

Enriching Lives

KIRLOSKAR

Gas Compression Systems





CERTIFICATE

hereby certifies in accordance with procedures that

KIRLOSKAR PNEUMATIC CO. LTD.

ite-1: Hadapsar Industrial Esta Pune – 411 013, Maharashtra, ite-2: Saswad, Taluka Purande st: Pune – 412 301, Maharasht

has established and applies an Integrated Management System for

An audit was performed, Report No. 2-5-4724/2010 Proof has been furnished that the requirements according to ISO 9001: 2008. ISO 14001: 2004. BS OHSAS 18001: 2007 are fulfilled. The certificate is valid until 27 August 2018

mbai. 27.08.2015





IMS Certified Company ISO 9001, ISO 14001 **BS OHSAS 18001**

- 'Employer Branding' Award
- CII 'Best Kaizen' Award
- CII Exim Bank Award 'Significant Achievement in Business Excellence'
- CII 'Excellence in Energy Management' Award
- Quality circle Competition Awards
- Gold Winner Award Quality Circle Forum of India

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 and 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.

KIRLOSKAR PNEUMATIC CO. LTD. (KPCL)

Founded in 1958 as a part of Kirloskar Group, Kirloskar Pneumatic Co. Ltd. (KPCL) is one of the most accomplished names in Oil and Gas Sector.

Due to its technological edge, KPCL has been enjoying customer preference for almost half a century, serving products & customised solutions in diverse fields like Gas Compression, Refrigeration, Marine, HVAC, CNG, Air Compression and Transmission.

Our Business Units

PGS Division

- Process Gas System (Gas Compression System)
- **CNG Packages & Solutions**

ACR Division

- Refrigeration System
- Marine HVACR
- Vapour Absorption Chiller
- Compressors and Packages for industrial Refrigeration
- ACD Air Compressor Division
- TRM Transmission Division















KIRLOSKAR - Gas Compression Systems

Kirloskar a Leading name in Customised Gas Compression Solutions provides products and complete solutions from concept to commissioning. Kirloskar provides Gas Compression Systems used for hydrocarbons and industrial gases which are a highly specialised market segment in the field of Gas Compression Systems.

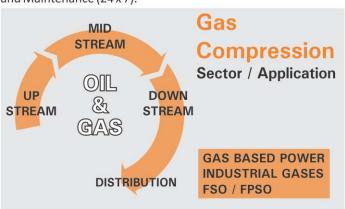
Our philosophy of 'Concept to Commissioning' has given us the edge and thus we continue to stay ahead of the increasingly stringent environmental, quality and safety standards that regulate the Industry.

Whatever may be the size and complexity of the project, KPCL provides cost effective solutions using latest technology from a factory assembled skid mounted unit to complex site erected unit incorporating PLC based control and monitoring systems. These Units give trouble free performance round the clock.

Our customised solutions feature activities like Designing, Manufacturing, Packaging, Installation, Commissioning, After Sales Service and Training.

Total Solution provider for Gas Compression Systems

In our quest to be a total solution provider for Gas Compression Systems we also undertake setting up of Gas Compression Stations on EPC Basis covering Designing, Procurement , Construction, Installation, Commissioning, Training & Operation and Maintenance (24x7).











System Design:

- Competent and trained team of dedicated engineers providing comprehensive in-house systems solutions with 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 & many more...

Experience with Reputed International Consultants / Inspection Agencies:

 Engineers India Ltd. (EIL), Technip, Bechtel, UHDE, Akeer Kvaerner, Lurgi, Tecnimont, PDIL, Mecon, 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.

Sophisticated testing labs

Stress relieving furnances

CNC machining centre

- Fabrication
- Packaging
- Foundry (In-house)
- Testing facilities

Quality Assurance:

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

Packaging:

- Capability to assemble at factory as well as at site.
- Supplied over 1900 packages in India and abroad.
- Completely factory wired ready to install Gas Compression 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.

Training:

 Special session for the operation and maintenance staff which covers the entire gamut from basic design philosophy upto the operation / maintenance / trouble shooting.

After Market Support:

- Operation and Maintenance involving parts, overhaul and repairs.
- · Spare Parts.
- · Technical support.
- Service Network.



KIRLOSKAR - High Speed Reciprocating Gas Compression Systems

We provide Reciprocating Compressor Package conforming to ISO 13631 (Formerly API-11P).

KPCL is Authorised Packager of Ariel USA Compressors.

Salient Features:

- Reciprocating Gas Compressors (Ariel USA).
- Pressure range: 1 bar 580 bar.
- Flow range: 50 cfm 6000 cfm.
- Driver: Gas Engine / Electric Motor.
- Interstage cooling: Air cooled / Water cooled Heat Exchangers.
- Pulsation Dampners.
- Control Panel: Flame Proof / Purge Type.
- Piping & Instrumentation as per International Standards.

KIRLOSKAR - Low Speed Reciprocating Gas Compression Systems

We provide Reciprocating Compressor Package conforming to API 618.

KPCL is Authorised Packager of GE Nuovo Pignone Italy Compressors.

Salient Features:

- Reciprocating Gas Compressors (GE Nuovo Pignone, Italy upto 5000 KW).
- Driver: Synchronous / Induction Motor.
- Interstage cooling: Shell & Tube type Heat Exchangers.
- Control Panel: Flame Proof / Purge Type.
- Pulsation Dampners.
- Piping and Instrumentation as per international standards.

KIRLOSKAR - High Speed Screw Type Gas Compression Systems

We provide Reciprocating Compressor Package conforming to API 619.

KPCL is Authorised Packager of Howden UK Compressors.

Salient Features:

- Screw Gas Compressor (Howden UK).
- Oil flooded / Oil free Screw Compressors.
- Pressure range: 1 bar 32 bar.
- Flow range: 100 cfm 6000 cfm.
- Driver: Gas Engine / Electric Motor.
- Heat Exchangers: Air Cooled / Water Cooled.
- Step less capacity control.
- Efficient Oil Separation System.
- Single & Dual Shaft Seal System.
- Control Panel: Flame Proof / Purge Type.

KIRLOSKAR GAS COMPRESSION SYSTEMS



Enriching Lives

MIDSTREAM

- Gas Pipeline Transmissio
- Gas Storage Injection
- Gas Storage Withdrawal

DOWNSTREAM

HydrocrackingFCC & AlkylationPower Generation

Hydrotreating

PSA System

• Reforming & H, Plants

Flare Gas Recovery

Gas Turbine Fuel Booster

UPSTREAM

Offshore / Onshore)

- Reinjection
- Gas Lift
- Coal Bed Methane (CBM)
- Power Generation
- Fuel Gas
- LNG
- Flare Gas Recovery

GAS BASED POWER

Fuel gas booster - To raise pressure level as feed to the Gas Turbines.

INDUSTRIAL GASES

Gas Compression Solutions for other gases like Ethyelene, CO₂, Helium, Ammonia and host of other heavier hydrocarbons.

FSO / FPSO

Gas Compression Applications



Upstream Gas Booster Package for Adani Gas



Gas Compressor Pkg. - Offshore platform, ONGC MHN



Gas Compressor Pkg., ONGC, Nazira



PSA Tail Gas Compressor Pkg.- BCPL





IPPI Ennore Flash Gas Compressor



Natural Gas Transmission Compr. Pkg.



MRPL Gas Booster Pkg.





Ammonia Unloading & Holding Refrigeration System
Compressor Pkg. on FSO LPG Petrostar,



Gas Engine driven, Reciprocating Gas Compressor Package on Unmanned Offshore Platform.



Offshore Platform Flare Gas Recovery Pkg. - ONGC Neelam Hira



Flare Gas Recovery Unit- Zero Flare Project Oil & Natural Gas Corporation Ltd., Uran



CBM Screw Pkg.















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)

KIRLOSKAR - CNG Systems for NGV Filling Application

Kirloskar is currently one of the leading suppliers of CNG Compressor Packages for NGV filling applications to all the gas companies in india. We have an expertise in providing tailor made packages to meet our customer's needs. Each package tailored to the customer's requirement is tested in house and subjected to a full load test as per contract specification & as per ISO 13631 (Formerly API-11P).

Salient Features:

- · Multistage Reciprocating Compressor
- Low vibrations and low power consumption
- Driver: Gas Engine / Electric Motor
- Wide range of products offering
- Suction Pressure Range: 0.55 bar 60 bar
- Discharge Pressure: 250 bar
- Flow range: 300 SCMH 3500 SCMH
- Flame Proof Control Panel
- · Air cooled / Water cooled Heat Exchangers
- Pressure vessel (manufactured as per ASME sction VIII, Div 1 with 100% radiography)
- Priority panel (3, 5 and 9 line)

Optional Features and Supplies

- Vibration Sensing Device
- Gas Detectors (L.E.L.)
- Flame Detectors (U.V.)
- Acoustic Enclosures
- Flow Metering Device
- Programmable Logic Control
- CO2 Flooding System
- Man Machine Interface for Parameter Display & Alarm
- High pressure cylinder storage cascade
- Dispenser for car and bus filling
- Station tubing fitting layout

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

Offices, Dubai, Saudi-Arabia, Oman, Egypt, Iraq, Thailand, Malaysia, Vietnam, Philippines, Indonesia, Myanmar, Australia, Turkey, Netherlands, Srilanka, Nepal, Bangladesh, South Africa, Nigeria, Abu-Dhabi, Kuwait, Italy, Russia

Contact: International Marketing: acrpgmktg@kpcl.net

 $Refrigeration \ Systems: acrref@kpcl.net$

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

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KIRLOSKAR PNEUMATIC CO. LTD.

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Visit us at

www.kirloskarkpcl.com



ISO 9001 ISO 14001 BS OHSAS 18001

As we are constantly endeavoring to improve the performance of our product / equipment, we reserve the right to make alterations from time, and as such our products / equipment may from the detailed in this publication. For latest information you may get in touch with our regional sales offices.