# Suitable for matching with geothermal water well multifunctional drilling rig with deep well dedicated screw air compressor

# **Basic Information**

- Place of Origin:
- Brand Name: Aipu

China

1PC

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- Model Number: LG/KS
- Minimum Order
   Quantity:
- Price: negotiable
- Packaging Details: container
- Delivery Time:
- Payment Terms:
- Supply Ability: 10t/y



# Product Specification

| Exhaust Pressure:                                | 1.7-3.5Mpa   |
|--|--|
| Displacement:                                    | 18-43m³/min  |
| • Type:  | Deep Well Dedicated Screw Air Compressor                   |
| Power Source:                                    | Explosion Proof Motor (380V/660V/10kV) Or<br>Diesel Engine |
| Diesel Engine Power:                             | 220-775 HP   |
| <ul> <li>Suitable For Deep<br/>Wells:</li> </ul> | 500-3000m  |

**Our Product Introduction** 

## **Product Description:**

The deep well dedicated screw air compressor is a high-performance air compression equipment designed specifically for high-pressure deep well operations such as deep well drilling, mine ventilation, geothermal development, and oil and gas extraction. Adopting high-power and high-pressure screw host technology to ensure stable gas supply in extreme depths (over 1000 meters), meeting the needs of downhole drilling rigs, pneumatic tools, ventilation and air exchange.

## **Characteristic:**

#### Core R&D

The company has a nationally recognized enterprise technology center and eight high-tech enterprises.

A large number of excellent engineers and high-precision processing and testing equipment have built a complete Kaishan Machinery Manufacturing System.

The company has passed ISO9001 quality management system, ISO14001 environmental management system, and GB/T28001 occupational health and safety management system certification.

#### Multi lineage products

The compressor products produced by the company include twin-screw, single screw, vortex, centrifugal, reciprocating, etc. The application market includes air compressors, process gas compressors, gas compressors, refrigerant compressors, refrigeration compressors, blowers, vacuum pumps, etc. The power coverage range of the compressor is 2HP~6800HP, and the pressure range is 0.4bar-800bar. Aipu also produces expansion power stations.

#### Environmentally friendly and sustainable development

Adhering to the fundamental belief of environmental sustainability, we have been committed to continuously improving the energy efficiency of our products and creating value for our users.

We have developed the most efficient "Y-shaped" rotor profile:

A screw air compressor that achieves national first level energy efficiency;

An expansion machine that utilizes waste energy to generate electricity

Aipu's commitment to environmental responsibility ensures that we will continue to develop technology and manufacturing solutions to provide products of extraordinary value for present and future generations.

# **KSZJ series:**

#### SKY patented screw host

Designed with a maximum pressure of 40 bar

Rotor profile: patented rotor profile, highest efficiency

Two stage compression: corresponding to flexible design and lifting valve, global invention patent

Heavy duty design, SKF bearings

Optimal structure, highest reliability

#### Heavy duty dedicated diesel engine

Equipped with national heavy-duty diesel engines such as Yuchai and Cummins. Realize the optimal combustion state throughout the entire range of engine operation. The product has higher reliability, stronger power, and better fuel economy.

#### Computer control system

Display operating parameters such as operating speed, supply pressure, oil pressure, exhaust temperature, coolant temperature, fuel level, etc. throughout the process. It has self diagnostic fault, alarm and shutdown functions to ensure the safe operation of the machine when there is no one on duty.

An optional remote network monitoring system allows you to have a clear view of the machine's operating status even while sitting in the office.

#### Efficient cooling system

The latest achievement of the North American R&D center ensures that the compressor is always in optimal operating condition. The design of independent oil, water, and air coolers combined with large-diameter fans is suitable for both cold and hot climates.

### Triple filtration system

#### air filtration system

Patent and maintenance free centrifugal air pre filter filters out more than 90% of dust and impurities, extending the maintenance and replacement cycle of the filter element by 5 times. The precision filter layer of the cyclone main air filter filters out the remaining dust, ensuring that the machine does not wear out. The safety filter element allows the machine to perform air filter maintenance without stopping, ensuring safe operation of the machine. Suitable for continuous operation in harsh environments such as deserts and high dust levels

#### Oil and gas separation system

Reduce the impact of excessive or insufficient oil injection into the separator on the oil content of compressed air, and always maintain the oil content of compressed air below 3ppm. Clean compressed air is beneficial for the safe operation of gas equipment. Lubricating oil filter with an accuracy of 10  $\mu$ 

Ensure minimal wear on moving parts. Multiple fuel filtration devices protect the reliability of the engine fuel injection system.

#### Optional value-added system

#### Low temperature starting system

The water pump of the fuel heater draws the coolant from the engine body to the heat exchanger, and the oil pump draws the fuel from the fuel tank to the combustion chamber for combustion. Through the continuous circulation and transfer of heat, the temperature of the

coolant, the whole machine, and the lubricating oil continues to increase, ensuring the starting performance of the diesel engine in cold and high-altitude environments.

Aftercooler and steam water separator

Ensure that the outlet air temperature is not higher than the ambient temperature by 15  $^{\circ}$ C, especially suitable for operation with equipment such as turbochargers that require intake temperature.

Remote start stop, monitoring, and positioning system

# **Product Features:**

#### Ultra high pressure gas supply capacity

The working pressure can reach 20-40 bar (higher pressure can be customized), suitable for the high back pressure requirements of deep well operations.

Multi stage compression technology (optional) ensures stable exhaust volume under high pressure and avoids efficiency degradation.

#### High temperature resistance and anti-corrosion design

High temperature host and lubricating oil system, suitable for underground high temperature environment (ambient temperature  $\leq$  60 °C). Anti corrosion coating+stainless steel pipeline, resistant to underground moisture and acidic gas corrosion.

#### Efficient and energy-saving

Adopting Kaishan high-efficiency screw rotor with a specific power of  $\leq$  5.8 kW/(m <sup>3</sup>/min) to reduce energy consumption costs in deep well operations.

Intelligent frequency conversion control (optional), automatically adjusts output according to well depth pressure, saving 15% to 30% energy.

#### Strong and resilient structure

Heavy duty steel frame with shock resistant design, suitable for bumpy transportation environments in mines and oil fields. Modular design facilitates installation or separate hoisting in narrow underground spaces.

#### Safe and reliable

Multiple protections: overpressure shutdown, oil temperature alarm, motor overload protection, vibration monitoring, etc. Explosion proof configuration (Ex d II BT4) is optional and suitable for gas containing mines.

## **Technical Parameter:**

LGZJ series diesel generator set

| Product Model         | Exhaust<br>pressure(Mpa) | Displacemen<br>t<br>(m <sup>3</sup> /min) | Supporting<br>engine<br>power(HP) | Exhaust<br>interface | Weight(kg) | External<br>dimensions(mm) |
|-----------------------|--------------------------|---|-----------------------------------|----------------------|------------|----------------------------|
| LGZJ-31/25-35/18      | 2.5-1.8                  | 31-35                                     | Yuchai 400HP                      | G2×1,G¾×1            | 4500       | 3650×2000×2200             |
| LGZJ-36/30-41/20      | 3.0-2.0                  | 36-41                                     | Yuchai 560HP                      | G2×1,G¾×1            | 6000       | 3800×2160×2300             |
| LGZJ-36/30-<br>41/20K | 3.0-2.0                  | 36-41                                     | Cummins<br>500HP                  | G2×1,G¾×1            | 5800       | 3800×2160×2330             |
| LGZJ-30/35-35/25      | 3.5-2.5                  | 30-35                                     | Yuchai 560HP                      | G2×1,G¾×1            | 6000       | 3800×2160×2300             |
| LGZJ-30/35-<br>35/25K | 3.5-2.5                  | 30-35                                     | Cummins<br>550HP                  | G2×1,G¾×1            | 5800       | 3800×2160×2330             |
| LGCG-43/25-<br>37/35  | 2.5-3.5                  | 43-35                                     | Yuchai 775HP                      | G2×1,G¾×1            | 7000       | 4160×2200×2257             |

### KSZJ series diesel generator set

| Product Model | Exhaust<br>pressure(Mpa) | Displacement<br>(m <sup>3</sup> /min) | Supporting<br>engine<br>power(HP) | Exhaust<br>interface | Weight(kg) | External<br>dimensions(mm) |
|---------------|--------------------------|---------------------------------------|-----------------------------------|----------------------|------------|----------------------------|
| KSZJ-18/17A   | 1.7                      | 18                                    | Yuchai 220HP                      | G2×1,G¾×1            | 2200       | 2800×1520×1780             |
| KSZJ-18/18    | 1.8                      | 18                                    | Yuchai 260HP                      | G2×1,G¾×1            | 2700       | 3050×1800×1800             |
| KSZJ-29/23G   | 2.3                      | 29                                    | Yuchai 400HP                      | G2×1,G¾×1            | 4050       | 3500×1950×2030             |

| KSZJ-29/23-<br>32/17  | 1.7-2.3 | 29-32 | Yuchai 400HP      | G2×1,G¾×1 | 4050 | 3500×1950×2030 |
|-----------------------|---------|-------|-------------------|-----------|------|----------------|
| LGZJ-35/25-<br>38/20  | 2.5-2.0 | 35-38 | Yuchai 550HP      | G2×1,G¾×1 | 4500 | 3500×1950×2320 |
| LGZJ-35/25-<br>38/20K | 2.5-2.0 | 35-38 | Cumminsi550H<br>P | G2×1,G¾×1 | 4500 | 3500×1950×2200 |

## **Applications:**

Deep well drilling: providing high-pressure gas source for downhole down the hole drilling rig to support drilling in hard rock layers. Mine ventilation: delivering compressed air to deep mines to improve the working environment.

Geothermal development: assisting in the drilling and maintenance of geothermal wells.

Oil/natural gas: used for downhole tool power or pipeline blowing.

# **Support and Services:**

Our Deep well dedicated screw air compressor product comes with comprehensive technical support and services to ensure that our customers are satisfied with their purchase. Our team of experts is available to provide assistance with installation, operation, and maintenance of the product. We also offer repair and replacement services for any faulty parts or components. Additionally, we provide training and educational resources to help our customers maximize the performance and lifespan of their Deep well dedicated screw air compressor.

# **Packing and Shipping:**

#### Product Packaging:

The Deep well dedicated screw air compressor comes in a sturdy cardboard box with the product image and specifications printed on the outside. Inside, the product is securely packaged with foam inserts to prevent any damage during transportation. Shipping:

Our standard shipping time is 3-5 business days. For expedited shipping, please contact our customer service team. We ship via trusted carriers such as UPS, FedEx, and USPS and provide a tracking number for your convenience.

## FAQ:

- Q: What is the brand name of this product?
- A: The brand name of this product is Aipu.
- Q: What is the model number of this product?
- A: The model number of this product is Deep well dedicated screw air compressor.
- Q: Where is this product made?
- A: This product is made in China.
- Q: Does this product have any certifications?
- A: Yes, this product is certified by ce.ul.
- Q: What is the minimum order quantity for this product?
- A: The minimum order quantity for this product is 1pc.
- Q: Is the price of this product negotiable?
- A: Yes, the price of this product is negotiable.
- Q: What is the packaging details for this product?
- A: The packaging details for this product is container.
- Q: How long is the delivery time for this product?
- A: The delivery time for this product is 10 days.
- Q: What are the payment terms for this product?
- A: The payment terms for this product is tt.
- Q: What is the supply ability of this product?
- A: The supply ability of this product is 10t/y.

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