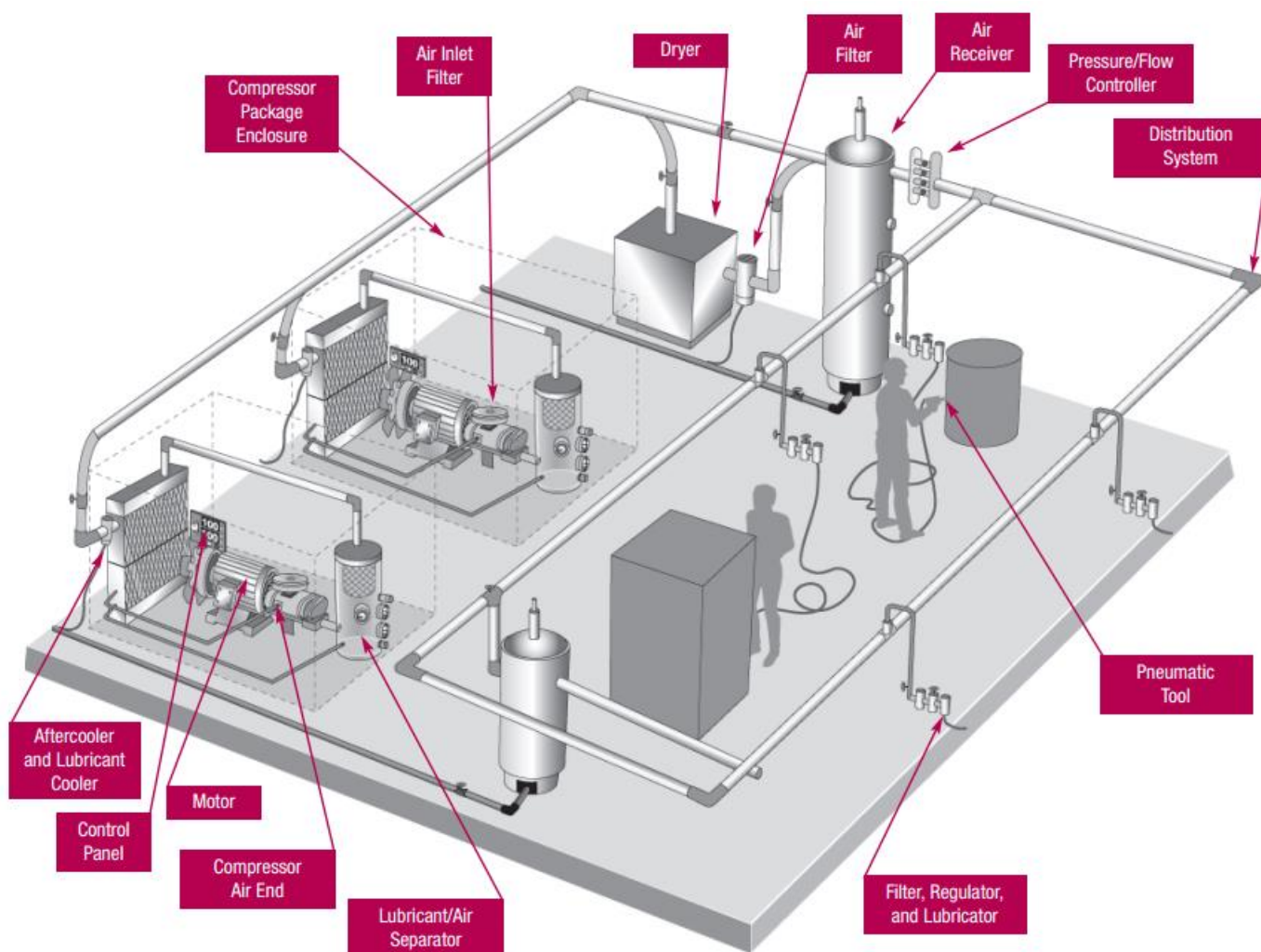


Best Practices

- 1.) Fix Air Leaks
- 2.) Reduce Compressor Discharge Pressure
- 3.) Restrict compressed air flow on weekends
- 4.) Automate compressor shut off when not needed
- 5.) Switch pneumatic tools to electronic mechanical tools
- 6.) Remove Inappropriate Uses
- 7.) Install sufficient Storage & stabilize system
- 8.) Use VFD machine for trimming
- 9.) Use no loss condensate drain
- 10.) Reduce Blow-off in centrifugal compressor



Components of a Typical Industrial Compressed Air System.

System	Things to Check	Comments
Compressor Room	<ul style="list-style-type: none"> • Opportunities with compressor controls • Opportunities with optimizing compressor discharge pressure • Heat recovery Opportunities • Opportunities with compressor sequencing (multi compressor system) 	<ul style="list-style-type: none"> • Turned off/ down compressor during weekend/ between shifts? • Automatic turnoff based on timer • Use control scheme optimized for given load • Pressure drop across the filters/ dryer acceptable? Typical 3-5 PSI • Minimize pressure drop & reduce compressor discharge pressure leads to energy savings • What is the system pressure and what is the required pressure at end use? • Energy decreases by 1% for every 2-3 PSI discharge pressure decrease • 80% of compressor energy is dissipated as heat. • Can we use this for space heating or process heating needs? • Is the VFD used on the trim compressor? • Programmable Logic Control (PLC)-based multi-compressor controls can be used to sequence based on given load.
Compressed Air System	<ul style="list-style-type: none"> • Compressed air storage • Opportunity for no loss condensate drain • Air leaks 	<ul style="list-style-type: none"> • Does the system have the necessary air storage? • Zero loss drain separate condensate(water) without air loss • Is there a program to fix leaks?
End Use	<ul style="list-style-type: none"> • Interfacing air use to process line • Opportunities with how compressed air used in the process 	<ul style="list-style-type: none"> • Turn off when no parts are present • Solenoid valves can shut off unnecessary air • Are there any unregulated end uses that could benefit from vortex nozzles or FRLs? • Are there any inappropriate uses of compressed air? Example: Personnel cooling, using air to move parts, open blowing, cabinet cooling, padding, mixing, agitation.