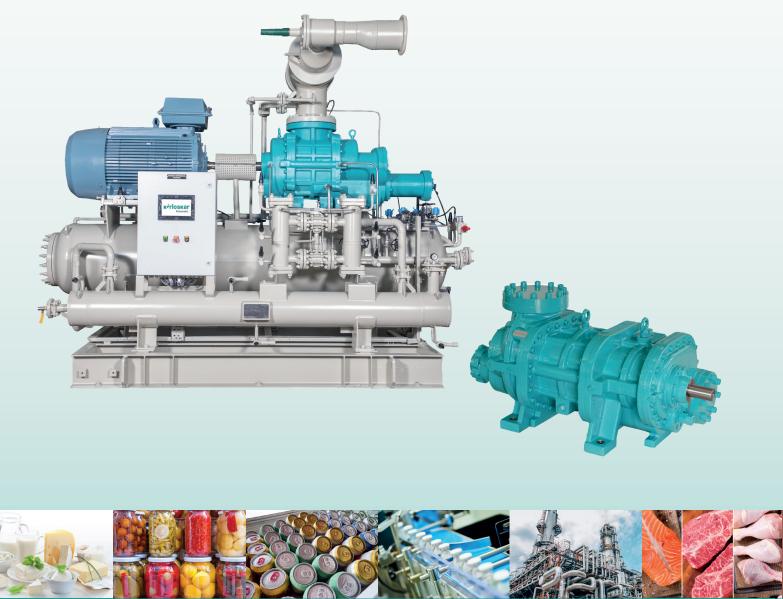


# KHIONE SCREW COMPRESSOR AND PACKAGE

# for Industrial Refrigeration



FERTILIZERS & CHEMICALS

FISH & MEAT PROCESSING

### Khione – Screw Compressor



#### **Salient Features**

- Variable Volume Ratio "Vi"
- Economizer port for higher COP
- Optimum lubrication
- Suction temperature range : (-)45 to (+)5°C
- Robust design
- Low cost of ownership
- Anti-friction bearings
- Stepless capacity control using slide valve : 10-100%
- Max RPM : 3600

## Versatile Packaged Solution for Refrigeration Applications

Kirloskar's versatile and efficient refrigeration packages are used in a wide range of process refrigeration applications across Industries including Dairy & Ice Cream, Brewery & Beverage, Pharmaceuticals, Fertilizers & Chemicals, Fish, Meat & Food Processing. These also cater to HVAC applications, including Water Chilling, etc. These packages are designed to operate with R717, R134a, R22, R404A, R407C, R410A, R502 & R507 refrigerants.

Superior COP (Coefficient of Performance) values at full and part-load operation, modest capital investment, and low maintenance costs are some of the key benefits of KPCL's refrigeration packages that make it the first choice of customers.

# Suction Strainer Equalizing Line Main Motor Oil Pump Chick Valve Chick Valve Chick Valve Chick Valve Chick Valve Duplex Oil Filter Oil Cooler Oil Cooler Chick Valve Chick Valve

#### Kirloskar Screw Compressor Package

#### Engineering

In house engineering excellence

Customized

package

design &

building

#### Testing

On load testing facility to check compressor performance

#### After Sales



extensive After Sales and Service Network



Ease in installation & commissioning

#### Manufacturing Excellence



> We are committed to providing customers with high quality compressors. We use cutting edge technology to achieve highest accuracy and tolerances, resulting in compressors with high efficiency and outstanding reliability



### Salient Features

- Step less capacity control from (100% To 10%)
- Variable speed drive improves part load efficiency
- Variable Volume Ratio "Vi"
- Economizer
  - Shell & tube type/PHE
  - Open flash
- Comprehensive refrigeration capacity range with booster & high stage models

- Oil separator with 3-stage of oil separation
- Oil cooling
  - Thermo-siphon
  - Water cooled
  - Liquid refrigerant injection
- Simplex / Duplex oil filter with 6-way valve and lever
- Skid mounted, pre-assembled with PLC-based control panel

# PLC Based Smart Control Panel

- 10" HMI touch screen, colour display
- SD card storage, USB connections
- Enables unloaded start
- Safety features: alarm & cut out:
  - High discharge pressure
  - High discharge temperature
  - Low suction pressure
  - Low differential oil pressure
  - Differential pressure across oil filter
- Compressor "Ready To Start" sequence indication

- Compressor total & current running hours indication
- Date & Time setting from HMI
- Indication of active alarms & alarm history in HMI
- Indication of last trip analog values.
- PLC panel can be configured as per specific application and can be accessed from SCADA
- LPI: PLC display shows position of "auto slide valve" and hence real time loading of screw compressor





Proven & Reliable Technology



Longevity



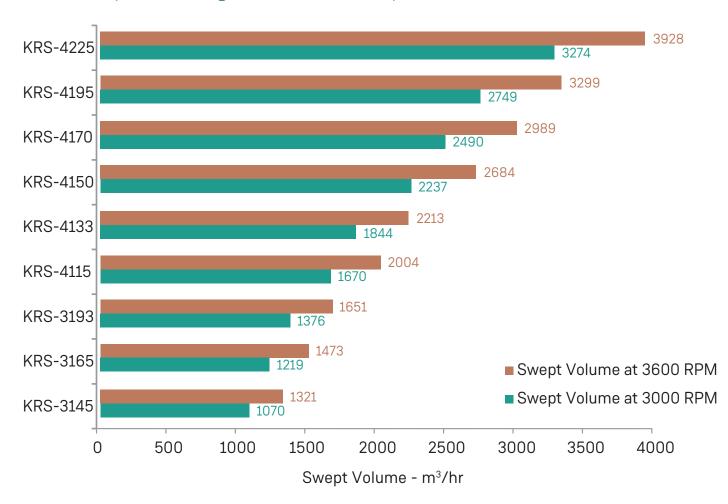
After Sales Support & Service



Easy Installation & Commissioning



Lower Life Cycle Cost



#### Screw Compressor Range - Theoretical Swept Volumes m<sup>3</sup>/hr

- Screw compressor package conducive to all refrigerants (NH3, R22, R134a, R404A, R407C, R507 etc...).
- Please contact KPCL for specific requirements, operating conditions and refrigerant.

\*We reserve the right to modify the specifications in accordance with improved designs. Although every effort has been made to maintain accuracy in the data given, the figures are no way binding.

