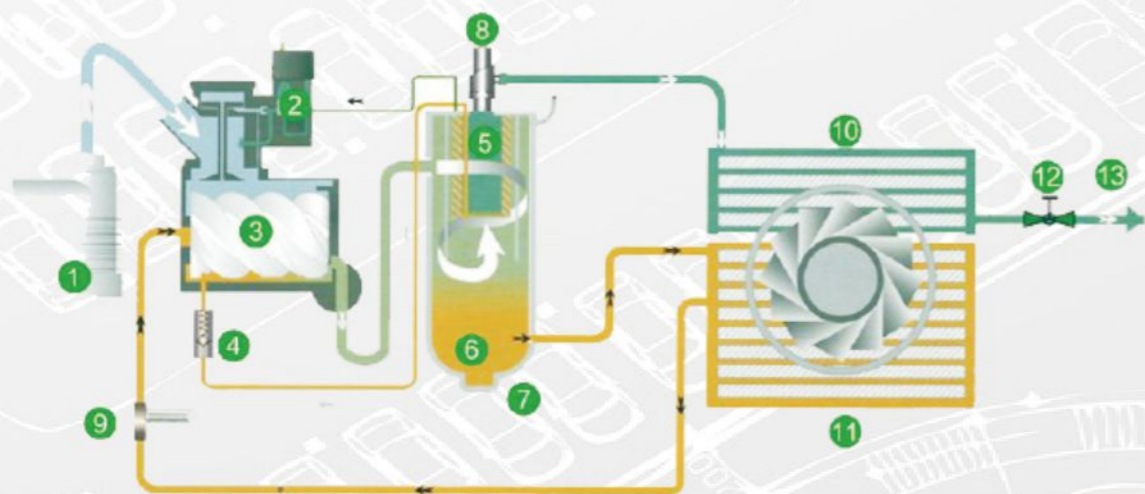




■ Belt type screw Air compressor parameters

TACUMEN Screw Air Compressor (Belt driven)												
Model	TA-7A	TA-10A	TA-15A	TA-20A	TA-25A	TA-30A	TA-40A	TA-50A	TA-60A	TA-75A	TA-100A	
Free air deliver /Discharge pressure (m ³ /min/Mpa)	0.85/0.7 0.75/0.8	1.2/0.7 1.1/0.8	1.6/0.7 1.5/0.8	2.5/0.7 2.3/0.8	3.2/0.7 2.9/0.8	3.8/0.7 3.6/0.8	5.2/0.7 5.0/0.8	6.8/0.7 6.2/0.8	7.3/0.7 7.0/0.8	10.0/0.7 9.1/0.8	13.5/0.7 12.6/0.8	
Free air deliver /Discharge pressure (CFM/PSI)	30/102 27/116	42/102 39/116	57/102 53/116	88/102 81/116	113/102 102/116	134/102 127/116	184/102 177/116	240/102 219/116	258/102 247/116	353/102 322/116	477/102 445/116	
No. of compression stage	single stage											
Ambient temperature	-5--+45°C											
Cooling model	Air --Cooling											
Discharge temperature(°C)	Ambient temperature+15°C											
Lubricant(L)	16	18			30			65				
Noise level(Db)	62±2	64±2			62±2			68±2			72±2	
Drive method	Multivee belt											
Electricity(V/ph/Hz)	380/3/50											
Power(KW/HP)	5.5/7	7.5/10	11/15	15/20	18.5/25	22/30	30/40	37/50	45/60	55/75	75/100	
Starting method	Y-△ Starter											
Dimension: length/width/height(mm)	800*720*950	860*740*960	1100*850*1160			1400*950*1300			1500*1000*1420		1730*1170*1700	1820*1250*1760
Weight(kg)	128	240	400	420	600	620	680	980	1050	1600	1800	
Air outlet pipe diameter(inch/mm)	3/4"		1"				1 1/2"		2"			

■ Air cooling system flow diagram



- Pilot line
 - Admission line
 - Oil line
 - Air line
 - Air/oil mixture
- ① Air filter
 - ② Air inlet valve
 - ③ Air end
 - ④ Non-return valve
 - ⑤ Oil air separator element
 - ⑥ Oil
 - ⑦ Oil-air tank
 - ⑧ Minimum pressure valve
 - ⑨ Oil filter
 - ⑩ After cooler
 - ⑪ Oil cooler
 - ⑫ Ball valve
 - ⑬ Air outlet

■ Direct Driven Screw Air compressor parameters

TACUMEN Screw Air Compressor (Direct coupled)												
Model	TA-30A	TA-50A	TA-75A	TA-100A	TA-120A/W	TA-150A/W	TA-175A/W	TA-220A/W	TA-250A/W	TA-300A/W	TA-350A	
Free air deliver /Discharge pressure (m ³ /min/Mpa)	3.8/0.7 3.6/0.8	6.8/0.7 6.2/0.8	10.0/0.7 9.1/0.8	13.5/0.7 12.6/0.8	16.1/0.7 15.0/0.8	21.0/0.7 19.8/0.8	25.2/0.7 24.0/0.8	28.7/0.7 27.6/0.8	32.0/0.7 30.5/0.8	36.7/0.7 34.5/0.8	42.0/0.7 40.5/0.8	
Free air deliver /Discharge pressure (CFM/PSI)	134/102 127/116	240/102 219/116	353/102 322/116	477/102 445/116	569/102 530/116	742/102 700/116	890/102 848/116	1014/102 975/116	1131/102 1078/116	1297/102 1219/116	1484/102 1431/116	
No. of compression stage	single stage											
Ambient temperature	-5--+45°C											
Cooling model	Air --Cooling					Air-Cooling&Water-Cooling			Water-Cooling			
Discharge temperature(°C)	Ambient temperature+15°C											
Lubricant(L)	18	30	65			90			110			
Noise level(Db)	68±2		72±2			75±2			72±2			
Drive method	Direct drive											
Electricity(V/ph/Hz)	380/3/50											
Power(KW/HP)	22/30	37/50	55/75	75/100	90/120	110/150	132/175	150/200	185/250	220/300	250/350	
Starting method	Y-△ Starter											
Dimension: length/width/height (mm)	1400*900*1220	1560*1000*1360	1800*1200*1600	1900*1200*1600	2100*1400*1780	2360*1360*1800	2460*1420*1800	2560*1540*1840	2610*1640*2050	2700*1740*2100	2900*1850*2200	
Weight(kg)	680	1060	1880	1980	2100	2900	3500	3900	4200	4600	5000	
Air outlet pipe diameter(inch/mm)	1"	1 1/2"	2"			DN65			DN80		DN100	

■ One-stop Shopping Flow

Full set of machine supply and service, including air dryer, air receiver and air filter.

