

## **KIRLOSKAR**

**CNG Packages & Solutions** 



Corporate Office: Hadapsar, Pune.

Factory/Works: Saswad, Pune.

#### **KIRLOSKAR Group**

Kirloskar Group is one of the leading engineering conglomerates in India. It has more than hundred years of proven expertise in specialist areas of Gas Solutions, Cooling Solutions, Power Solutions, Water Solutions, Air Solutions & Environmental Protection with a Portfolio of world class industrial products and turnkey solutions. Kirloskar holds the repute in the industry for its good business values and excellent customer satisfaction.



IMS Certified Company

ISO 9001 ISO 14001 BS OHSAS 18001



#### KIRLOSKAR PNEUMATIC CO. LTD. (KPCL)

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#### **Our Business Units**

- Process Gas Division
  - Gas Compression System (Upstream, Midstream, Downstream Sector)
  - CNG Solutions for NGV Applications (Distribution Sector)
- Air-conditioning & Refrigeration Division
  - Refrigeration System (Refineries, Petrochemicals, Chemicals, Fertilisers...)
  - Marine HVACR
  - Vapour Absorption System
  - Compressors and Packages for Industrial Refrigeration
- ACD Air Compressor Division
- TRM Transmission Division

#### **Awards**

- 'Employer Branding' Award CII 'Best Kaizen' Award
- CII Exim Bank Award for 'Strong Commitment Towards Excellence'
- CII 'Excellence in Energy Management' Award

















#### **Training:**

 Special session for the operation and maintenance staff (on site & Class room) which covers the entire gamut from basic design philosophy up to the operation / maintenance / troubleshooting

### **After Market Support:**

The range of available services includes:

- 24 x 7 Operation and Maintenance involving parts, overhaul and repairs
- Spare Parts
- Technical support
- Service Network across the country

#### **Capabilities**

#### System Design:

- Competent and trained team of dedicated engineers providing comprehensive in-house systems solutions
- Innovative and pioneering R&D
- Capability of detailed engineering and conformance with standards like API, IS, BS, ASME, OSHA, NACE, TEMA, OISD etc.
- Use of latest software like HTRI for heat exchanger design, CAESAR-II for pipe stress analysis and software for torsion, vibration, pulsation analysis,. PDS/PDMS and UNISIM Process Simulation Software..

## **Experience with Reputed International Consultants/Inspection Agencies:**

 PDIL, Mecon, Woodgroup Kenny, Tractabel, Engineers India Ltd. (EIL), Technip, Bechtel, UHDE, Akeer Kvaerner, Lurgi, Tecnimont, Linde, ICB, Chemtex, Jacobs H&G, Toyo, Llyods Registrar, BV, DNV...

#### **Procurement:**

- Team of professionals to procure system components with adherence to delivery schedules
- Dedicated sub-vendors for assured quality

#### Manufacturing:

- Dedicated infrastructure to support all the manufacturing processes
- In-house foundry
- Sophisticated testing labs
- CNC machining centre
- Stress relieving furnances
- Testing facilities

#### **Quality Assurance:**

- Dedicated team of QC engineers certified for various NDT examinations and stringent quality control as per pre-defined QAP for each project.
- Elaborate Quality Dossier for each project.

#### **Packaging:**

- Capability to assemble at factory as well as at site
- Supplied over 1000 packages in India and abroad
- Completely factory wired ready to install Gas Compression Package & CNG Packages.

#### **Erection:**

 Ingenious and committed personnel specialised in Avenues like mechanical, electrical and instrumentation striving towards completion of the projects within stipulated time

#### **Commissioning:**

• Specialised, trained, dedicated commissioning engineers



**▲** Motor Driven Compressor Pkg.





## **CNG PACKAGE**

- Compressor Balanced Opposed,
  Reciprocating Type
- · Construction Compact, Modular
- Suction Pressure 0.5 to 65 bar
- Discharge Pressure 250 bar
- Low Power Consumption

#### Compressor

#### Reciprocating

• ISO 13631 (API 11 P) Compliant

#### **Heat Exchangers**

#### **Air Cooled**

Compact box header construction with carbon steel tubes & Aluminium fins.

#### **Water Cooled**

Shell & Tube type exchanger designed & manufactured as per TEMA / Client requirement

#### **Process Gas Piping**

Designed, fabricated & tested as per ASME B 31.3

#### **High pressure tubing**

## Blow-down vessel & pulsation suppression devices:

Designed as per ASME section VIII, div. 1 latest edition

#### **Safety Devices**

- High temperature trip at each stage discharge
- High pressure trip at each stage discharge
- No flow Switch for Low Oil Flow to cylinders
- Frame Low lube Oil pressure trip
- Trip for excess Vibration (Optional)
- Gas detector (LEL detectors) (Optional)
- Flame detector (UV) (Optional)
- CO<sub>2</sub> flooding system (Optional)





- Prime Mover Motor/Engine Driven
- Enclosure Open Type / Acoustic
- Variable Suction Pressure 14 to 200 bar
- Flow 300 to 3500 SCMH
- Controls PLC Based Control Panel for Auto Operation

#### Driver

#### **Electric Motor**

- Flame Proof / Increased safety / Non sparking
- Squirrel Cage Induction Type, IP 55
- Statutory authority approvals Indian : CMRI / CCOE

International: BASEEFA / ATEX CE **Gas Engine:** As per ISO 3046 / BS 5514.



Duplex gas suction & single/twin discharge filters (Optional)

Flow meters at suction & discharge (Optional)









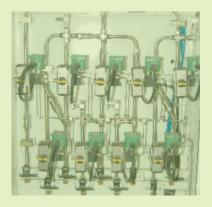
Engine Driven Compressor Pkg.

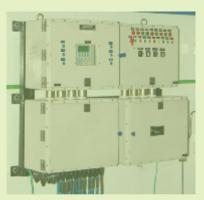






S S Enclosure











#### **Control Panel**

#### **Basic features:**

- Flame proof (As per IS2148)
- Frame Mounted
- Display : Alpha numeric / graphical
- Compact size
- Degree of protection (IP 55)
- Remote Monitoring System

#### **Optional features:**

- PLC based Control Panel (Our PLC is as per IEC 80 Standards)
- MMI with touch screen and color display upto 10"
- SCADA
- Redundancy of power module, CPU, I/O's & Communication Module

#### **Priority Panel**

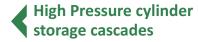
3 lines, 5 lines & 9 lines priority panel can be provided in two configurations

- Electronic type
- Mechanical type

#### **Testing**

- Dedicated Test Set Up for CNG
  Compressor Packages for full load test
- No Load Mechanical Run Test for Motor driven & Gas Engine driven Compressor packages.
- Full Load test of Motor driven & Gas Engine driven Compressor packages as per client requirement.





# Some of our Indian Significant Installations

MNGL, Pune

(Various type - 750, 1200 SCMH - Motor Driven, Gas Engine Driven)





IGL Millennium Park, New Delhi

(6 Packages - one of the largest fleet of NGV Passenger buses in the world)



BGL, Hyderabad (1900 SCMH)

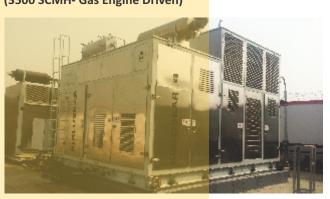
IGL, Delhi (2400 SCMH)



Adani, Chandola (Various type - 750, 1200 SCMH Motor Driven, Gas Engine Driven)



NIPCO PLC, NIGERIA (3500 SCMH- Gas Engine Driven)



## **International Presence**

Compressor Installations 30,000+ Compressors, 40 Countries

#### Offices/ Dealers/ Representative



### Refrigeration I Air I Gas > Compressors Packages & Systems

Plants: Hadapsar, Saswad, Nashik

Offices (India): Hadapsar, Mumbai, Ahmedabad, Delhi, Lucknow, Chennai, Hyderabad,

Bangalore, Kolkata

Dealer's (India): Pune, Mumbai, Ahmedabad, Baroda, Vapi, Delhi, Agra, Lucknow,

Chandigarh, Jaipur, Chennai, Secunderabad, Kochi, Bangalore, Kolkata Dubai, Saudi-Arabia, Oman, Egypt, Iraq, Thailand, Malaysia, Vietnam, Phillipines, Indonesia, Mynmar, Australia, Turkey, Netherlands, Shrilanka,

Nepal, Bangladesh, South Africa, Nigeria, Abu-Dhabi, Kuwait, Italy, Russia

International Marketing: acrpgmktg@kpcl.net Contact:

Refrigeration Systems: acrref@kpcl.net

Gas Compression Systems / CNG Pkgs.: pgs@kpcl.net



Offices /

Representatives

(Overseas):

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KIRLOSKAR PNEUMATIC CO. LTD.

Visit us at

www.kirloskarkpcl.com



**BS OHSAS 18001** 

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