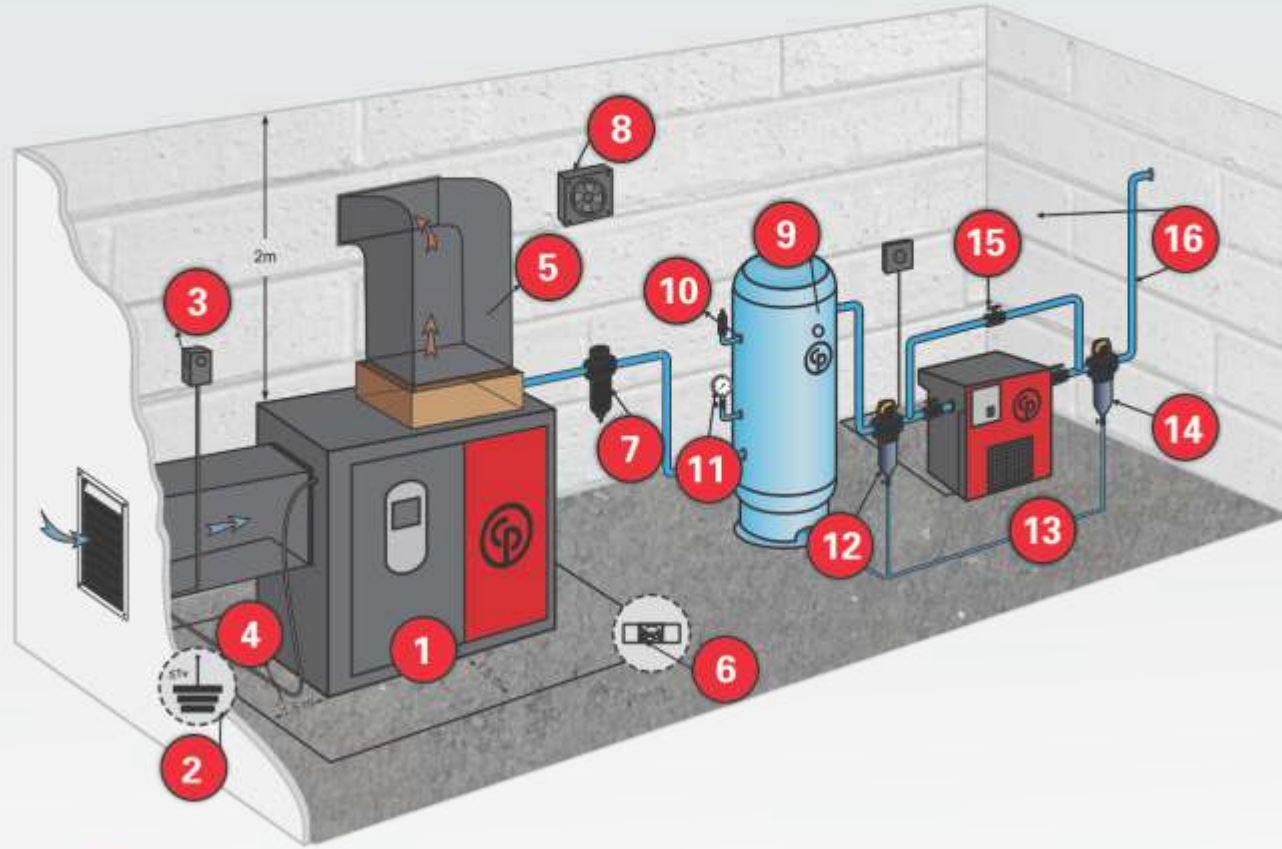


Maintenance and Installation Guidelines



- | | | |
|----------------------------|----------------------|--------------------|
| 1 Compressor | 6 Floor leveling | 12 Pre-filter |
| 2 Earthing | 7 Moisture separator | 13 Dryer |
| 3 SFU (switch fusing unit) | 8 Exhaust fan | 14 After Filter |
| 4 Copper cable | 9 Air receiver | 15 By pass valve |
| 5 Exhaust dust | 10 Safety valve | 16 Air Net Pipings |
| | 11 Pressure gauge | |

- Use Chicago Pneumatic Genuine parts only.
- Use service kits as per the service schedule.
- Compressor service should be carried out by trained professionals only.
- Use of Safety PPE during maintenance schedule is a must.
- LMRA and use of LOTO during maintenance schedule is mandatory.
- Hazardous waste disposal to be regulated through authorised agency only.



Chicago Pneumatic: full offer, global presence



Chicago Pneumatic Compressor
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Design, Manufacture, Sales and Service of air compressors, Air dryers and air filters



Chicago Pneumatic's Environmental Management System forms an integral part of each business process.



ISO 14001 EMS forms integral part of each business process.

Regional Customer Centres

BRANCH	ADDRESS	SALES ☎	SERVICE ☎	EMAIL
WEST	Rushabh, II Floor, Near American Heart Institute, Ghodbunder Road, Thane (W) 400601	93241 74565	93256 36552	sales.west@cp.com service.west@cp.com
NORTH	Unitech Business Park, Tower - A, First Floor, Block - F, Sector -41, South City -I, Gurgaon - 122001	93124 06866	93124 17744	sales.north@cp.com service.north@cp.com
EAST	Trinity Plaza, 2nd Floor, East Wing, 84/1A, Topsia Road, (South) Kolkata 700 046	93322 90559	93322 91224	sales.east@cp.com service.east@cp.com
CENTRAL	4th Floor, Block A, Amsri Shamira Building, Old Lancer Lines, Secunderabad 500 025	93900 38582	93924 06641	sales.central@cp.com service.central@cp.com
SOUTH	No.1-A, Kushal Garden, Peenya Industrial Area, Peenya 2nd Phase, Bangalore - 560 058	93677 87070	93421 44450	sales.south@cp.com service.south@cp.com

Area offices : Ahmedabad, Baroda, Chandigarh, Chennai, Pune
Resident Offices : Coimbatore, Erode, Kochi, Jaipur, Raipur, Vizag

Dealer Representation at :

Ahmedabad • Aurangabad • Bangalore • Baroda • Bhubaneswar • Belgaum • Bellari
Bhopal • Chandigarh • Chennai • Cochin • Coimbatore • Dehradun • Delhi • Durgapur
Faridabad • Gandhidham • Gurgaon • Guwahati • Hospet • Hyderabad • Indore • Jaipur
Jammu • Jamshedpur • Jodhpur • Kanpur • Karimnagar • Kathmandu • Katni • Kolhapur
Kolkata • Lucknow • Ludhiana • Madurai • Mumbai • Nagpur • Nashik • Nellore • Noida
Patna • Phuntsholing • Puduchery • Pune • Raipur • Rajkot • Silvassa • Surat
Thane • Tirupur • Udaipur • Vaizag • Vapi

Toll Free No : 1800 200 0040

www.cp.com

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Chicago Pneumatic

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CPC
CPD
CPE

People. Passion. Performance



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

People. Passion. Performance.

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

"The Standard in the industry"

GEAR DRIVEN



CPC/CPD

Noise level	Silent: 73-75 dB(A)
Capacity	142-462 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 standard controller

Continuing the innovation in product development Chicago Pneumatic is introducing new addition into the product family. With vast experience in rotary screw compressor, 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.

"Maximum productivity"

GEAR DRIVEN



CPE

Noise level	Silent: 75 dB(A)
Capacity	362-570 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 standard controller

"Top value through energy efficiency"

INVERTER DRIVEN



CPVS

Noise level	Silent: 73-75 dB(A)
Capacity	67-505 cfm
Power	40-100 hp
Pressure	5-13 bar

User benefits

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



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.

Premium performance



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



1

Air end

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



2

Motor

High efficiency motor designed to suit Indian conditions



10

Filtration baffle

Highly efficient filtration baffle to protect dust entry



9

Unloader

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



8

Control Panel

Reputed make electrical components ensuring safety and optimal efficiency and reliability



7

Cooling fan

Low RPM cooling fan for minimum operating cost and quiet operation



6

Air/oil separator

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



5

Air inlet filter

High efficient paper filter for improved efficiency



4

Coolers

Optimized cooler design to ensure lower operating temperature



3

Smart controller

Advance control system with user friendly interface

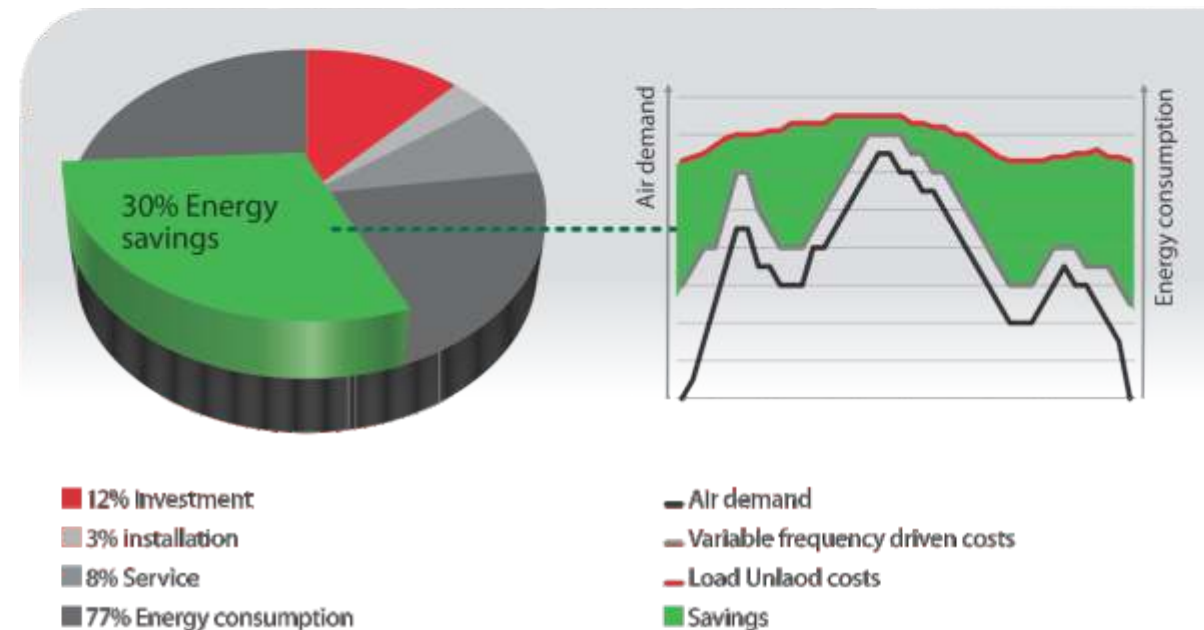
Reliable compressed air solution for varying load demands.

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 up to 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

Electromagnetic compatibility

No interference to near by equipments

Constant power factor

Machine maintains high power factor even with reduced loads

Profitable investment

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



Frequency converter

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

Smart controller

Advanced controller with fully loaded features

Pressure band

Regulates pressure within 0.1 bar

Soft startup

Ensures no current peaks extending life of parts

No unloading power

Eliminates unloading power to almost 0% ensuring energy savings

Environment friendly

Reduced carbon-di-oxide emissions in turn saving environment

Silent running

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

100% factory tested

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



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 standard and advance controller system 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

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 9.6% 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.



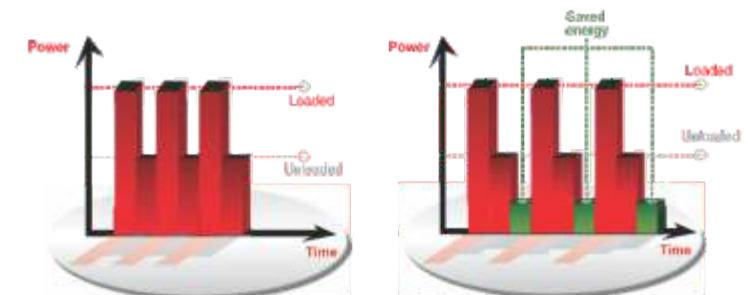
Online Monitoring

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)





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 over0.1

C Series - After filter with micron rating 0.01, maximum oil carry over 0.008

V Series - Carbon activated filter with micron rating 0.005

S Series - Particulate filters for dust protection.(MPPS = 0.1 micron)



CPX dryers (Refrigerated)







Environment friendly, quality dry air from refrigerated dryers for cost effective compressed air system. CPX range of dryers assures constant PDP of +3°at full load.

Technical Data - Gear Driven

								
Model	in bar G	HP	kW	CFM	Noise dB (A)	End Connection	Weight in kg.	L W H in m.m.
CPC 40	7	40	30	204	73	G 1 1/2"	865	1680 x 951 x 1503
	8.5			187				
	10			170				
	13			142				
CPC 50	7	50	37	240	73	G 1 1/2"	875	1680 x 951 x 1503
	8.5			223				
	10			206				
	13			170				
CPC 60	7	60	45	288	74	G 1 1/2"	895	1680 x 951 x 1503
	8.5			265				
	10			246				
	13			214				
CPD 75	7	75	55	356	75	G 2"	1162	1850 x 1060 x 1630
	8.5			329				
	10			305				
	13			263				
CPD 100	7	100	75	462	75	G 2"	1192	1850 x 1060 x 1630
	8.5			437				
	10			392				
	13			341				
CPE 100	7	100	75	517	75	G 2"	1640	2210 x 1060 x1594
	10			429				
	13			362				
CPE 120	7	120	90	570	75	G 2"	1670	2210 x 1060 x1594
	10			498				
	13			423				

Technical Data - Inverter Driven

							
Model	Max Operating pr	Min	Max	Noise dB (A)	End Connection	Weight in kg.	L W H in m.m.
CPVS 40 -10	5	83	198	73	G 1 1/2"	885	1680 x 951 x 1503
	7	82	199				
	8	82	181				
	10	81	165				
CPVS 40 -13	7	69	167	73	G 1 1/2"	885	1680 x 951 x 1503
	8	68	167				
	10	68	160				
	13	67	144				
CPVS 50-10	5	102	239	73	G 1 1/2"	905	1680 x 951 x 1503
	7	101	238				
	8	101	221				
	10	100	201				
CPVS 50-13	7	84	208	73	G 1 1/2"	905	1680 x 951 x 1503
	8	83	208				
	10	83	197				
	13	82	165				
CPVS 60-10	5	123	283	73	G 1 1/2"	935	1680 x 951 x 1503
	7	122	282				
	8	122	266				
	10	122	237				
CPVS60-13	7	104	244	73	G 1 1/2"	935	1680 x 951 x 1503
	8	104	244				
	10	103	231				
	13	102	208				
CPVS 75-10	5	145	351	75	G 2"	1115	1850x1060x1630
	7	144	350				
	8	144	328				
	10	143	255				
CPVS 75-13	7	124	307	75	G 2"	1115	1850x1060x1630
	8	123	306				
	10	123	276				
	13	121	255				
CPVS 100-7	5	190	508	75	G 2"	1640	2210x1060x1594
	6	189	507				
	7	187	505				
CPVS 100-10	5	163	444	75	G 2"	1640	2210x1060x1594
	7	161	442				
	8	160	440				
	10	157	438				
CPVS 100-13	7	134	376	75	G 2"	1640	2210x1060x1594
	8	133	375				
	10	130	372				
	13	126	368				

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

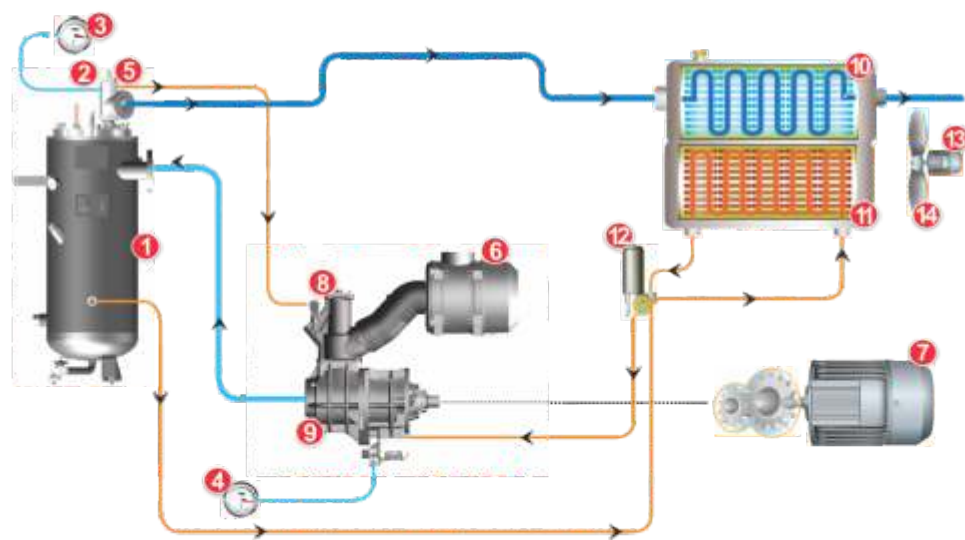
After Cooler
- 11

Oil cooler
- 12

Thermostatic valve
- 13

Fan motor
- 14

Fan



Note : 1. Unit performance measured according to Iso 1217 Ed 3 Annex C. 1996.
2. Noise level measured according to ISO2151 / Pneurop / CAGI PN8NTC2.