



LB&LBPM SERIES

INTRODUCTION

ENERGY SAVING PRODUCTS | LOW PRESSURE COMPRESSOR



POWER STARTS DREAMS



SCR Compressor official WeChat QR code

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ABOUT SCR



CHINESE HEADQUARTERS

SHANGHAI SCREW COMPRESSOR CO.,LTD is a high tech Japanese joint venture with independent intellectual property, founded in 2000. SCR together with Anest Iwata focus on air compressor research and development, covering all aspects from manufacturing through to sales, service and technical support. SCR supply a complete range of products such as high efficiency permanent magnet variable speed air compressors, oil free screw compressors, oil free scroll compressors, bearing

free and magnetic centrifugal blowers. The global sales and service network provide our customers with high-quality, energy efficient and environmentally friendly compressed air solutions. SCR's statement of "power starts dreams" signifies the close relationship with their global partners, and suppliers. SCR is committed to building an industrial world with continuous improvement for both its customers, the environment and its employees.

100000m²
Square meters factory

83
Country exported

50000
Global customers

35
Professional certifications

35
Sino-Japanese R&D team member

500
Global sales and service agents

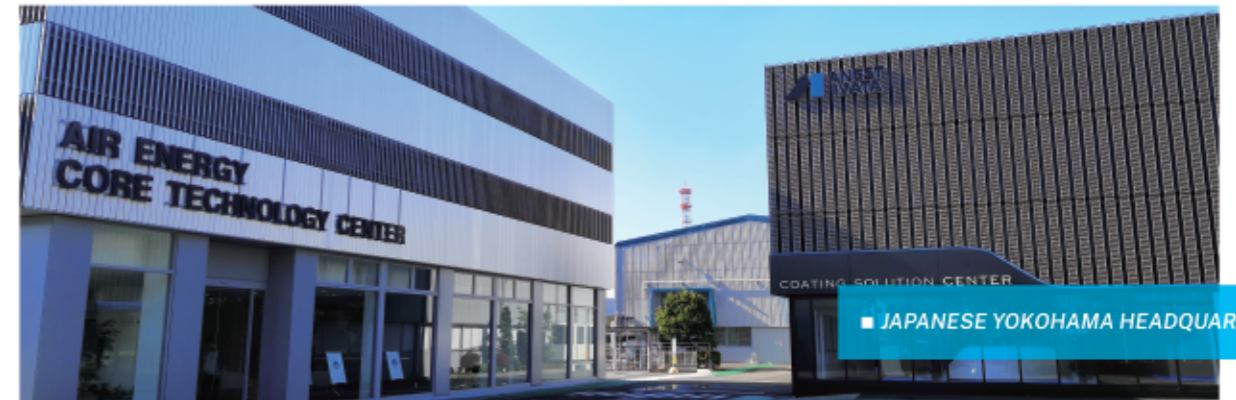
86
National patents

10
Industry standards

20
Years of R&D

8%
Annual sales re-invested into R&D

140000
Production volume from 2000



JAPANESE YOKOHAMA HEADQUARTERS



JAPANESE FUKUSHIMA FACTORY

LBPM SERIES

Motor power
37-185KW

Discharge airflow
12-47.4M³/MIN

Pressure
0.1-0.5 MPA



Ultimate efficient inverter model

SCR COMPRESSOR pushes the boundaries of compressed air efficiency once again with its latest generation of LBPM series screw air compressors. SCR LBPM has not only achieved the class-leading Specific energy consumption by technology innovation and drastically energy loss reduction. But they also combine ease of use and maintenance with exceptional versatility and environmentally responsible design.

Energy saving with inverter	Wide range control
Super premium efficiency PM motor(IE4 Equiv)	Overall efficiency
Up to 52°C Ambient condition	Stability
Special design for oil tank	3ppm oil content

THE PRODUCT APPLICATION

*Special customized low pressure compressor
Suitable for various industries.*



TEXTILE



CEMENT



BUILDING MATERIALS



CHEMICAL FIBER



GLASS BLOWING



BIO-PHARMACEUTICAL



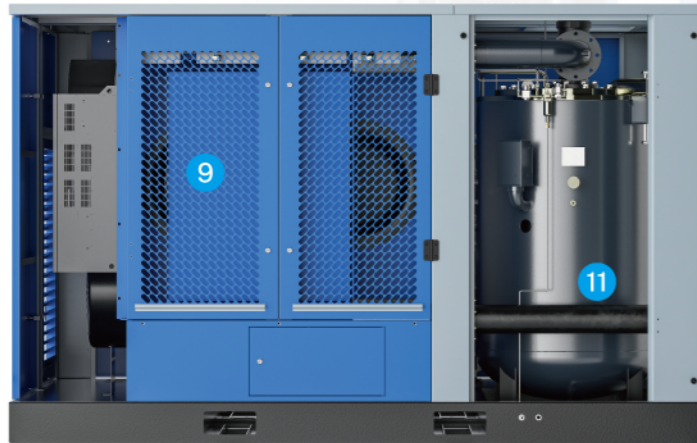
BIO-FERMENTATION



PRINTING AND
DYEING INDUSTRY



BEARING INDUSTRY



LBPM SERIES

EVEN MORE EFFICIENT

1 Permanent magnet (PM) motor

- EXCEED IE4 standards;
- IP55 protection grade;
- VSD PM motor;
- 10% margin;
- PTC protection for PM motor.

2 New compressor air end

- New improved rotor profile;
- R&d in japan;
- Designed to give many years of reliable operation.

3 Inlet filter

- Nano scale heavy duty;
- Filtration accuracy upto 99.9%;
- Dust particles below 0.3 micron ;
- Pressure drop indicator;
- 2,000 hours service intervals;
- Make the main rotor bearing from attrition.

4 Inlet valve

- Optimizes the inlet flow of the air end;
- No blow down losses;
- Full aluminum maintenance free design;
- High vacuum degree:700mmhg;
- Large suction area;
- Low load energy consumption in unloaded operation;
- Fast check: prevent unloading and shutdown oil injection;
- Fluoro rubber for improved valve seal.

5 Innovative flux cector inverter

- CE/UL/CULROHS certification;
- Wide voltage design 380V-480V;
- Meet EMC C3 and C2 requirements ;
- Built-in DC reactor;
- Independent cooling air duct design;
- Robust enclosure to trouble-free operation even in the harshest of conditions.

6 SCR 9000 touch controller

- 7.0 inch full color touch lcd screen;
- Real-time operation/ maintenance/ alarm information;
- Full graphical Flow diagram ;
- Operation record/ chart display ;
- Multiple languages;
- Weekly and daily scheduling, service history and planning;
- On board RS485 interface.

7 Electrical control cabinet

- Siemens core electrical components are used to further enhance reliability.

8 Centrifugal fan

- VSD control;
- Compact;
- Low noise level;
- High capacity for optimized cooling;
- Low power consumption.

9 Classic cooler design

- Separate oil/air cooler;
- Easy access for maintenance;
- Paint anti-corrosion coating on surface;
- 30% oversized cooler design.

10 Oil filter

- High efficiency oil filter removes reliably removed contaminants from the oil ;
- Oil particles can be controlled at 0.1 micron;
- Ensures a smooth and well-lubricated oil system.

11 Gas tank & built-in separation system

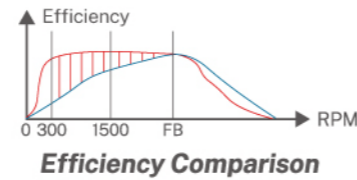
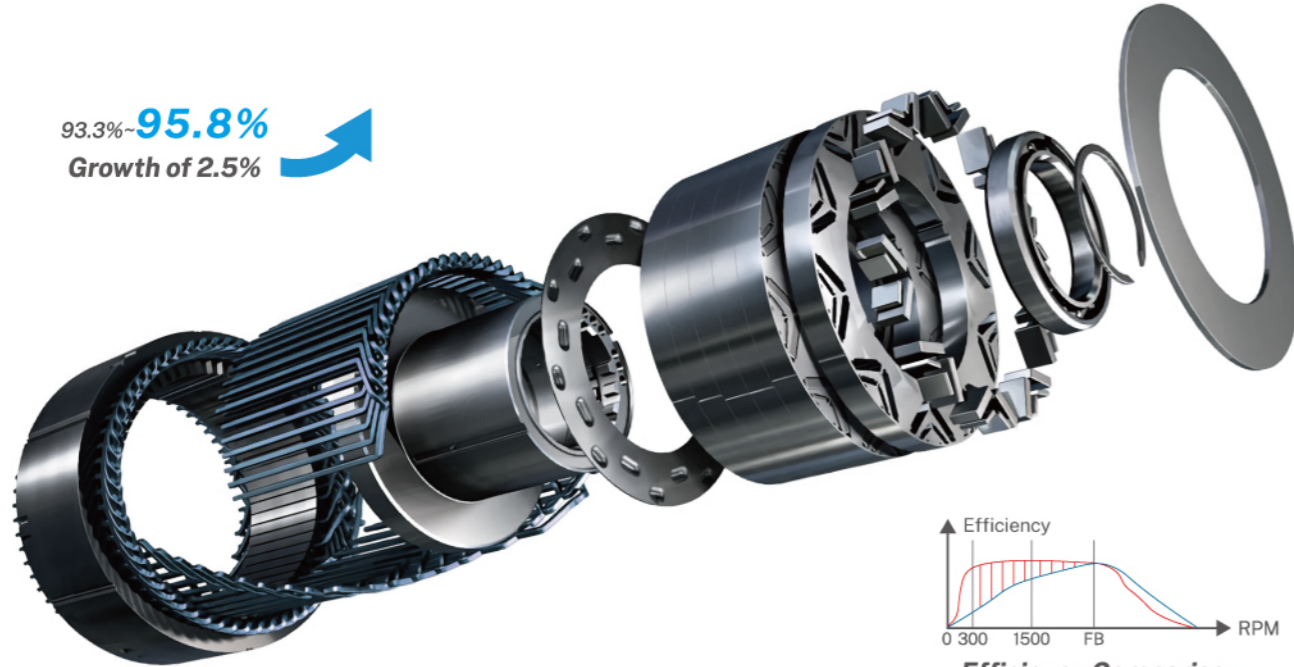
- Oversized air and oil tank improves the cyclone effect maximising the separation process;
- The high efficiency oil separator ensures that the oil carry over is less than 3ppm;
- System pressure loss is less than 0.02mpa;
- The rotating oil tank lid makes maintenance convenient and straight forward reducing maintenance down time.

12 All-steel internal pipe system

- All steel internal pipe work and compression joints are used to prevent leakage and premature ageing often seen with flexible pipes;
- Less pipe friction loss.

SUPER PREMIUM EFFICIENCY PM MOTOR (IE4 EQUIVALENT)

93.3%~**95.8%**
Growth of 2.5%



Exceed IE4 standards	Efficiency 5% higher than general motor
VSD: variable speed drive	Rare earth permanent magnet materials
Large torque and small current when starting and running	High efficiency and long service life
High-temperature design prevents demagnetization	Wide operating frequency range and low operating noise
Reasonable magnetic field design and magnetic density distribution	Low temperature rise design the temperature rise is less than 60K

Low Pressure Customized Airend



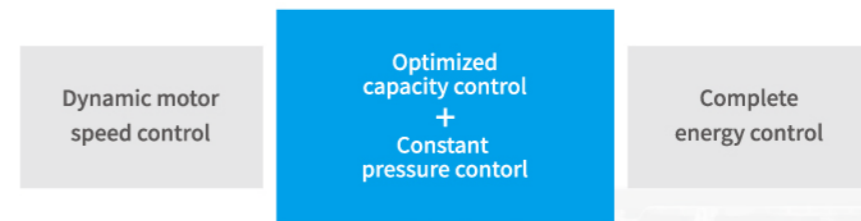
- Energy saving profile design
- R&D in Japan
- Isothermal compression
- Multi point atomization injection technology
- Optimized outlet butterfly port
- Reduced pressure losses
- Optimized in and outlet portals
- Designed for 20 years of reliable operation
- Flow-optimized for impressive performance
- All-new, state-of-the-art airend improves efficiency as much as 12%

Double inverter design

Inverter Control

SCR LBPM compressors have a wide operating speed range leading to stable constant pressure control further reducing power consumption. SCR's exclusive inverter and Energy

Saving Logic control can get optimized energy savings, regardless of the load condition. They can react to pressure changes quickly maintaining pressure fluctuation to ± 0.01 MPa.



Seven major characteristics

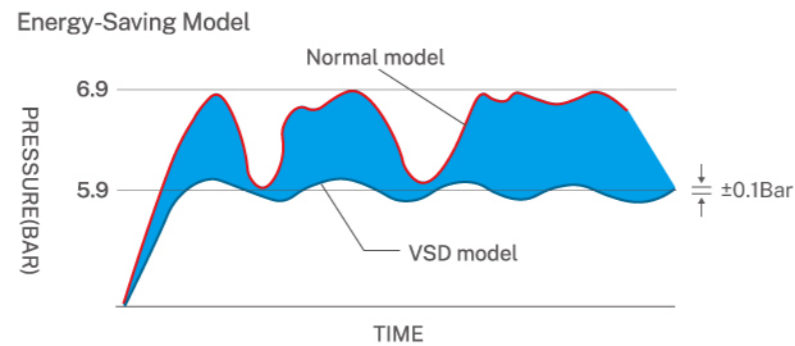
- On Board RS485 communication
- Intelligent PID flow regulation mode
- Accurate torque control
- Fast response speed for system pressure
- Fast acceleration and deceleration characteristics
- Closed loop dynamic control and high precision control
- Constant pressure control avoids over generating site air pressure



ENERGY SAVING TECHNOLOGY

Constant pressure output

Significant energy-savings can be achieved by constant pressure control avoiding pressure fluctuations controlled to within ±0.01MPa.



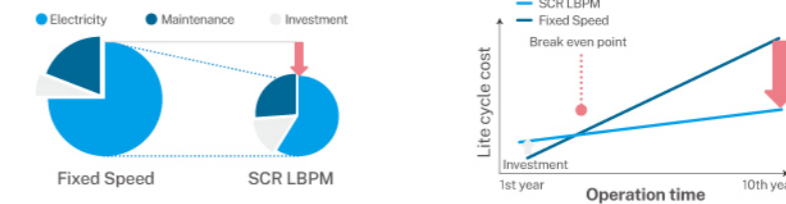
Stable constant temperature

Constant temperature setting of 81°C ensures the best lubrication performance avoiding high temperature trips.



DOWN-TO-EARTH INVESTMENT FOR THE FUTURE

What's important is not initial cost but life cycle cost. Variable speed compressors may look more expensive than fixed speed models, but many customers choose them because they know importance of life cycle cost & return on investment when it comes to choosing the right compressor.

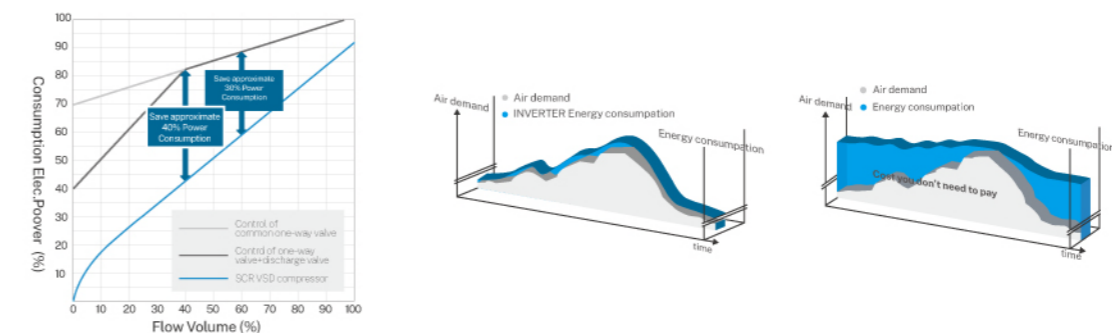


35% CAN SAVE APPROX OF LIFE CYCLE COST (LCC)

Air Flow (m ³ /min)	Pressure (BAR)	Model	Motor power (KW)	Specific power (m ³ /min)
33	3	Standard low pressure	132	4.5
33	3	SCR LB series low pressure	110	3.8

SCR LBPM series low pressure energy saving percent with standard low pressure compressors: $(4.5-3.8)/4.5=15.5\%$

Only pay for the air you use



SCR's LBPM series of compressors adjust compressor's rotating speed depending on the demand, which can change from moment to moment. Thus, it can provide exact volume and pressure what customer needs and achieve maximum energy saving potential.

Maximizing energy-saving under any load operation through wide-range inverter control.

Wide-range control and e-STOP function.

AIR COOL SYSTEM



Air Inlet System

Large capacity air filter

More than 30% margin of air filter capacity

Efficiency is improved more than 0.5%

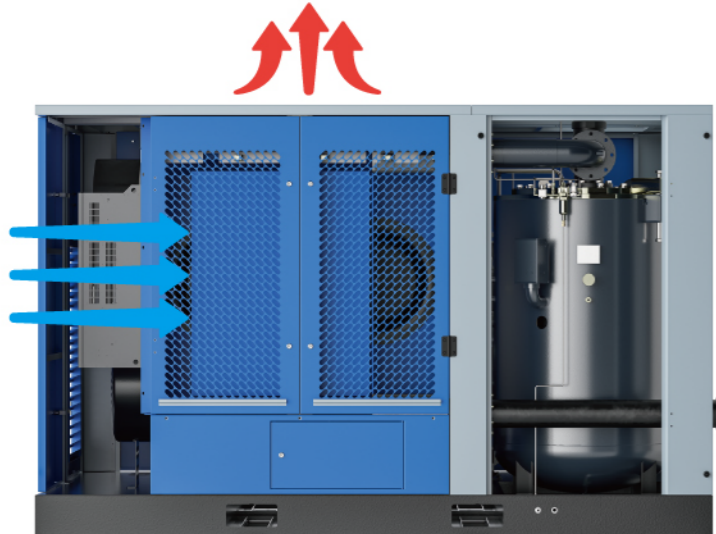


Inlet Valve

30% oversized cooler design

Optimizes the inlet flow of the air end

Efficiency is improved more than 0.5%



30% Oversized Cooler Design

VSD centrifugal fan

- Centrifugal fan VSD operation according ambient
- 1-2% energy efficiency improvement

Side Air Inlet&Top Air Outlet

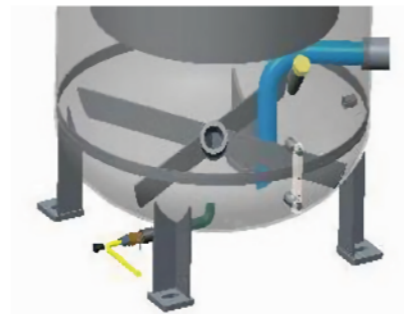
Magnetic panel filters

- Reduce the ingress of foreign matter preventing the cooler from blocking
- Extend the service life of the compressor

OIL SYSTEM

Gas tank & built-in separation system

- The flow guide plate changes flow direction, and the cross collision makes the small oil particles combine into large oil particles to separate, reduce the burden on the oil-gas separator layer, and extend the life of oil separator
- Reserved more than 30% margin of oil-separator
- Efficiency is increased by 1-2%
- Vertical tangential structure separator
- Below 1.5bar low pressure operation, the oil content of compressed air < 1 ppm



1.Secondary Oil Return System

- Two oil return lines to avoid oil return valve being blocked
- Extra oil filter is installed in the return line
- Maintenance-free for 8000 hours
- The check valve has no filter screen
- No blocking of oil return lines

2.Oil Filter

- 4 oil filters Parallel arrangement structure design
- No need to stop the machine to replace the oil filter
- The oil pump is equipped with an oil filter
- Prevent impurities from entering the oil pump to damage the shaft seal
- Extend the service life of the oil pump



State-of-the-art Touch Controller

Improved user friendly desing

Parameters can be modified without stopping compessor

2/3/4/5 bar pressure mode

Increased reliability

Energy saving logic

Overload/ Over current/ phaseloss/unbalance protection

Pre-alarm system to avoid sudden failure

Remote monitoring capability

Programmable start stop schedules

Multiple compressor sequencing capability

Compressor group control

Up to 16 compressors can be automatically operated without a group control panel.





Flexible machining centres

Rotors and casings for SCR airends are produced in state of the art, climate controlled machining centres. Japanese quality management ensures unrivalled product quality.

Performance testing

Each air compressor must undergo an operational inspection before leaving the factory to verify the performance of the compressor.

Meticulous assembly

All airends and compressor packages are assembled to the highest standards by SCR's qualified specialists in accordance with Japanese Quality Management System.

Precision milling and grinding

The NEW PROFILE rotors are machined on CNC profile grinders to micron accuracy.

Precision detection

To achieve maximum precision, components for SCR rotary screw compressors, are machined in climate-controlled rooms using the very latest tool machinery. Dedicated and highly qualified personnel draw on years of engineering experience to ensure

unrivalled product quality and consistency. Production tolerances are continuously monitored using precision 3-D measuring equipment that detects variations with micron accuracy.

SCR COMMITMENT:

2 years standard warranty



CE Certificate

5 years extended warranty for



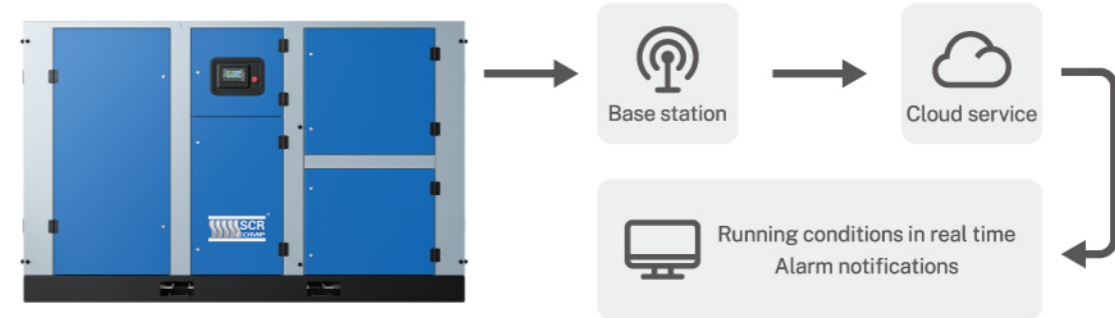
ISO Certificate

SCR'S CLOUD SERVICE OPTION

New air solution program with advanced LOT technology

Anytime, Anywhere

Customers can monitor the live running conditions of SCR compressors anytime, anywhere and can be accessed through a Cloud service in real time. Moreover, alarm notifications will help prevent any unplanned down time.



Reliable Security

VPN (Virtual private network) ensures the same reliable security level as the private network. User friendly Cloud service.

Practical Use Of Cloud Service

Easy maintenance

Maintenance will become easier thanks to remote monitoring system.

Energy saving

Monitoring the compressors actual conditions will help to improve energy use.

Stable-operation

Preventive maintenance according to alarm notifications increases reliability;

Trouble shooting

Remote monitoring prevents any unexpected maintenance issues reduces unplanned downtime.

Live of energy usage data.

Live of energy usage data

Records and saves running condition records

Graphical visualization of running conditions

Alarm notifications



Model	Power (KW)	Capacity (m ³ /min)	Pressure (Bar)	Dimension (mm)	Weight (kg)	Outlet Size
SCR420LB	37	12	1.5-3	2400*1760*1700	2400	DN80
	45		4			
			5			
SCR530LB	45	15	1.5-3	2400*1760*1700	2600	DN80
	55		4			
	55		5			
SCR830LB	63	21.5	1.5-3	2900*1860*1900	2900	DN100
	75		4			
	90		5			
SCR950LB	90	28.8	1.5-3	2900*1860*1900	3100	DN100
	110		4			
	110		5			
SCR1500LB	132	47.4	1.5-3	3300*2200*2100	5300	DN150
	160		4			
	185		5			
SCR420LBPM	37	3.6-12.0	1.5-3	2400*1760*1700	2500	DN80
	45		4			
	45		5			
SCR530LBPM	45	4.5-15.0	3	2400*1760*1700	2700	DN80
	55		4			
	55		5			
SCR830LBPM	63	6.45-21.5	3	2900*1860*1900	3100	DN100
	75		4			
	90		5			
SCR950LBPM	90	8.6-28.8	1.5-3	2900*1860*1900	3300	DN100
	110		4			
	110		5			
SCR1300LBPM	110	9.9-33.0	1.5-3	3300*2200*2100	4800	DN150
	110		4			
	132		5			
SCR1500LBPM	132	14.2-47.4	1.5-3	3300*2200*2100	5500	DN150
	160		4			
	185		5			

NOTE:

- The capacity is measured as GB3853 standard.(equivalent to ISO1217 Annex C)
- Standard voltage is 380V/50HZ/3P, other voltage is available.
- The recommended best capacity range is 60%-100%.
- Alpine/high altitude, high temperature, high humidity, high dust loads or other adverse working conditions will require specialized custom designs. These are available on special request.
- We reserve the right to make changes and improvements to the design and appearance. Specifications may change without prior notice.

CASE ANALYSIS

Taicang ZhiLong Chemical Fiber Case

Use for 4 units high speed textile machines

Before	After
Power 132kW	Power 70kW
Pressure 1.8bar	Pressure 1.4 bar
2 units 20m ³ piston machines	2 units 830LBPM
Every month consumed electricity cost 8050\$	Every month consumed electricity cost 5550\$

* Every month can save electricity cost **2500\$**



FOOTPRINT ALL OVER THE WORLD



LEGEND:

- Market share by continent
- Headquarters
- Major global sales outlets

OUR CUSTOMERS

