# **Gear Drive Rotary Screw Air Compressors** 40-120 HP









People.
Passion.
Performance.

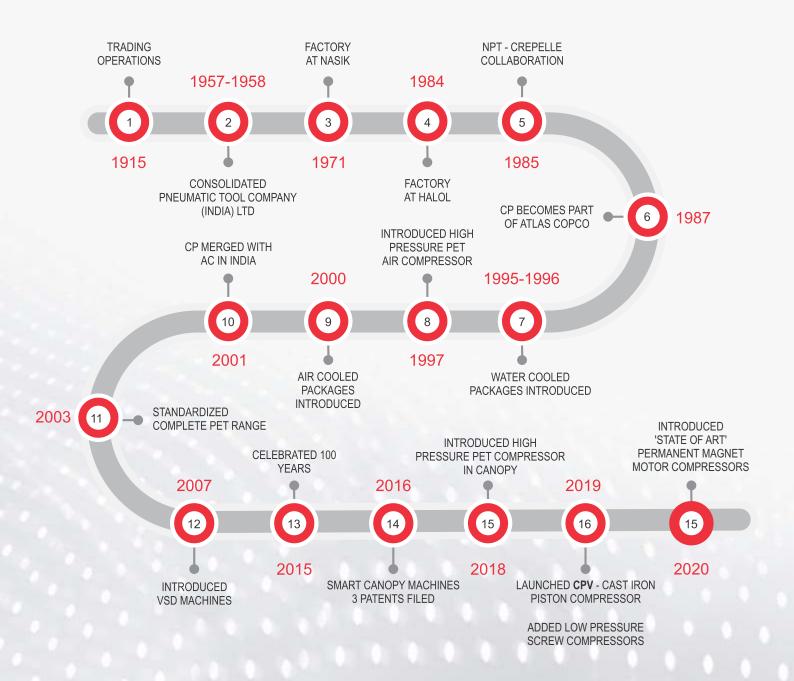


### Over a 100 Years of Industrial Excellence in India

Chicago Pneumatic (CP) is a global leader in the design, manufacture and distribution of high-performance compressors. In addition to pioneering design, high impact technology and durability, Chicago Pneumatic means Customer Value. Our goal is to deliver best-in-class global service and local support to our customers through a dedicated product portfolio and a strong network of authorized distributors. We generate added value by delivering the best solution to meet your needs based on our decades of experience.

Today, CP is a global brand that offers products for countless applications and almost every industry. We are also proud to say that after all these years, CP still stands for reliability, durability and customer value.







# We value good service to ensure customer satisfaction!

For Chicago Pneumatic, it isn't just about products. We value our end-users' and distributors' **performance**, and do our ultimate best to make it easy to work with our **people** while providing reliable products with a **passion**.

- Broad product portfolio of robust compressors & accessories
- Decades of experience & innovation
- 100% committed distributor partnership

At Chicago Pneumatic, it is our constant endeavor to provide you with the best equipment and service solutions. Our compressors are supported by a network of trained service technicians and dealers who provide complete service support and ensure spare parts availability. They are available for any technical consultation to optimize the performance of your equipment and ensure reliable operation. With a wide network spread across the country, we are never too far away, to help you solve your problems.



# Define your needs, our broad offer does the rest

Continuing the innovation in product development Chicago Pnumatic is introducing new addition into the product family. With vast experience in rotary screw compressor, CPC/CPD/CPE new dimension with gear drive technology for energy efficient production. The gear driven transmission maximizes machine output for the given pressure and power.

#### CPC/CPD

- The standard in the industry
- Gear driven



# Noise level Silent: 73-75 dB(A) Capacity 148- 462 CFM Power 40-100 hp Pressure 7-13 bar

#### **User benefits**

- · Industry leading performance.
- Compact solution
- Easy maintenance one man job
- · Highly reliable components
- User-friendly operation
- ES 4000 Swipe/Touch controller

# MaxGea

**CPE** 

- Maximum productivity
- Gear driven



Noise level	Silent: 75 dB(A)
Capacity	<b>;</b> 362-625 CFM
Power	100-120 hp
Pressure	7-13 bar

#### **User benefits**

- Industry leading performance
- Reduced energy consumption for optimum output
- High product efficiency
- Cost savings on maintenance and energy consumption
- ES 4000 Swipe/Touch controller

#### **CPVS**

- Top value through energy efficiency
- Inverter driven



Noise level	Silent: 72-74 dB(A)
Capacity	<b>≡</b> 82-625 CFM
Power	150-240 hp
Pressure	7.5-12.5 bar (g)

#### **User benefits**

- Save electricity over 30%
- Optimal efficiency perfectly matching the air flow
- Quick return on investment
- ES 4000 Touch controller
- Environment friendly reduced CO₂ emissions.

# Gear driven Compressors

# Maximize productivity with reliable compressed air solutions.

Chicago Pneumatic's gear driven range of oil-injected screw compressors is the true standard in the industry.

The components have been carefully selected to assure optimal quality and reliability. While the footprint is reduced due to the smart transmission system and component arrangement, performance is guaranteed thanks to the in-house designed air end.

#### Highest reliability

- · Eliminating transmission losses & optimizing running cost
- · Reduced bearing loads resulting in longer lifetime & extended service intervals

#### Robust design

- Designed for 46°C ambient temperature
- · High quality components ensures maximum longevity in operating conditions

#### Serviceability

· Easy access to every service points



# Pressurized canopy and pre filter - unique design feature

- · Pre filter avoids any dust entry inside the canopy
- Pre filter maintains cleanliness inside canopy
- · Pre filter enhances suction filter element life
- · Natural ventilation passage provides smooth and consistent flow of cool ambient air
- · Pressurized canopy interior avoids any suction pressure drop decreases compressor ratio

# Component overview



#### Air end

In house designed air end, unique 4/6 screw profile for premium performance



#### **Motor**

High efficiency TEFC IP55 motor, designed for tropical Indian conditions

#### **Smart controller**

Advanced touch controller with user friendly interface



#### Coolers

Optimized cooler design to ensure lower operating temperature





#### Air inlet filter

High efficient paper filter for improved efficiency



#### Air/oil separator

Vertical air / oil vessel for 3 stage filtration & optimized operating temperature, ensuring minimum oil carry over <3ppm



Low RPM cooling fan for minimum operating cost and quiet operation



#### **Control panel**

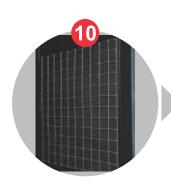
Reputed make electrical components ensuring safety and optimal efficiency and reliability built in inverter





#### Unloader

vacuum unloader with less wear and tear, maintenance for tough operating conditions



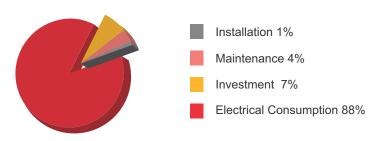
#### **Filtration baffle**

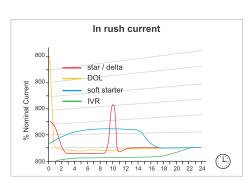
Highly efficient filteration baffle to protect dust entry

# Inverter Driven Compressors to protect your efficiency

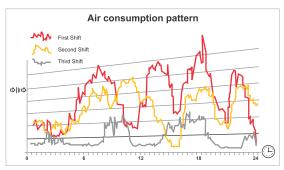


#### **Fixed Speed**









# **Energy Audit:**

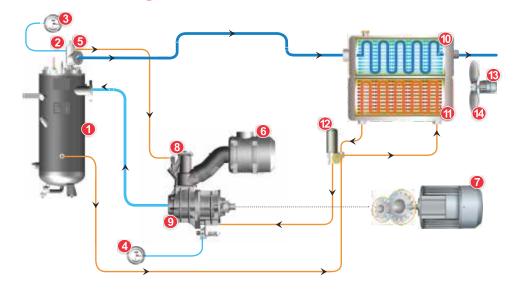
An IVR compressor potentially offers upto 30% energy savings, with an ROI less than 18 months.

Chicago Pneumatic has developed the Energy cutter, a tool that calculates yearly savings from an IVR compressor.

We offer energy audits, specialized advice to make sure you make the right decision when buying your compressor.



# Flow diagram



- 1 Air / Oil separator filter
- 2 Safety valve
- 3 Pressure gauge
- 4 Temperature switch
- 5 Minimum pressure valve
- 6 Air Filter (Air in)
- 7 Main Motor
- 8 Unloader
- 9 Screw element
- 10 After Cooler
- 11 Oil cooler
- 12 Thermostatic valve
- 13 Fan motor
- 14 Fan

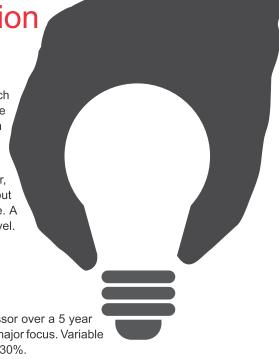
Reliable compressed air solution for varying load demands.

The variable speed compressor series allows you to find the perfect match between air demand and air supply. Thanks to the inverter driven technology, the energy cost can be reduced upto 30%. Due to the robust design of the gear driven transmission, you can rely on high quality compressed air in the most demanding applications.

Components are carefully selected assuring quality and reliability. Moreover, installation and maintenance is kept simple thanks to the easy accessibility. Last but not least, cooling performance is guaranteed by the oversized cooler package. A high efficiency cooling fan is designed to deliver a high cooling flow at low noise level.

### We protect your efficiency

Energy costs represent about 70% of the total operating cost of your compressor over a 5 year period. That's why reducing the operating cost of a compressed air solution is a major focus. Variable frequency driven compressors can cut the energy bill of your compressor by up to 30%.





#### **Lower running cost**

Only uses energy for air production; no wastage of energy on partial unload



#### Frequency converter

Built in frequency converter to perfectly match the varying air demand and supply



#### **Pressure band**

Regulates pressure within 0.1 bar



#### **Constant power factor**

Machine maintains high power factor even with reduced loads



#### **Environment friendly**

Reduced carbon-di-oxide emissions in turn saving environment



#### 100% factory tested

Factory tested machines at critical speed to minimize vibration / resonance risk



#### **Electromagnetic compatibility**

No interference to near by equipments



#### **Smart controller**

Advanced controller with fully loaded features



#### No unloading power

Eliminates unloading power to almost 0% ensuring energy savings



#### **Profitable investment**

Saves upto 30% power ensuring early payback and (long run power saving)



#### Silent running

Very low noise level ensuring machine can be kept close to the point of use



#### Soft startup

Ensures no current peaks extending life of parts

# Smart Swipe and Touch controllers



#### Next generation controllers for easy access.

Advanced new generation controller with latest features to suit all your needs.

Chicago Pneumatic offers range of control and monitoring systems for all compressed air products. The next generation ES 4000 Swipe and Touch controller systems offers a great variety of control & monitoring features that allow you to increase your compressor's efficiency and reliability.

# To maximize energy efficiency the controller has following features:

- · Latest icon based controller
- Ideal for load / unload compressors
- · Improved controller algorithm
- · Continuous pressure follow up algorithm
- · Auto restart after voltage failure

- Always restart (when activated)
- · Loaded with communication ports
- · Ethernet connection
- CAN connection
- I/O expansion connection with RS 485 MODBUS Port

#### Dual pressure band

Multiple pressure bands can be switched using either of the following:

- Manually
- By timer
- By external DCS systems

By reducing the system pressure energy is instantly saved, a drop of 1 bar or 14.5 psi saves a total of 7% when leakage losses are taken into account.



### Optional DCS connectivity



Connect & monitor the compressor from your control centre. Inbuilt RS 485 port facilitates DCS connectivity to your control centre.



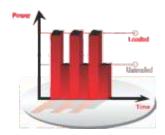
#### Online Monitoring

Monitor your compressor over ethernet with the new controller. Monitoring features include warning indication, compressor shutdown & many more...

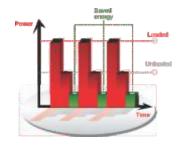


#### **Delayed Second Stop**

- Most production processes create fluctuating levels of demand which, in turn, can create energy waste in low use periods.
- New Controller is more efficient it keeps track of the time since the last stop occurred (Intelligent Unload Cycles)
- The result is that the machine can simply stop rather than unload, eliminating several minutes of unloaded running.



- Controller unloads rather than stops the machine if the pressure is dropping fast.
- Controller can predict the time until the minimum pressure limit is reached once the machine has stopped.
- Compressor restarts soon enough to ensure that the system pressure never drops below the desired minimum.

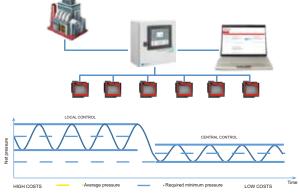


#### Optional Multiple compressor control

Can synchronize upto 6 compressors including other brands under a simple license. Inverter driven compressors can either be a master or slave.

- · Control different compressors over CAN network
- 4/6 compressors sequencer with the use of simple licence
- All Competitors machines over Can-Box
- Built-in sequencer for 4 (1 IVR) or 6 compressors (IVR)





### ICONS - Intelligent Connectivity System

With ICONS, there is no need for service logbooks or even regular visits to the compressor room.

A mouse click is all it takes to consult the service status of your compressor online.

A link takes you directly to your compressor supplier for a service quote request.

It's fast and easy, and it's always there when you need it.





# Eliminate water, oil & dirt from your air system for efficient productivity



Today, process equipments are extremely sophisticated which require compressed air free from impurities like moisture, oil, dust etc.

Thanks to the reliable and efficient quality air solution products from Chicago Pneumatic customers are rest assured about the quality of air delivered at the point of application.

#### Online filters

Reliable filtration for superior system protection from dirt, oil and moisture.

**G Series:** Pre filter with micron rating 0.1, maximum oil carry over 0.1 mg/m³

**C Series:** After filter with micron rating 0.01, maximum oil carry over 0.008 mg/m³

V Series: Carbon activated filter with micron rating 0.005





#### Refrigerated dryer

- 1. Environment friendly gases R513A, R410A, R452A
- 2.quality dry air for cost effective compressed air system
- 3.Guaranteed constant PDP of +3°
- 4. Wide range from 10 CFM- 3500 CFM

# **Technical Specification**

# Powerful, compact and easy to maintain

Model	HP	Pressure (BAR G)			CFM →(III)→				dB(A) √W√	End Connection -⊄₽D-	Weight (KG)	
CPC 40	40					204	187	170	142			865
CPC 50	50	7	8.5	10	13	240	223	206	170	73	1 ½"	865
CPC 60	60					290	265	248	214			895



**CPC** | FM | 1680 X 975 X 1505



CPD | FM | 1850 X 1060 X 1635

## Reliable top performer

Model	HP	Pressure (BAR G)					CFM <b>→</b> llli <b>→</b>			dB(A) ∿W√	End Connection <b>-</b> ⊄ <b>:</b> D <b>-</b>	Weight (KG)
CPD 75	75	7	8.5	0.5 40		356	398	305	265	75	2"	1165
CPD 100	100	,	0.5	10   13	462	437	398	345	1195			

# Maximise your productivity

Model	HP	Pressure (BAR G)						=M II <b>I→</b>		dB(A) ∿W	End Connection -⊄⊒D-	Weight (KG)
CPE 100	100	7	-	10	13	517	-	429	362	75	2"	1840
CPE 120	120	7	-	10	13	593	-	502	407	75	2	1040
CPE 121*	120	7	8	10	13	625	598	513	424	77	G 2	3240



**CPE** | FM | 2210 X 1060 X 1595

## Save your energy cost



			<b>→</b>	<b>→</b>	WW.	T. C.	Î			
Model	HP		Capaci	ty CFM	dB(A)	End	Weight	LXWXH		
	1115	7 Bar	8 Bar	10 Bar	13 Bar	ub(A)	Connection	(KG)	mm	
CPVS 40	40	82 - 199	82 - 181	82 - 181	67 - 144	73	1 ½"	885		
CPVS 50	50	101 - 238	101 - 221	101 - 121	82 - 165	73	1 ½"	905	1680 X 955 X 1505	
CPVS 60	60	122 - 288	122 - 266	122 - 266	102 - 208	75	2"	935		
CPVS 75	75	145 - 350	144 - 328	144 - 328	121 - 255	75	2"	1230	1850 X 1060 X 1635	
CPVS 100	100	187 - 506	160 - 441	157 - 438	126 - 368	75	2"	1640	2260 V 4060 V 4505	
CPVS 120	120	197 - 565	191 - 564	151 - 503	151 - 411	75	2"	1650	2260 X 1060 X 1595	
CPVS 121*	120	187 - 625	197 - 598	154 - 513	127 - 424	77	G 2	3240	2845 X 1750 X 1960	

- Note: 1. Unit performance measured as per ISO 1217: Ann E- Ed.4 2009
  - 2. Noise level measured according to ISO2151 / Pneurop / CAGI PN8NTC2.
  - 3. Dimensions in mm (L x W x H).
  - 4. \*Import option

### Maintenance and installation guidelines

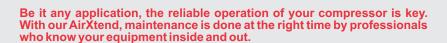
Dimensions in mm (L x W x H).



- Compressor
- 2 Earthing
- 3 SFU (Switch Fusing Unit)
- Copper cable
- 5 Exhaust dust
- 6 Floor leveling
- **7** Moisture separator
- 8 Exhaust fan
- 9 Air receiver
- 10 Safety valve
- 11 Pressure gauge
- 12 Pre-filter
- 13 Dryer
- 14 After Filter
- 15 By pass valve
- 16 AIR net piping

### AirXtend

Have complete peace of mind with AirXtend, our extended warranty plan on Screw Element





Have a complete peace of mind with AirXtend, our extended warranty plan on Screw element.



Using original parts and lubricants will uphold your system's energy efficiency and prevent pressure drop as all consumables are replaced on time using genuine parts.



High uptime and energy efficiency reduce the operating cost of your compressor. In addition, AirXtend gives you maximum control over your budget.



We give you top priority and support in case of urgent repair, after all you are an Extended Warranty + customer.



No unnecessary spending.



We order original parts in advance to avoid piling up of the inventory.





- \*Local models only
- \*For more details contact service representative

To know more visit us at www.cp.com/en-in/Compressors







We value your feedbacks and endeavour to continuously improve our products and services.

Service ahead of time.
Original parts, Your quality assurance.

# We serve many industries...







Since 1901, the Chicago Pneumatic name has represented reliability and attention to customer needs, with tools and compressors designed for specific industrial applications. Today, Chicago Pneumatic has a global reach, with local distributors around the world.

Our people start every single day with a passion to research, develop, manufacture and deliver new products that are meant to meet your needs not only today, but tomorrow as well.

To learn more, visit www.cp.com.

#### **Chicago Pneumatic: Full Offer, Global Presence**













**CPVS** 

**WIS AIR** 

Spiral AIR

**PPNGs** 

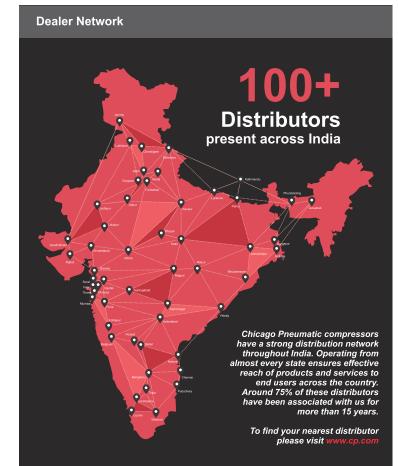
Chicago Pneumatic Compressors Sveanagar, Mumbai-Pune Highway, Dapodi, Pune - 411012, Maharashtra, India.



Design Manufacturing, Sales and Service of Air Compressors, Air Dryers and Air Filters



ISO 9001. ISO 14001 **OHSAS 18001** Forms an integral part of each business process of Chicago Pneumatic Compressors



Regional Customer Centers							
West	Mumbai						
North	North Gurgaon						
East	Kolkata						
Central	Hyderabad						
South	South Bengaluru						
Area offices: Ahmedabad, Baroda, Chandigarh, Chennai, Pune							

Resident offices: Coimbatore, Erode, Kochi, Jaipur, Raipur, Vizag

#### Powered by a strong aftermarket support at your doorstep





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