# COMPRESSORS



## The right compressed air solution

From the smallest maintenance task to the largest truck tire service garage, Chicago Pneumatic keeps your business running just the way you want it.

Chicago Pneumatic has since decades a heart for the automotive industry: we understand the needs of maintaining and repairing vehicles. We do not only have the right powerful tools, we also develop, produce and provide the right compressed air and aftermarket solutions that meet your toughest demands as an automotive professional.

Your efficiency and productivity, our bottom line.

To get more details about the CP compressor offer in your country, please contact your closest distributor on our website:

www.cp.com



### COMPRESSORS

### The 10 things you should consider when buying a compressor



When you consider buying a compressor, the offer is wide and can appear quite complex. Here are 10 basic rules to help you finding the compressor that suits your needs.

## Determine your type of use: DIY, professional or industrial

You just occasionally fix small things at home? Or you rather need continuous air flow to keep different applications running in your factory?

Define the tools you will work with to define the total Free Air Delivery requirements (FAD). FAD is often expressed in CFM (cubic feet per meter) or I/m (liter per minute)

Blowing up your mountain bike tires requires much less air flow and pressure than working with a professional spray gun. To select the right compressor, you need to know the total CFM of all your individual air applications. Add an additional margin of 25% to cover inefficiencies in your network and future growth. FAD is the most important selection criterium.

Required CFM = (CFM tool 1 + CFM tool 2 + CFM tool n) + 25% of total CFM

## 3 Define your frequency of use: occasional - intermittent - frequent

Piston compressor technology is suitable for many occasional and intermittent users. Frequent users will benefit from cast iron piston and screw compressor technology.

Define the spacing requirements of your machine: fixed, moveable, remote device and horizontal or vertical vessel

For easy moving around your compressor, look for comfortable handles and wheels. For remote service, consider an engine driven compressor. Always on the same spot? Go for comfort vibration dampers and a wide stable base. If you have reduced workspace, consider a vertical vessel.



### 5 Define the comfort you need in terms of noise level

With a separate compressor room and an air network, there are less requirements considering the compressor noise level. If you want to position your device close to your working area, silenced compressors are ideal for you.

### Define your electrical requirements

Check if you need a 1 phase or 3 phase compressor. When you have variable flow requirements and more than 5 minutes load, consider a frequency driven compressor. Most of the time, your air consumption will not be constant, so you can gain a lot on energy efficiency.

### 7 Define your vessel size

For an average use of your selected compressor type, the standard proposed vessel size suits the needs, as compressor design is based on years of experience.

### Define the accessories you need

You have delicate air equipment or care extra about the environment, so you need special clean or dry air? Quality Air solutions like dryers and filters exist in many forms, separate or integrated if you require moisture free air.

### Check the quality label

For an optimal return on investment, look for guarantees, like ISO conformity and genuine parts so you can enjoy a long, safe and efficient lifetime of your compressor.

## 10 Check ease of maintenance, parts and service availability

Check serviceability of the device, service intervals and if easy access to genuine parts and services is garanteed.

You want to verify your choice? Our team is ready to support you with their professional advice on Chicago Pneumatic compressors.



Check out your nearest contact at www.cp.com



## **General Safety Instructions for the Operation of Power Tools**

The goal of Chicago Pneumatic is to produce tools that help the operator work safely and efficiently. The most important safety device for this or any tool is the operator. Care and good judgement are the best protection against injury. All possible hazards cannot be covered here, but we have tried to highlight some of the important ones. Individuals should look for and obey Caution, Warning and Danger Signs placed on tools, and displayed in the workplace. Operators should read and follow safety instructions packed with each tool. For a copy of these instructions, contact your nearest Chicago Pneumatic representative via www.cp.com.

Learn how each tool works. Even if you have previously used similar tools, carefully check out each tool before you use it. Get the "feel" of it and know capabilities, limitations, potential hazards, how it operates and how it stops.



#### WARNING

Multiple Hazards. Read and understand safety instructions supplied with tool before operating or servicing. Failure to do so can result in serious bodily injury.

All tools are designed to operate on a air line pressure of 6.3 bar +/- 0.15 bar in accordance with ISO2787, 8NTC1.2. Sound levels +/- 3dB(A)\* are measured in accordance with EN ISO15744. Vibration values\* are measured in accordance with ISO8662 & ISO28927

\*These declared values were obtained by laboratory type testing in accordance with the stated standards and are suitable for comparison with the declared values of other tools tested in accordance with the same standards. These declared values are not adequate for use in risk assessments and values measured in individual work places may be higher. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, the workpiece and the workstation design, as well upon the exposure time and the physical condition of the user.

We, Chicago Pneumatic, cannot be held liable for the consequences of using the declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.



### Compressed Air Hazards

- Air under pressure can cause injury. Never point an air hose at yourself or anyone else. Never blow your clothes free of dust with compressed air. Always direct exhaust air away from yourself and others in the work area.
- Always check for damaged or loose hoses and fittings before using an air tool, and replace if necessary. Whipping hoses can cause serious injury.
- Disconnect the tool from the air supply when not in use, before changing accessories, setting the torque, or when making repairs.
- . Do not exceed rated air pressure to increase the output of the tool. This could cause injury and shorten tool life.
- Do not assemble quick coupler on the tool. Vibration can cause breakage resulting in a whipping air hose. Instead, use quick couplers on the end of a short leader hose.
- · When universal twist couplings are used, lock pins must be installed to prevent accidental hose disconnection.
- · Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electric power sources.

### Projectile Hazards for all air tools

 Always wear impact resistant eye and face protection when involved with or near the operation or the repair of air tools.



### **Breathing Hazards**

 Proper breathing protection must be worn when working with materials which produce airborne particles.



### **Noise Hazards**

- Hearing loss can result from prolonged exposure to excessive sound levels.
- Use hearing protection as recommended by your employer or OSHA regulation (see 29 CFR part 1910).



### **Vibration Hazards**

- Repetitive work motions, awkward positions and exposure to vibration may be harmful to your hands and arms.
- If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician.



### **Entanglement Hazards**

 To reduce the risk of injury from entanglement, do not wear loose clothing when using rotating accessories.



### **Additional Hazards**

- Slip/Trip/Fall is a major cause of serious injury or death. Beware of excess hose/cord left on the walking or work surface.
- · Operators and maintenance personnel must be physically fit to perform job tasks, and handle the bulk, weight and power of the tool.
- · Deburring tools should be used to reduce risk of cuts and abrasions due to burrs.
- Wear gloves to protect hands from sharp edges.

