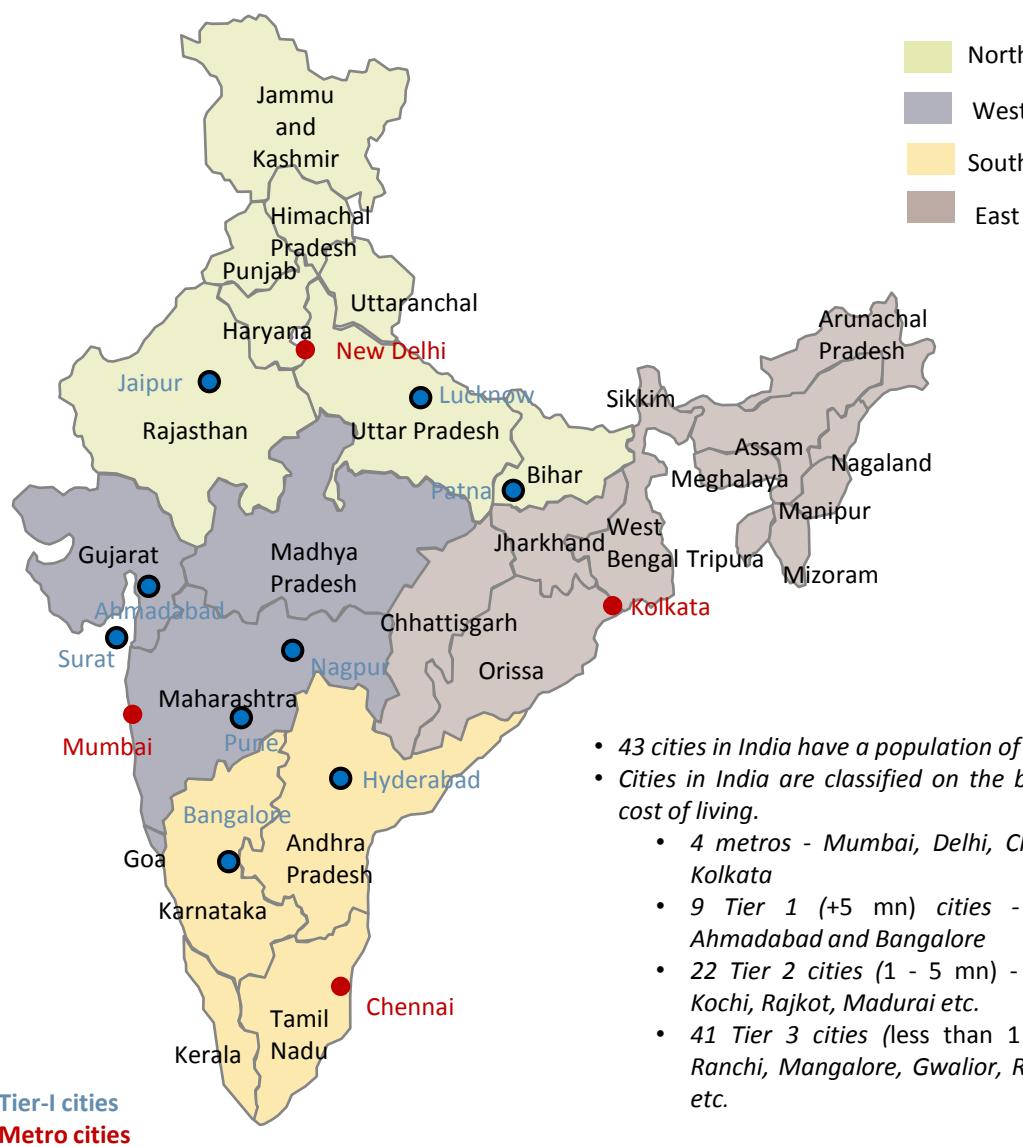


Source: <http://www.pdcmachines.com>

# India Fact File



- 43 cities in India have a population of 1 mn+
- Cities in India are classified on the basis of cost of living.
  - 4 metros - Mumbai, Delhi, Chennai, Kolkata
  - 9 Tier 1 (+5 mn) cities - Pune, Ahmadabad and Bangalore
  - 22 Tier 2 cities (1 - 5 mn) - Patna, Kochi, Rajkot, Madurai etc.
  - 41 Tier 3 cities (less than 1 mn) - Ranchi, Mangalore, Gwalior, Roorkee etc.

| India - Snapshot           |   |
|----------------------------|---|
| Population growth          | 1.4% p.a  |
| Land area                  | 3.29 mn sq km   |
| Population density         | 324 persons per sq km   |
| Form of government         | Democracy   |
| Number of states           | 29 states & 6 union territories   |
| Capital                    | New Delhi   |
| Per capita income          | Nominal: USD 1,124.4 p.a  |
| Religion                   | 6 main religions  |
| Languages                  | Hindi (national language), English (business language), 22 (official languages) |
| Currency                   | Rupees ₹  |
| Exchange rate (USD to INR) | 1 USD = INR 60.01 (as on 1 <sup>st</sup> April 2014)                            |
| Rural-urban mix            | 68% people reside in rural areas  |
| Households                 | 246 mn  |
| Literacy rate              | 74.04%  |

Source: Government websites

## Preface to the Report

### Who is the Reader?

- *Any participant or stakeholder in the industrial compressors industry would benefit from this report*
- *Analysts, industry experts or any person with an interest in tracking the progress of the industrial compressors industry*

### Purpose of the Report

- *The report provides intelligent insights on how the industrial compressors industry is expected to shape in the next five years till 2019. It comprises detailed analysis of industry drivers and challenges; proposed government and policy initiatives, and their impact on the industry; along with key segmentation (by end-users and geography)*
- *Additionally, the report provides profiles of the top industry players in the industrial compressors industry in India*

### Scope of the report

- *The report studies the current scenario for industrial compressors industry in India*
- *The report studies screw, reciprocating and centrifugal compressors, and does not cover valves and pumps*

| TOC          | Executive Summary   | Industry Structure | Market Overview | Drivers & Inhibitors | Industry Trends | Industry Attractiveness | Competitive Environment | Annexure & Appendix |
|--------------|---|--------------------|-----------------|----------------------|-----------------|-------------------------|-------------------------|---------------------|
|              | <b>Executive Summary</b>                                  |                    |                 |                      |                 |                         |                         | 9                   |
| <b>1</b>     | <b>Industry Structure</b>                                 |                    |                 |                      |                 |                         |                         | 10                  |
| <b>1.1</b>   | Industry Structure  |                    |                 |                      |                 |                         |                         | 11                  |
| <b>1.2</b>   | Industry Evolution  |                    |                 |                      |                 |                         |                         | 12                  |
| <b>1.3</b>   | Industry Definition                                       |                    |                 |                      |                 |                         |                         | 13                  |
| <b>1.4</b>   | Industry Classification                                   |                    |                 |                      |                 |                         |                         | 14                  |
| <b>1.5</b>   | Industry Supply Chain                                     |                    |                 |                      |                 |                         |                         | 15                  |
| <b>2</b>     | <b>Market Overview</b>                                    |                    |                 |                      |                 |                         |                         | 16                  |
| <b>2.1</b>   | Size & Growth   |                    |                 |                      |                 |                         |                         | 17                  |
| <b>2.2</b>   | Market Segmentation                                       |                    |                 |                      |                 |                         |                         |                     |
| <b>2.2.1</b> | - Industry Segmentation   Types of Compressors            |                    |                 |                      |                 |                         |                         | 18                  |
| <b>2.2.2</b> | - Centrifugal compressors Consumption by End Industry     |                    |                 |                      |                 |                         |                         | 19                  |
| <b>2.2.3</b> | - Screw compressors Consumption by End Industry           |                    |                 |                      |                 |                         |                         | 20                  |
| <b>2.2.4</b> | - Reciprocating compressors Consumption by End Industry   |                    |                 |                      |                 |                         |                         | 21                  |
| <b>2.3</b>   | Geographical Analysis                                     |                    |                 |                      |                 |                         |                         | 22                  |
| <b>3</b>     | <b>Drivers and Inhibitors</b>                             |                    |                 |                      |                 |                         |                         | 23                  |
| <b>3.1</b>   | Drivers and Inhibitors                                    |                    |                 |                      |                 |                         |                         | 24                  |
| <b>3.1.1</b> | <b>Driver 1</b> - End User Industries are Growing         |                    |                 |                      |                 |                         |                         | 25                  |
| <b>3.1.2</b> | <b>Driver 2</b> - Awareness of Energy Efficiency Measures |                    |                 |                      |                 |                         |                         | 26                  |
| <b>3.1.3</b> | <b>Driver 3</b> - Emergence of New Industries             |                    |                 |                      |                 |                         |                         | 27                  |
| <b>3.1.4</b> | <b>Inhibitor 1</b> - Delay in Setup/Approvals             |                    |                 |                      |                 |                         |                         | 28                  |
| <b>3.1.5</b> | <b>Inhibitor 2</b> - Rising Raw Material Cost             |                    |                 |                      |                 |                         |                         | 29                  |
| <b>3.1.6</b> | <b>Inhibitor 3</b> -Threat from Low Cost Imports          |                    |                 |                      |                 |                         |                         | 30                  |
| <b>4</b>     | <b>Industry Trends</b>                                    |                    |                 |                      |                 |                         |                         | 31                  |
| <b>4.1</b>   | Recent Trends Witnessed                                   |                    |                 |                      |                 |                         |                         | 32                  |
| <b>5</b>     | <b>Mergers &amp; Acquisitions and Recent Developments</b> |                    |                 |                      |                 |                         |                         | 33                  |

| TOC   | Executive Summary   | Industry Structure | Market Overview | Drivers & Inhibitors | Industry Trends | Industry Attractiveness | Competitive Environment | Annexure & Appendix |
|-------|---|--------------------|-----------------|----------------------|-----------------|-------------------------|-------------------------|---------------------|
| 6     | <b>Industry Analysis</b>  |                    |                 |                      |                 |                         |                         | 34                  |
| 6.1   | Porter's Analysis   |                    |                 |                      |                 |                         |                         | 35                  |
| 6.2   | Industry Attractiveness   |                    |                 |                      |                 |                         |                         | 36                  |
| 7     | <b>Competitive Environment</b>  |                    |                 |                      |                 |                         |                         | 37                  |
| 7.1   | Industry Segmentation   Organized vs Unorganized  |                    |                 |                      |                 |                         |                         | 38                  |
| 7.1   | Industry Segmentation   Imports   |                    |                 |                      |                 |                         |                         | 39                  |
| 7.3   | Brand Positioning   |                    |                 |                      |                 |                         |                         | 40                  |
| 7.4   | Manufacturing Landscape   |                    |                 |                      |                 |                         |                         | 41                  |
| 7.5   | Competitor Benchmarking   |                    |                 |                      |                 |                         |                         | 42                  |
| 8     | <b>Profiles of Key Players</b>  |                    |                 |                      |                 |                         |                         | 43                  |
| 8.1   | Atlas Copco (India) Limited   |                    |                 |                      |                 |                         |                         | 44                  |
| 8.2   | Elgi Equipments Limited   |                    |                 |                      |                 |                         |                         | 46                  |
| 8.3   | Ingersoll Rand (India) Limited  |                    |                 |                      |                 |                         |                         | 48                  |
| 8.4   | Kirloskar Pneumatic Company Limited   |                    |                 |                      |                 |                         |                         | 50                  |
| 8.5   | Kaeser Compressors (India) Private Limited  |                    |                 |                      |                 |                         |                         | 52                  |
| 9     | <b>Annexure</b>   |                    |                 |                      |                 |                         |                         | 54                  |
| 9.1   | Status of Stalled and New Projects in India   |                    |                 |                      |                 |                         |                         |                     |
| 9.1.1 | Projects Stalled in India: By Ownership   |                    |                 |                      |                 |                         |                         | 55                  |
| 9.1.2 | Projects Stalled in India by Sector and Top Five States in India by Project Loss (2013-14)                |                    |                 |                      |                 |                         |                         | 56                  |
| 9.1.3 | Fresh Project Investment in India: By Ownership   |                    |                 |                      |                 |                         |                         | 57                  |
| 9.1.4 | Fresh Projects Investment in India by Sector and Top Five States in India by Investment in Fresh Projects |                    |                 |                      |                 |                         |                         | 58                  |
| 9.2   | Research Methodology  |                    |                 |                      |                 |                         |                         | 59                  |
| 9.3   | Abbreviation & Bibliography   |                    |                 |                      |                 |                         |                         | 60                  |
| 9.4   | Glossary  |                    |                 |                      |                 |                         |                         | 61                  |

## List of charts

|                 |  |    |
|-----------------|--|----|
| <b>Chart 1</b>  | Non Electrical Equipment Industry Structure  | 11 |
| <b>Chart 2</b>  | Evolution of Industrial Compressors Industry in India  | 12 |
| <b>Chart 3</b>  | Supply Chain for the Industrial Compressors Industry in India  | 15 |
| <b>Chart 4</b>  | Share of Industrial Compressors in Pumps, Valves And Compressors Industry Segment in 2013 – India (By Value) | 17 |
| <b>Chart 5</b>  | Industrial compressors Market Size & Growth (INR Billion)  | 17 |
| <b>Chart 6</b>  | Market Size Segmentation Based on Product Type and Product Life Cycle Stage (in value)                       | 18 |
| <b>Chart 7</b>  | End User Segmentation for Centrifugal Compressors  | 19 |
| <b>Chart 8</b>  | End User Segmentation for Screw Compressors  | 20 |
| <b>Chart 9</b>  | End User Segmentation for Reciprocating Compressors  | 21 |
| <b>Chart 10</b> | Sales of Industrial Compressors Split by Geography (By Value)  | 22 |
| <b>Chart 11</b> | Life Cycle Cost for an Industrial compressors  | 26 |
| <b>Chart 12</b> | Index Numbers of Wholesale Prices in India   | 29 |
| <b>Chart 13</b> | Import from China of Air Compressors (INR Million)   | 30 |
| <b>Chart 14</b> | Porter's Analysis of Industrial Compressors Industry in India  | 35 |
| <b>Chart 15</b> | Industrial compressors Market Segmentation – by Type of Players (By Value)                                   | 38 |
| <b>Chart 16</b> | Industrial compressors Market Segmentation – by Types of Players and Products (By Value)                     | 38 |
| <b>Chart 17</b> | Import V/S Local Manufacturing (By Value)  | 39 |
| <b>Chart 18</b> | Imports for Air Compressors (INR Million)  | 39 |
| <b>Chart 19</b> | Import by Product Segmentation (by value)  | 39 |
| <b>Chart 20</b> | Price and Quality Perception of Compressors  | 40 |
| <b>Chart 21</b> | Manufacturing and Sales Landscape  | 41 |
| <b>Chart 22</b> | Annual Turnover of Atlas Copco (India) (INR Million)   | 45 |
| <b>Chart 23</b> | Key Manufacturing Locations  | 45 |
| <b>Chart 24</b> | Annual Turnover of Elgi Equipments Ltd. (INR Million)  | 47 |
| <b>Chart 25</b> | Key Manufacturing Locations  | 47 |

| TOC                   | Executive Summary | Industry Structure   | Market Overview | Drivers & Inhibitors | Industry Trends | Industry Attractiveness | Competitive Environment | Annexure & Appendix |
|-----------------------|-------------------|--|-----------------|----------------------|-----------------|-------------------------|-------------------------|---------------------|
|                       | Chart 26          | Annual Turnover is Ingersoll Rand (INR Million)                        |                 |                      |                 |                         | 49                      |                     |
|                       | Chart 27          | Key Manufacturing Locations  |                 |                      |                 |                         | 49                      |                     |
|                       | Chart 28          | Annual Turnover of KPCL (INR Million)                                  |                 |                      |                 |                         | 51                      |                     |
|                       | Chart 29          | Key Manufacturing Locations  |                 |                      |                 |                         | 51                      |                     |
|                       | Chart 30          | Annual Turnover of Kaeser Compressors (INR Million)                    |                 |                      |                 |                         | 53                      |                     |
|                       | Chart 31          | Key Manufacturing Locations  |                 |                      |                 |                         | 53                      |                     |
|                       | Chart 32          | Projects Stalled in India by Sector (2012-13)                          |                 |                      |                 |                         | 56                      |                     |
|                       | Chart 33          | Projects Stalled in India by Sector (2013-14)                          |                 |                      |                 |                         | 56                      |                     |
|                       | Chart 34          | Fresh Projects Investment in India by Sector 2012-13                   |                 |                      |                 |                         | 58                      |                     |
|                       | Chart 35          | Fresh Projects Investment in India by Sector 2013-14                   |                 |                      |                 |                         | 58                      |                     |
| <b>List of tables</b> |                   |  |                 |                      |                 |                         |                         |                     |
|                       | Table 1           | Industrial compressors Industry Classification                         |                 |                      |                 |                         | 14                      |                     |
|                       | Table 2           | Mergers & Acquisitions in 2012-2013 in Industrial compressors Industry |                 |                      |                 |                         | 33                      |                     |
|                       | Table 3           | Recent Developments in Industrial compressors Industry                 |                 |                      |                 |                         | 33                      |                     |
|                       | Table 4           | Industry Attractiveness  |                 |                      |                 |                         | 36                      |                     |
|                       | Table 5           | Manufacturing Landscape  |                 |                      |                 |                         | 41                      |                     |
|                       | Table 6           | Competitive benchmarking of Top Players in India                       |                 |                      |                 |                         | 42                      |                     |
|                       | Table 7           | Financial Indicators of Atlas Copco (India)                            |                 |                      |                 |                         | 45                      |                     |
|                       | Table 8           | Financial Indicators of Elgi Equipments                                |                 |                      |                 |                         | 47                      |                     |
|                       | Table 9           | Financial Indicators of Ingersoll Rand                                 |                 |                      |                 |                         | 49                      |                     |
|                       | Table 10          | Financial Indicators of Kirloskar Pneumatic Company Ltd.               |                 |                      |                 |                         | 51                      |                     |
|                       | Table 11          | Financial Indicators of Kaeser Compressors                             |                 |                      |                 |                         | 53                      |                     |
|                       | Table 12          | Projects Stalled in India: By Ownership                                |                 |                      |                 |                         | 55                      |                     |
|                       | Table 13          | Top Five States in India by Project Loss (2013-14)                     |                 |                      |                 |                         | 56                      |                     |
|                       | Table 14          | Fresh Project Investment in India: By Ownership                        |                 |                      |                 |                         | 57                      |                     |
|                       | Table 15          | Top five States in India by Investment In Fresh Projects               |                 |                      |                 |                         | 58                      |                     |

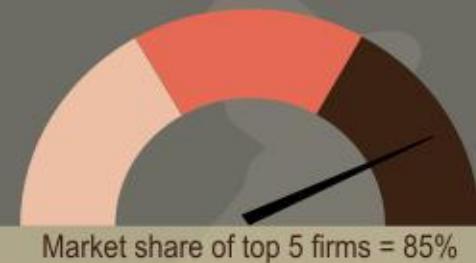
# Industrial Compressor Industry

## ValueNotes India Market Intelligence Dashboard

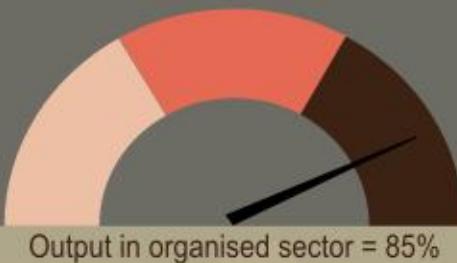
ValueNotes™  
Data to Decisions...

### Industry Structure

#### Concentration



#### Organised Sector



### Sources of Data

Indian Society of Heating, Refrigerating and Air-conditioning Engineers (ISHRAE), The Southern India Engineering Manufacturers' Association, etc

Trade Interviews

Primary Research



IBEF, Company websites, News Articles, etc

Other Sources

Industry Bodies



Government Bodies



Department of Heavy Industry, Ministry of Steel, etc

### Data Availability

|              | Macro Data  | Micro Data  |
|--------------|---|---|
| Completeness |  |  |
| Quality      |  |  |
| Recency      |  |  |

**Macro Data:** Market size, growth, market shares of key players, customer segments, key industry metrics

**Micro Data:** Segmental market size & growth, financials of key players

**Completeness:** All data points available

**Quality:** Accuracy of data

**Recency:** Latest period data available

## Market Size And Growth

- The industrial compressors industry in India is valued at INR 33,000mn (~USD 550mn) in FY 2014 and has been growing at CAGR ~7% for the three years
- The industry is expected to grow at CAGR of ~9% till FY 2019, due to expected growth in steel, cement, and petrochemical industry
- ValueNotes** estimates that the industry will be worth approximately INR 50,000mn (~ USD 833mn) by FY 2019

## Drivers & Challenges

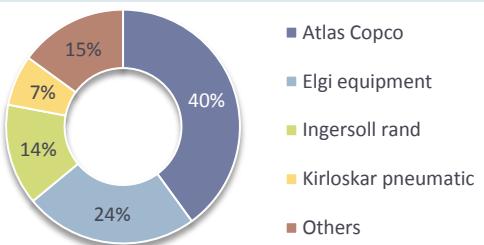
- Drivers**
  - There is more than ~5% growth in steel, cement, oil & gas and power industry which will drive growth in compressors industry
- Challenges**
  - Need for high levels of investment and rising raw material costs

## Industry Segmentation

- The industrial compressors industry is divided into screw, reciprocating and centrifugal compressors
- Currently screw compressors account for ~50% of the total compressors market in India (FY 2014)
- Centrifugal compressors segment is seeing maximum growth and is expected to grow by 10-12% from FY 2014 to FY 2019 because of the expected growth in steel, cement, power and petrochemical industries

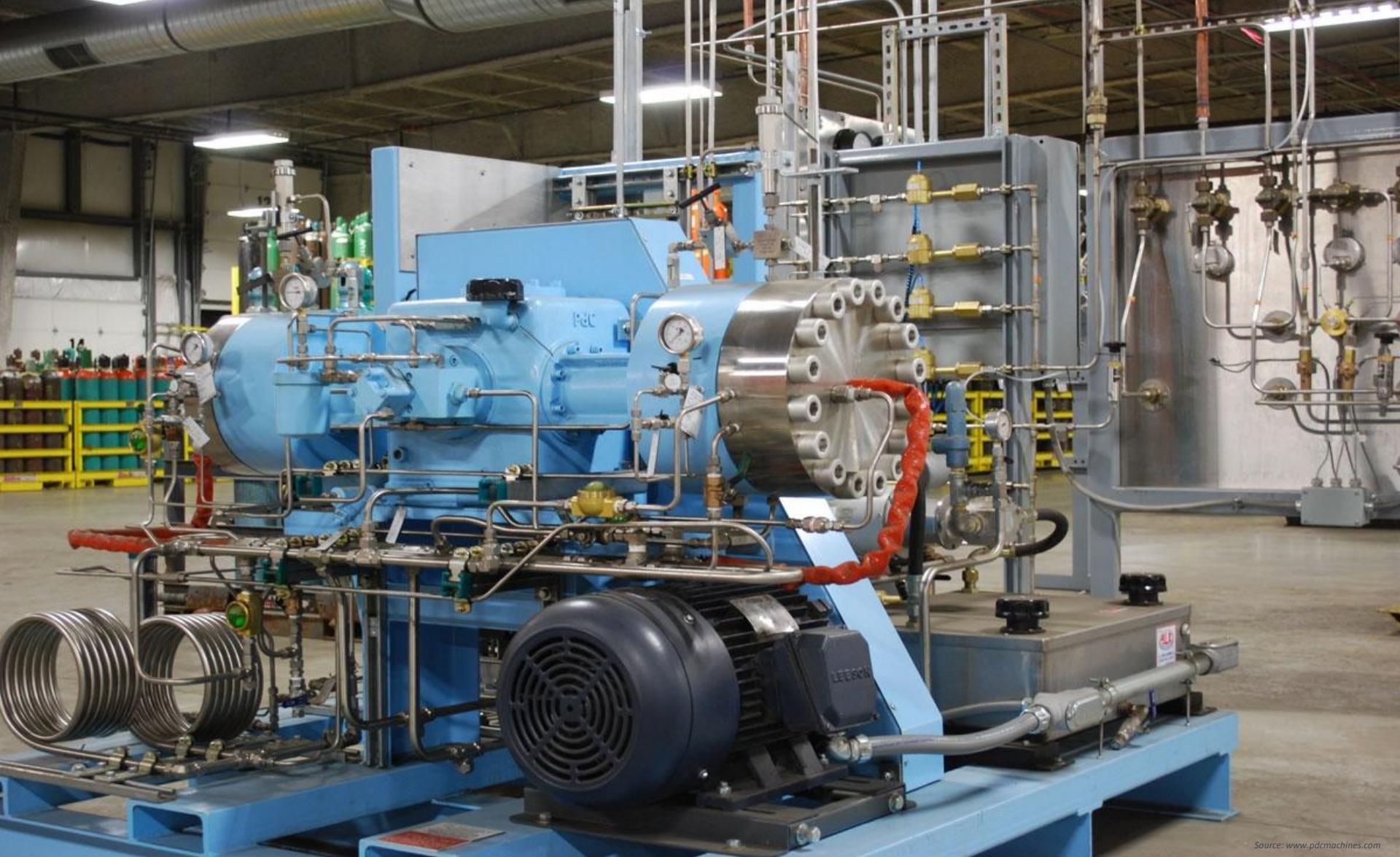
## Key Players

- 85% of the overall industrial compressors market is organized and dominated by multinational companies like Atlas Copco and Ingersoll Rand
- Kirloskar and Elgi are the two major Indian manufacturers who have captured a total of 31% of the overall compressors market



1 USD = 60.01 INR(2014 and onwards)

The industrial compressors industry in India has been given an Industry Attractiveness Rating of **7.2** as per the '**ValueNotes** Industry Attractiveness Rating Evaluation System'

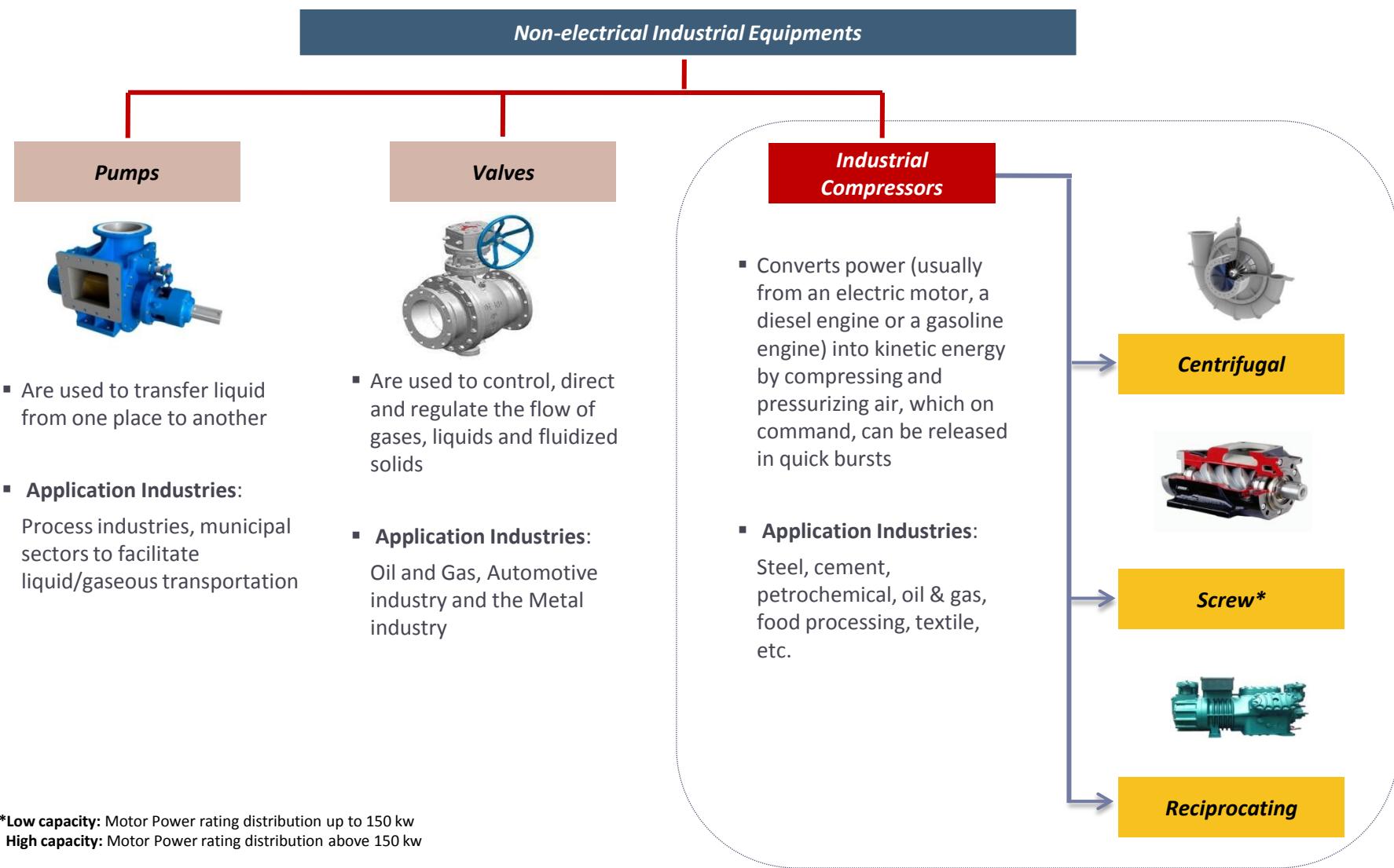


Source: [www.pdcmachines.com](http://www.pdcmachines.com)

# Industry Structure

## ► Non electrical industrial equipment industry structure

Chart 1: Non electrical equipment industry structure

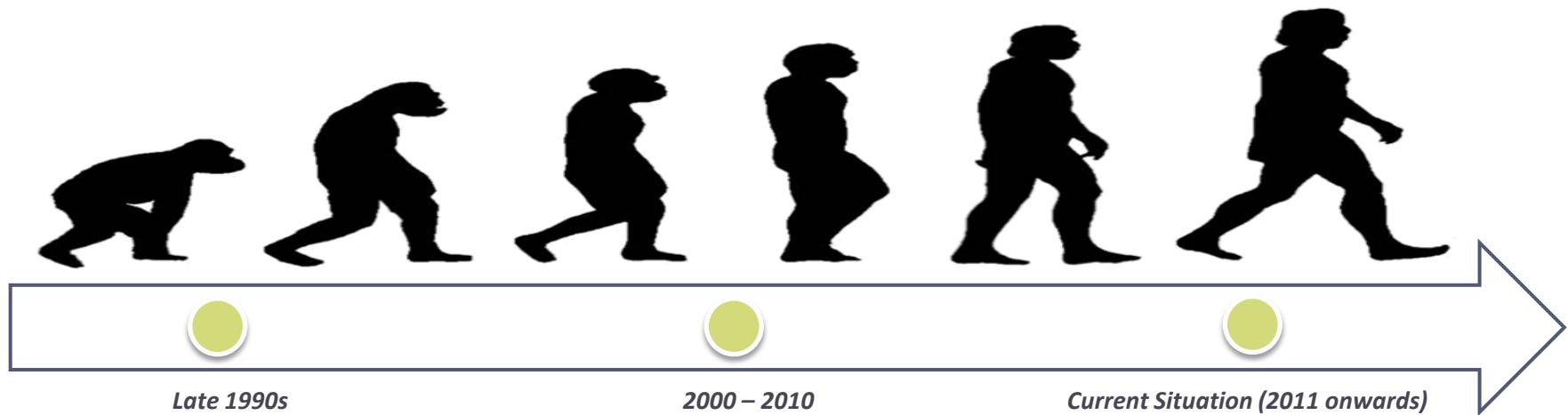


\*Low capacity: Motor Power rating distribution up to 150 kw

High capacity: Motor Power rating distribution above 150 kw

## ► Industrial compressors industry has evolved from reciprocating to centrifugal compressors

Chart 2: Evolution of compressors industry in India



*Late 1990s*

*2000 – 2010*

*Current Situation (2011 onwards)*

- Ingersoll Rand (India) was incorporated on 1st Dec 1921. It set up its first manufacturing plant for reciprocating compressors at Naroda in Gujarat, in 1965
- Before opening its first sales office in India in 1960, Atlas Copco sold its products through agents. In 1962, the company set up its first factory and started supplying products all over India
- In 1960, Elgi Equipments was established as an air compressor and garage equipment manufacturer. In 1990, Elgi developed high-pressure compressors for naval applications

- The first generation of compressors were reciprocating compressors, which were taken over by screw compressors because of their high capacity. Now, the new generation compressors are centrifugal compressors with higher energy saving and compression capacity. The reciprocating compressors have almost reached their technological development limits
- In 2002, Elgi developed the world's smallest screw air compressor

- In 2011, Atlas Copco launched the first oil-free screw air compressor
- Today, a wide variety of compressors are produced in India with capacities as high as 235,000 CFM. The industry is composed of both organized sector of medium and large-scale manufacturers and an unorganized sector of small-scale units. The majority of the market is captured by MNCs like Atlas Copco and Ingersoll Rand
- OEMs of compressors are concentrating on making compressors more energy efficient
- Currently advanced technologies such as scroll and eccentric cam compressors are being developed by leading players

*OEMs: Original equipment manufacturers CFM: cubic feet per minute MNCs: Multi national companies*

## ▶ Definition of industrial compressors industry as per the scope of this report

Industrial compressors industry falls under non-electrical equipment industry and are used to create high pressure for functioning heavy machines. Compressors can create low and high pressure and according to their capacity, the end consumer application changes.

There are mainly three types of industrial compressors:

### ▪ **Rotary screw compressors**

Two helical rotors force gas into a chamber that decreases in size, thereby increasing the pressure of the gas. The screws in the rotary screw compressors can be lubricated with oil or can be non-lubricated. Oil-free compressors are used for gas that must remain clean and uncontaminated. Rotary screw compressors are typically sized from 30-200 horsepower

### ▪ **Reciprocating compressors**

One or more pistons are moved inside a cylinder to increase the gas pressure. This is similar to a combustion engine without the ignition of fuel. Just like a car, the pistons generate much heat so the reciprocating compressors are typically cooled by air or water. Most industrial compressors are multi-stage, ranging from 1 to 500 or more horsepower

### ▪ **Centrifugal compressors**

Centrifugal compressors speed up and compress gas via a rotor with blades. Centrifugal force is used to force the air or gas to an outer chamber under higher pressure. Centrifugal compressors are designed to operate above 75-80% speed. Surging can occur below these speeds. This makes the centrifugal compressor ideal for continuous high duty operation

#### **This report covers:**

- All types of industrial compressors including centrifugal, Screw and Reciprocating compressors

#### **This report does not cover:**

- Pumps, Valves and refrigeration compressors



Source: <http://www.kolorrol.com>

## ► Centrifugal compressors are the next generation compressors

Industrial compressors are classified according to the mechanical functionality and capacity of pressure they can generate

Table 1: Industrial compressors industry classification

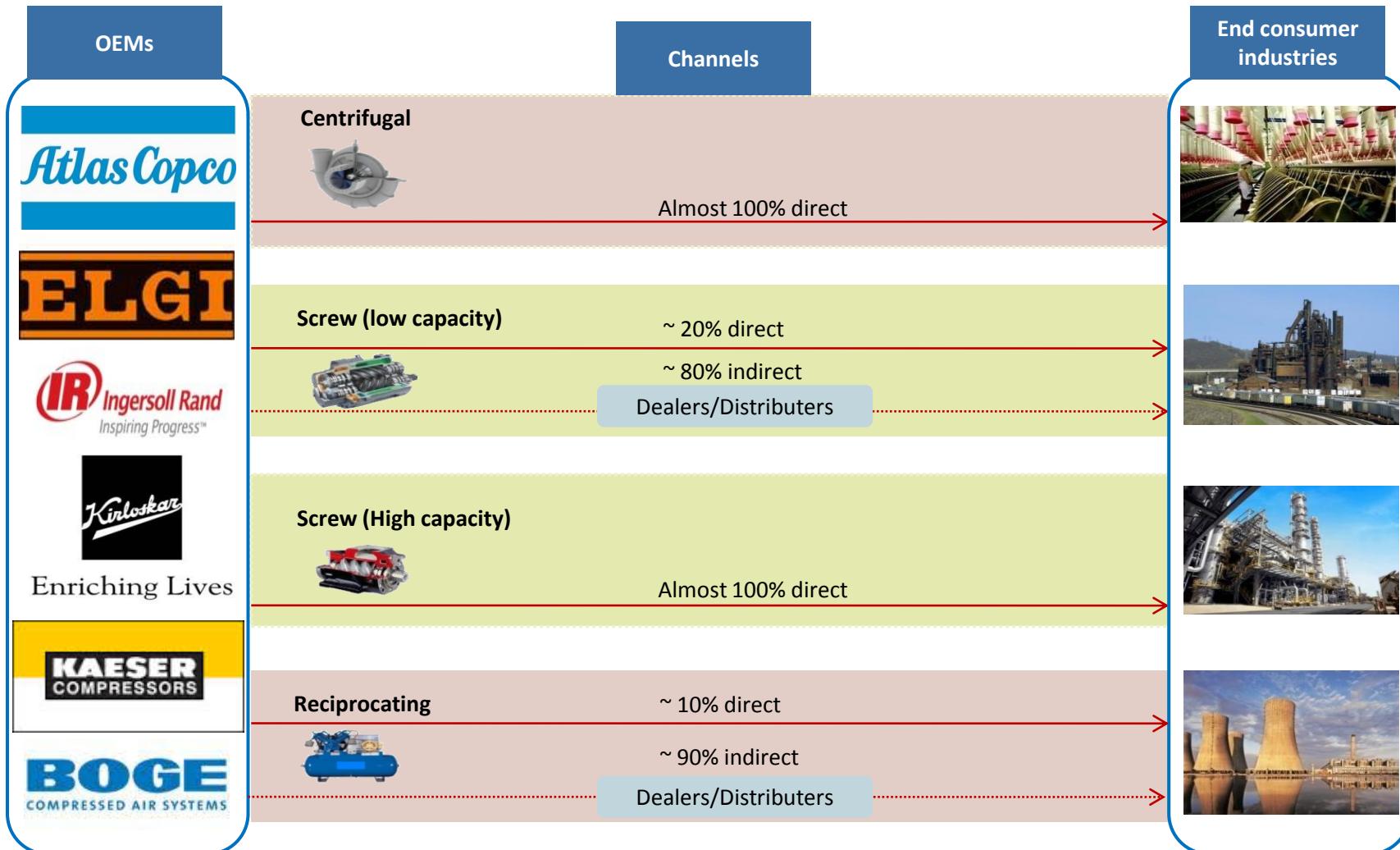
| Product segment          | Reciprocating  | Screw  | Centrifugal  |
|--------------------------|--|--|--|
| Mechanical functionality | ▪ Positive displacement  | ▪ Positive displacement  | ▪ Dynamic  |
| Capacity                 | ▪ Low - high   | ▪ Low - high   | ▪ Medium – high  |
| Noise level              | ▪ Noisy  | ▪ Quiet-if enclosed  | ▪ Quiet  |
| Vibration                | ▪ High   | ▪ Almost none  | ▪ Almost none  |
| Maintenance              | ▪ Many wearing parts   | ▪ Very few wearing parts   | ▪ Sensitive to dust in air   |
| Product type             | ▪ Lubricated<br>▪ Oil free   | ▪ Lubricated<br>▪ Oil free   | ▪ Oil Free (gas/air lubricated)  |
| Market type              | ▪ ~70% of the reciprocating compressors market is organized<br>▪ 30% market is unorganized, as reciprocating compressors can be used in small business like garage | ▪ ~98% of the screw compressors market is organized (Only larger companies can manufacture, because of complicated design and high investment) | ▪ 100% of the centrifugal compressors market is organized (Only larger companies can manufacture, because of complicated design and high investment) |
| Major end user segment   | ▪ Automobile<br>▪ Food and beverages<br>▪ Chemical<br>▪ Small scale industries<br>▪ Fertilizer<br>▪ Steel  | ▪ Power<br>▪ Steel<br>▪ Petrochemical<br>▪ Oil & gas<br>▪ Automobile<br>▪ Cement   | ▪ Steel<br>▪ Cement<br>▪ Petrochemical<br>▪ Oil & gas<br>▪ Power<br>▪ Textile  |
| Major players            | ▪ Atlas Copco (India) Ltd.<br>▪ Burckhardt Compression<br>▪ Elgi Equipments<br>▪ Ingersoll Rand<br>▪ Kirloskar Pneumatic   | ▪ Atlas Copco(India) Ltd.<br>▪ Boge<br>▪ Elgi Equipments<br>▪ Ingersoll Rand<br>▪ FS Curtis<br>▪ Kirloskar Pneumatic                           | ▪ Atlas Copco (India) Ltd.<br>▪ Ingersoll Rand<br>▪ Elgi Equipments<br>▪ Boge<br>▪ Kirloskar Pneumatic   |

CFM: Cubic feet per minute, KW: kilowatt

## ► High capacity industrial compressors are typically sold directly, while low capacity ones are sold through dealers

- Companies prefer dealing directly with end consumer for centrifugal compressors. High capacity screw compressors are sold directly to the end consumer. 90% of the reciprocating compressors are sold through dealers, as they are low capacity and low cost compressors.

Chart 3: Supply chain for the industrial compressors industry in India





# Market Overview

## ► Industrial compressors industry is expected to growth at a CAGR of ~9% until 2019

Chart 4: Share of industrial compressors in pumps, valves and compressors industry segment in 2013 – India (by value)

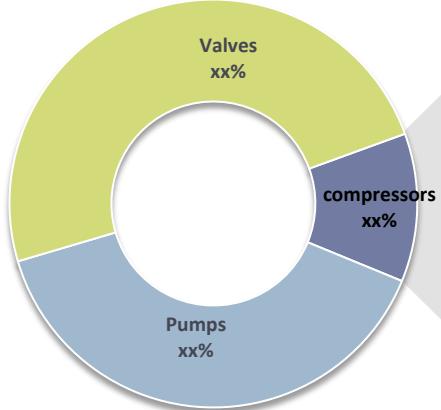


Chart 5: Industrial compressors market size & growth (INR billion)



### Current market

- XX
- XX

### Estimated growth

- XX
- XX

Usage of “**Three point analysis**” to arrive at growth figures:

- Optimistic:** Maximum growth if all growth factors\* occur as expected
- Pessimistic:** Least growth, if growth factors are delayed or not implemented
- Most Likely:** Most likely growth which has highest probability of taking place

\*The estimated growth of ‘the industrial compressors industry’ is based on various factors including:

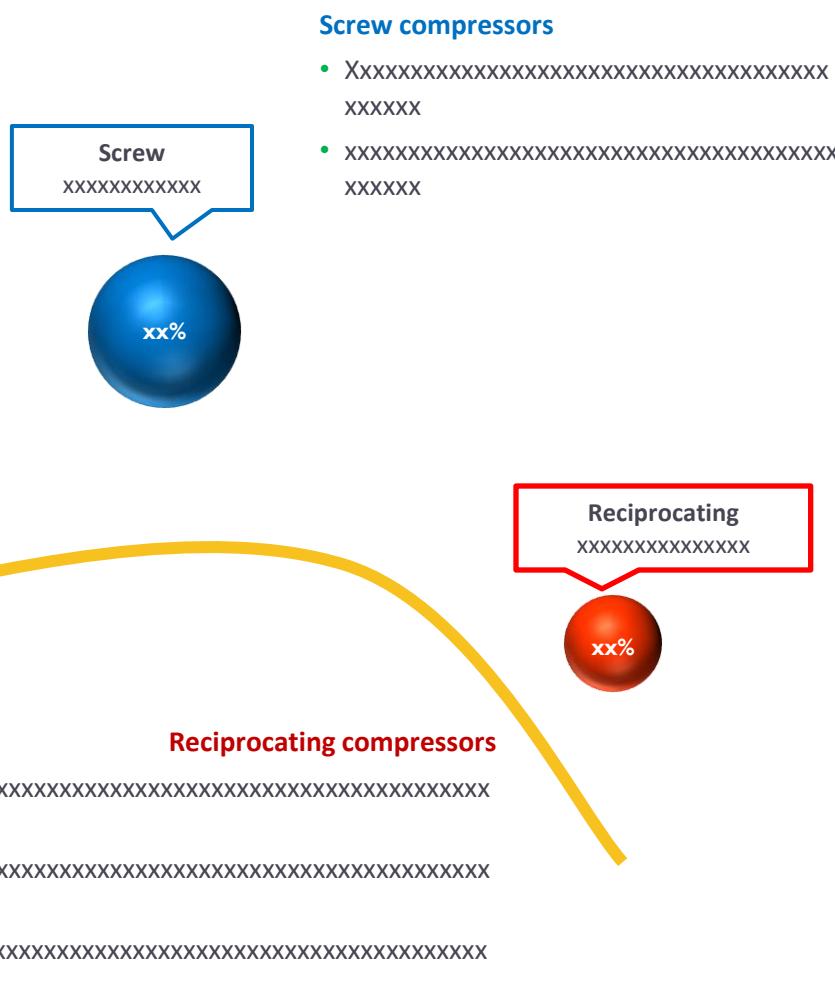
- XXXX

## Screw compressors currently contribute to ~50% of the overall compressors market in India (FY 2014) by value

Chart 6: Market size segmentation based on product type and product life cycle stage (in value)

### Centrifugal compressors

- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXX
- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
- XXXXXX



*Note: Percentages in the bubbles represent market share of the different types of compressors in value (for FY 14)*

*Source: Trade interviews, ValueNotes Research*

**Disclaimer:** This short industry report is published for general information only. Although high standards have been used in the preparation, ValueNotes is not responsible for any loss or damage arising from use of this report. The information contained herein is from publicly available data or other sources believed to be reliable. While we would endeavor to update the information herein on reasonable basis, ValueNotes is under no obligation to update or keep the information current. This report is the sole property of ValueNotes and must not be copied, either in whole or in part, or distributed or redistributed to any other person in any form.

# Data to Decisions



[www.valuenotes.biz](http://www.valuenotes.biz)  
Research & Consulting

[www.indianotes.com](http://www.indianotes.com)  
Indian Markets

[www.sourcingnotes.com](http://www.sourcingnotes.com)  
Outsourcing Intelligence



In case of any queries, mail us at [research@valuenotes.co.in](mailto:research@valuenotes.co.in)

About the author:



## Author Profile

Nitin has over 3 years of industry experience in India, USA and Canada. As a research analyst at ValueNotes he has worked on due diligence, market sizing, market assessment, Market entry, competitive intelligence projects in the verticals such as air conditioner, electronic component manufacturing, construction, and FMCG. Nitin has MS (Computer Science) from Northwestern Polytechnic University, USA and PGDM in Project management and marketing research from Centennial College, Canada.



[research@valuenotes.co.in](mailto:research@valuenotes.co.in)



+91 20 6623 1743

## Other Industry Reports by ValueNotes:

1. Warehousing industry in India
2. Integrated Cold Chain industry in India
3. Switchgear & Control gear industry in India
4. Packaged bottle water industry in India

**ValueNotes Database Pvt Ltd**

1 Bhuvaneshwar Society, Abhimanshree Road Pashan, Pune 411 008, Maharashtra, India