Globally recognized industrial presence

Over the last sixty years, Kaishan has steadily grown to become a significant, diversified engineering company developing high value machinery for industries worldwide. With modern, specialized manufacturing facilities positioned in seven strategic locations, Kaishan’s group of thirty-two subsidiary companies produce over 60,000 rotary screw and 250,000 reciprocating compressors annually. Kaishan is the world’s third largest manufacturer of compressed air, mining and drilling equipment and supports industries in more than 60 countries including: USA, Australia, Germany, Japan, Korea, Russia, Africa and throughout Latin America.

Vertically integrated global strategy

Kaishan’s global strategy of combining highly skilled engineering with highly efficient manufacturing allows us to provide performance proven, reliable equipment at a significant cost savings to our customers. Additionally, Kaishan’s manufacturing processes are 85% vertically integrated insuring full control of the material supply chain. This vertical approach supplies high quality components at a lower cost, and affords Kaishan the ability to respond rapidly to changing market demands.

Practiced environmental sustainability

Integral to the design and manufacture of our products is outstanding energy efficiency. Kaishan’s fundamental belief in environmental sustainability drives us to produce products that maximize energy efficiency and help to preserve precious energy resources. Single and two-stage compressors that produce more compressed air per unit of power input as well as expanders that utilize waste heat to produce electricity are just two of the fundamental products in our sustainable approach.

Throughout our manufacturing processes, unused waste materials are recycled at every stage to maximize the use of raw materials. This approach translates to lower initial costs and lower operating costs for our customers and a smaller environmental footprint that helps us all. Kaishan’s commitment to environmental responsibility ensures that we will continue to develop technologies and manufacturing solutions that provide industry with machinery of exceptional value - now and well into the future.
KRSP2 SERIES COMPRESSORS PROVIDE LOW CAPITAL COST AND LOW OPERATING COST

Low cost of ownership throughout life cycle
Compressed air is often referred to as the ‘fourth utility’ and is critical to most manufacturing operations. Facility performance depends upon compressor reliability and efficiency.

Power consumption is a significant cost throughout the life cycle of a compressor. Therefore, it is important to consider the life cycle cost of a compressed air system when evaluating productivity improvements. KRSP2 series advanced energy saving features reduce operation costs significantly.

WORLD CLASS ENGINEERING

PATENTED ‘SKY’ TWO-STAGE AIR END DEVELOPED EXCLUSIVELY BY KAISHAN ENGINEERS

Continued development has increased efficiency by more than 20% over earlier models

- Two-Stage air end design for high flow rate and low power consumption
- Direct drive (through gears) motor and air end operate at slow speed
- Low part load energy consumption
- Steady system pressure lowers system pressure fluxuation and overall air demand
- Slow speed male rotors maximize performance and increase reliability
- Decreased energy consumption reduces carbon footprint and delivers cost savings
- 5 / 6 rotor profile creates optimal performance while reducing energy consumption
- 2 in 1 intake valve design (with check valve) for increased efficiency
- Direct flow inlet valve provides reliable capacity control
- Triplex SKF bearings for durability and reliability
- Very tight tolerances provide maximum efficiency
SAFETY AND THE ENVIRONMENT
Reduced OSHA Risk and Injury
• The entire Kaishan range of compressors includes full safety features such as guarded rotating components and shrouded electrical components

‘ULTRAWEB’ AIR INTAKE FILTERS
Increased Filtration Efficiency
• Full airflow, low restriction, nanofiber technology
• Deep bed media ensures excellent dust capture
• Increased free air delivery for further savings in energy and running costs

SINGLE PASS OIL & AFTER COOLERS
Long Life / Easily Accessible
• Minimize thermal stress
• Cooler running temperatures / correct running temperature @ 122°F (50°C) ambient capable
• Low oil carryover increases bearing life
• Low cooling air velocity reduces dust build up

3 STAGE TANGENTIAL OIL SEPARATION
Lower Pressure Drop / Lower Absorbed Power
• Excellent oil mechanical pre-separation/reduced direct oil impingement onto separator element
• Lower dust contact resulting in lower pressure drop / longer element life / lower energy consumption
• Residual oil carryover limited to 3 ppm

TRIPLE DISCHARGE BEARINGS
Longer Bearing Life / Quieter Operation
• The “SKY2” series airend uses three discharge bearings on the first stage and four bearings on the second stage
• Longest bearing life in the industry
• Warranted for a “Lifetime” of use

LAMINAR FLOW INLET VALVE
Minimum Pressure Drop / Increased Output
• Laminar flow inlet valve results in lower pressure drop through the intake, increasing output and saving energy

‘SKY’ SERIES AIR END
Maximum Output with Less Energy Usage
• Asymmetric 5 / 6 rotor profile with 100% SKF bearings
• KAPP Grinder rotor technology for tighter clearances and world class efficiency and performance
• Precision machined bell housing to maintain rigid alignment
HIGH EFFICIENCY ELECTRIC MOTORS
Long Operating Life / Lower Power Use
• Kaishan uses high efficiency motors, which comply with all international standards
• Motors are standard TEFC to IP 54 protection from dust and moisture
• Class F insulation
• Cooling air bypasses main compressor compartment resulting in lower component operating temperatures and longer life

CENTRIFUGAL COOLING FANS
Increased Cooling Efficiency
• Higher static pressure allows for heat recovery ducting
• Even air flow across the cooler face.
• VSD cooling fan (150 HP and above) provides energy savings as cooling airflow is reduced during periods of light load or low temperatures
• Cooling air bypasses main compressor compartment resulting in minimal internal dust build up

316 STAINLESS STEEL CONTROL TUBING
Long Tubing Life / Reduced Downtime
• Increased reliability due to corrosion free material
• Material such as nylon, copper or mild steel will fail in time causing downtime

DIGITAL CONTROL PANEL
Monitors & Controls Key Compressor Functions
• Protects compressor in the event of a fault
• Provides service required alert
• Sequencing of up to 16 compressors
• External monitoring via RS 485 interface
• WYE Delta starter is standard on all models
• MODBUS capability

INDUSTRIAL GRADE ELECTRICAL COMPONENTS
Increased Reliability / Lower Servicing Cost
• Outstanding reliability
• Excellent component life
• Worldwide support
• Standard electrical parts available locally
KRSP2 SERIES COMPRESSORS PROVIDE ROBUST, TURN-KEY INDUSTRIAL SOLUTIONS

KRSP2 has low life cycle cost by providing:
Low Capital Cost + Low Operating Cost + Exceptional Reliability & Efficiency

- All electrical wiring is high performance including cable and converters
- Optimum operating temperature to prevent moisture in the system
- Rugged and proven technology to ensure long operating life
- Heavy duty isolators to minimize operating vibration
- SAE fittings greatly reduce oil leaks
- Spin-on fluid filter for quick maintenance
- VSD cooling fan on all units 150HP to 350HP
- Premium, efficient TEFC Electrical motors
- Acoustic enclosure brings the sound level to industry leading level of 67 dB(A) to 82 dB(A)

KRSP2 SERIES VARIABLE SPEED DRIVE OPTION PROVIDES A MAJOR ENERGY SAVINGS

KRSP2 VSD combines a robust power platform with a state-of-the-art control scheme
The drive provides a soft start and the ability to operate efficiently through the compressor's capacity range by matching flow to demand, while maintaining a high level of pressure control. By eliminating wasted energy, cost savings as high as 35% or more are possible. With this level of savings, the additional capital cost of the variable speed drive can be recovered in less than one year's operation.

Variable Speed Drive
The variable speed drive used in KRSP2 compressors are renowned for:
- Efficient and reliable service
- Worldwide support
**KRSP2 SERIES CONTROL SYSTEM PROVIDES TOTAL MANAGEMENT OF ALL OPERATING PARAMETERS**

**KRSP2 controller capabilities include the following features:**

- Operating parameters display
- Warning stop alarms
- Programmed maintenance schedules
- Recordings of compressor history

The control panel contains a special programmed microprocessor that can safely and efficiently control all the functions of the compressor.

The touch screen display monitors line pressure, oil temperature and working conditions (running, idling and stop). Abnormal conditions will trigger a flashing LED and a flashing message indicating the cause for the alarm. Microprocessor functions are password protected, accessible only to authorized personnel.

---

**KRSP2 SERIES SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY (CFM)</th>
<th>POWER (HP)</th>
<th>FULL LOAD (PSI)</th>
<th>MAXIMUM (PSI)</th>
<th>SOUND dB(A)</th>
<th>DIMENSIONS (IN.)</th>
<th>WEIGHT (LB.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AC</td>
<td>WC</td>
</tr>
<tr>
<td>KRSP2-100-100</td>
<td>600</td>
<td>100</td>
<td>100</td>
<td>110</td>
<td>72</td>
<td>N/A</td>
<td>101</td>
</tr>
<tr>
<td>KRSP2-100-125</td>
<td>525</td>
<td>100</td>
<td>125</td>
<td>135</td>
<td>72</td>
<td>N/A</td>
<td>101</td>
</tr>
<tr>
<td>KRSP2-125-100</td>
<td>739</td>
<td>125</td>
<td>100</td>
<td>110</td>
<td>72</td>
<td>72</td>
<td>101</td>
</tr>
<tr>
<td>KRSP2-125-125</td>
<td>669</td>
<td>125</td>
<td>125</td>
<td>135</td>
<td>72</td>
<td>72</td>
<td>101</td>
</tr>
<tr>
<td>KRSP2-125-150</td>
<td>599</td>
<td>125</td>
<td>150</td>
<td>160</td>
<td>72</td>
<td>72</td>
<td>101</td>
</tr>
<tr>
<td>KRSP2-150-100</td>
<td>873</td>
<td>150</td>
<td>100</td>
<td>110</td>
<td>73</td>
<td>73</td>
<td>122</td>
</tr>
<tr>
<td>KRSP2-150-125</td>
<td>738</td>
<td>150</td>
<td>125</td>
<td>135</td>
<td>73</td>
<td>73</td>
<td>122</td>
</tr>
<tr>
<td>KRSP2-150-150</td>
<td>667</td>
<td>150</td>
<td>150</td>
<td>160</td>
<td>73</td>
<td>73</td>
<td>122</td>
</tr>
<tr>
<td>KRSP2-200-100</td>
<td>1058</td>
<td>200</td>
<td>100</td>
<td>110</td>
<td>76</td>
<td>76</td>
<td>122</td>
</tr>
<tr>
<td>KRSP2-200-125</td>
<td>992</td>
<td>200</td>
<td>125</td>
<td>135</td>
<td>76</td>
<td>76</td>
<td>122</td>
</tr>
<tr>
<td>KRSP2-200-150</td>
<td>886</td>
<td>200</td>
<td>150</td>
<td>160</td>
<td>76</td>
<td>76</td>
<td>122</td>
</tr>
<tr>
<td>KRSP2-250-100</td>
<td>1455</td>
<td>250</td>
<td>100</td>
<td>110</td>
<td>75</td>
<td>75</td>
<td>136</td>
</tr>
<tr>
<td>KRSP2-250-125</td>
<td>1264</td>
<td>250</td>
<td>125</td>
<td>135</td>
<td>75</td>
<td>75</td>
<td>136</td>
</tr>
<tr>
<td>KRSP2-250-150</td>
<td>1169</td>
<td>250</td>
<td>150</td>
<td>160</td>
<td>75</td>
<td>75</td>
<td>136</td>
</tr>
<tr>
<td>KRSP2-300-100</td>
<td>1698</td>
<td>300</td>
<td>100</td>
<td>110</td>
<td>78</td>
<td>78</td>
<td>136</td>
</tr>
<tr>
<td>KRSP2-300-125</td>
<td>1618</td>
<td>300</td>
<td>125</td>
<td>135</td>
<td>78</td>
<td>78</td>
<td>136</td>
</tr>
<tr>
<td>KRSP2-300-150</td>
<td>1432</td>
<td>300</td>
<td>150</td>
<td>160</td>
<td>78</td>
<td>78</td>
<td>136</td>
</tr>
<tr>
<td>KRSP2-350-100</td>
<td>1998</td>
<td>350</td>
<td>100</td>
<td>110</td>
<td>80</td>
<td>80</td>
<td>152</td>
</tr>
<tr>
<td>KRSP2-350-125</td>
<td>1849</td>
<td>350</td>
<td>125</td>
<td>135</td>
<td>80</td>
<td>80</td>
<td>152</td>
</tr>
<tr>
<td>KRSP2-350-150</td>
<td>1677</td>
<td>350</td>
<td>150</td>
<td>160</td>
<td>80</td>
<td>80</td>
<td>152</td>
</tr>
<tr>
<td>KRSP2-400-100</td>
<td>2263</td>
<td>400</td>
<td>100</td>
<td>110</td>
<td>82</td>
<td>82</td>
<td>153</td>
</tr>
<tr>
<td>KRSP2-400-125</td>
<td>1960</td>
<td>400</td>
<td>125</td>
<td>135</td>
<td>82</td>
<td>82</td>
<td>153</td>
</tr>
<tr>
<td>KRSP2-400-150</td>
<td>1831</td>
<td>400</td>
<td>150</td>
<td>160</td>
<td>82</td>
<td>82</td>
<td>153</td>
</tr>
<tr>
<td>KRSP2-500-100</td>
<td>2641</td>
<td>500</td>
<td>100</td>
<td>110</td>
<td>82</td>
<td>82</td>
<td>153</td>
</tr>
<tr>
<td>KRSP2-500-125</td>
<td>2491</td>
<td>500</td>
<td>125</td>
<td>135</td>
<td>82</td>
<td>82</td>
<td>153</td>
</tr>
<tr>
<td>KRSP2-500-150</td>
<td>2322</td>
<td>500</td>
<td>150</td>
<td>160</td>
<td>82</td>
<td>82</td>
<td>153</td>
</tr>
</tbody>
</table>

*Consult factory for higher pressure models. Performance test based on ISO 1217.*
<table>
<thead>
<tr>
<th>MODEL</th>
<th>COMPRESSORTYPE</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>KRSP2</td>
<td>Two Stage</td>
<td>Global leader in air compressor efficiency</td>
</tr>
<tr>
<td>KRSP</td>
<td>Single Stage</td>
<td>Patented ‘SKY’ air end, triple SKF bearings</td>
</tr>
<tr>
<td>KRSD</td>
<td>Single Stage</td>
<td>Direct drive, TEFC motor, low sound enclosure</td>
</tr>
<tr>
<td>KRSB</td>
<td>Single Stage</td>
<td>Belt drive, economical to own and operate</td>
</tr>
<tr>
<td>KRST</td>
<td>Single Stage</td>
<td>Belt drive, tank mounted</td>
</tr>
<tr>
<td>KRSH</td>
<td>Two Stage High Pressure</td>
<td>Pressure to 580 PSI</td>
</tr>
<tr>
<td>KRSL</td>
<td>Single Stage Low Pressure</td>
<td>Pressure as low as 45 PSI</td>
</tr>
<tr>
<td>KRSV</td>
<td>Rotary Screw Vacuum Pump</td>
<td>World class vacuum efficiency</td>
</tr>
</tbody>
</table>