

# How to Size a Compressor



Use the chart below to get a general estimate of how much air you will need.

1. What is the maximum pressure you need?			psi
2. Electrical requirements -- Voltage			115
			230
			460
			Other:
		Single Phase	
		Three Phase (10 HP and above must be 3 phase)	
3. How many people (max) will be using air at any time:			People
4. Is this a	Body Shop:	12 - 15 cfm/man X __ people =	CFM Table see below.
	Mechanical Shop:	3 - 5 cfm/man X __ people =	CFM Table see below.
	Industrial application/other:		CFM Table see below.
	Total Cfm Required:		
*The above CFM suggestions per man are a minimum per man.			
Now add at least 25% to your total cfm required in order to allow for duty cycle.			
		Total Cfm X 1.25 =	

Air compressors should be sized based on the volume of air (CFM) and air pressure (PSI) needed to do the job and not Horse Power.

Single Stage air compressors have a maximum pressure around 130 psi, and Two Stage air compressors have a maximum air pressure of 175 psi.

Tank size typically is not a critical factor in sizing a compressor.

CFM CONSUMPTION TABLE		
	AIR PRESSURE	AIR CONSUMED
Tool/Equipment	required (psi)	(cfm)
Impact Wrench 3/8-1/2	70-90	5
Impact Wrench 1/2-3/4	70-90	10
Impact Wrench 3/4-1 3/4	70-90	20
Air Ratchet	70-90	3-5
*Body Sander (Orbital)	70-90	12
Tire Changer	125-150	2
Bead Breaker	125-150	12
Blow Gun	70-90	3
*Die Grinder	70-90	7
Screwdriver #2-6 Screw	70-90	5
Screwdriver #6-5/16 Screw	70-90	10
Paint Spray Gun (Touch Up)	70-90	4
Paint Spray Gun (HVLP)	40-60	15
Nailers/Staplers	70-90	2-4

\*Rated based on typical "on load" characteristics. Chart intended as a reference only. Actual air consumption will vary.