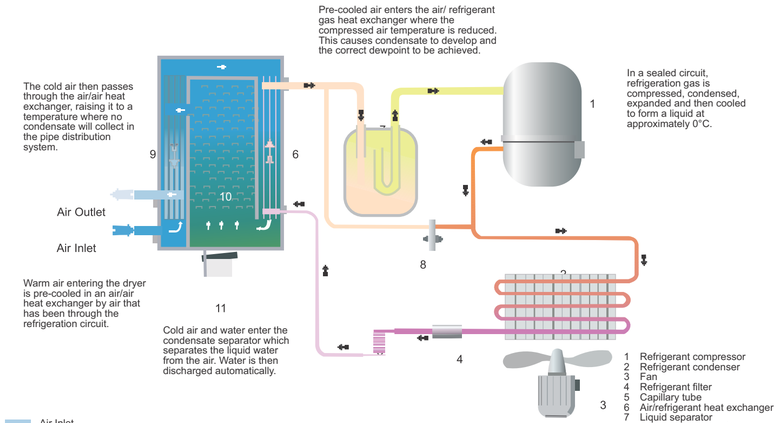
The Chicago Pneumatic solution for moisture free air : CPX dryer range

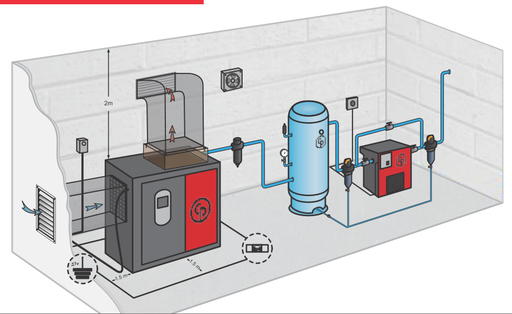
For many companies in today's competitive global market, the treatment of compressed air is not an option, but a necessity to reduce operating costs and increase production efficiency.

Being an efficient and simple technology, refrigeration dryers represent the preferred solution for the majority of these applications.

The Chicago Pneumatic CPX dryers have been developed to supply dry compressed air for your production process, with a minimum power requirement and low pressure drop for optimum efficiency



Ideal Installation



The unique, light and compact design makes handling the dryer easy. The installation of the CPX dryer is simple and requires no special equipment or foundation work.

To ensure operational reliability of the CPX dryer range, it is recommended to install a Chicago Pneumatic pre-filter upstream of the dryer and a high efficiency oil removal filter downstream of the dryer to protect the air system against particle and oil contamination.

Chicago Pneumatic: full offer, global presence

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Pune - 411012 Maharashtra, India
✆: + (91) 93 7191 9200 / 93 7106 0896

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

ISO 9001
Chicago Pneumatic's Environmental Management System forms an integral part of each business process.

ISO 14001
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

1915 2015 100 YEARS

CPX

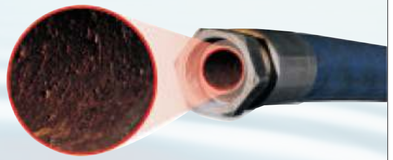
People. Passion. Performance.

Compressed air water contamination

Atmospheric air contains water in vapour form in different volumes according to the ambient conditions. Under compression, this water is drawn in along with the air. After compression, the air and water are then discharged to the distribution system, with some of the water content normally being removed by a compressed air after-cooler and then discharged.

However, a large proportion of the water vapour content remains in the compressed air, moving in the pipe distribution system as the air is consumed.

As time passes, the condensate can cause serious damage to pipes and applications, resulting in production downtime and higher maintenance costs. During processes, where compressed air comes into contact with the final product, it can even damage the product itself.



Compressed air may undergo further cooling in the piping, as a result of the ambient temperature and/or due to expansion, resulting in liquid water lying in the pipe distribution system, receivers and pneumatic equipment.

Water contamination risks

CPX dryers are machines designed for treating compressed air.

By using the refrigerant characteristics of certain fluids, these dryers lower the temperature of the compressed air, causing water vapour to condense and discharge prior to it entering any distribution system.

Compressed air water contamination

- **Corrosion in the network:**
  Increasing pressure drop due to the deterioration of the air network with increasing pipe scale and rust. Damage to joints will cause air leaks, significantly increasing the cost of air production.
- **Malfunction of the pneumatic equipment:**
  Malfunction of equipment and instrumentation, reduction of component life, increase in production losses and manufacturing costs.
- **Product contamination:**
  The efficiency of the production process can reduce product spoilage caused by product contamination: fitting moisture separators improves air quality. During spray painting, condensate causes imperfections on the finished product creating future corrosion areas. In pharmaceutical and electronic applications, condensate product contamination can be harmful and/or extremely expensive.

Automatic discharge of condensate

All models are equipped with a smart condensate drain. Carefully sized for each model, it assures exceptional reliability and efficiency in discharging water, without compressed air. In case of malfunction, an alarm signal is displayed

- It discharges only water, NOT compressed air.
- Silent operation; no noise pollution.

Options for CPX 10 up to CPX 60

In case of dryer non-operation, a manual bypass allows a continued compressed air supply while maintaining air filtration.
Filters are not included in the option.

Allows two filters to be installed on the rear side of the dryer, reducing overall dimensions and installation costs.

Environment friendly

Manufacturing machines with a low environmental impact is one of our primary goals. Our CPX series dryers achieves results that were not possible just a few years ago.

- No compressed air wasted when condensate is discharged.
- Silent condensate discharge operation.
- Environment friendly R134a and R404A gas.
- No impact on the ozone.
- High energy savings due to low pressure drop throughout the system.
- Cleaner compressed air distribution network for high quality air supply applications.

Technical data

CPX		10	20	30	40	60	80	100	125	150	180	225	270	350	425	530	700	850	1000	1200	1700	2500
Capacity	m³/h.	21	36	51	72	110	141	180	216	246	312	390	462	600	720	900	1080	1440	1800	2100	3000	4200
	cfm	12.4	21.2	30.0	42.4	64.4	83.0	106	127	145	184	230	272	353	424	530	636	848	1060	1237	1766	2472
Nominal electrical kW power ①		0.13	0.16	0.19	0.27	0.28	0.61	0.67	0.79	0.87	1.07	1.19	1.45	1.82	2.01	2.64	3.57	3.90	4.46	5.55	6.80	10.20
Power supply voltage	V/Hz/Ph	230/50/1												400/50/3								
Max. operating pressure	bar	16					13															
Refrigerant gases		R134a					R404A															
Service connection	gas/DN	3/4"M					1"F			1"1/2F				2"F				3"F			DN25	
Weight	kg.	19	19	20	25	27	44	44	53	60	65	80	80	128	146	158	165	325	335	350	550	600

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

Correction factor for conditions differing from the project K = A x B x C

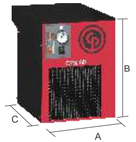
Room temperature	°C	**25**	30	35	40	45	
		1.00	0.92	0.84	0.80	0.74	(CPX 10 up to 270)
		1.00	0.91	0.81	0.72	0.62	(CPX 350 up to 2500)

Operating temperature	°C	30	**35**	40	45	50	55	
		1.24	**1.00**	0.82	0.69	0.58	0.45	(CPX 10 up to 270)
		1.00	**1.00**	0.82	0.69	0.58	0.49	(CPC 350 up to 2500)

Operation pressure	bar	5	6	**7**	8	9	10	11	12	13	14	15	16	
		0.90	0.96	**1.00**	1.03	1.06	1.08	1.10	1.12	1.13	1.15	1.16	1.17	(CPX 10 up to 270)
		0.90	0.97	**1.00**	1.03	1.05	1.07	1.09	1.11	1.12				(CPC 350 up to 2500)

The new flow rate value can be obtained by dividing the current or real flow rate by the correction factor related to the real operation conditions.

Dimensions



	A	B	C
CPX 10 to 60	350	450	500
CPX 80 to 100	370	764	500
CPX 125 to 180	460	789	560
CPX 225 to 270	580	899	590

Dimensions in mm

	A	B	C
CPX 350 to 700	735	962	898
CPX 850 to 1200	1,020	1,535	1,082
CPX 1700 to 2500	1,020	1,535	2,099

Dimensions in mm