

# COMPRESSED AIR SYSTEM TIPS

from the Iowa Waste Reduction Center

## Construction Matters

- Compressed air systems constructed of copper or aluminum plumbing generally have fewer air leaks because of the soldered and compression joints.
- Air leaks are more common in systems constructed of threaded black or galvanized pipe - particularly in systems sealed with pipe dope only.
- Threaded pipe systems appeared to be tighter when Teflon tape was used for sealing joints.



## Most Common Air Leaks



### Quick Disconnects (QDs)

- Replace leaky QD fittings as discovered.
- Place QDs from overhead drops oriented vertically to allow the air hose to hang in a downward direction. This prevents the weight of an air hose from applying unnecessary torque on the fitting, causing the fitting to wear and leak.
- Blow gun QD fittings are notorious for air leaks. Consequently, they should be checked more frequently and replaced as needed. Employees should also be instructed to remove blow guns and other air tools from hoses when not in use.

### Spliced Air Hoses

- Replace damaged air hoses rather than splicing.

### Air Hose Crimps

- Inspect regularly.

The 2014 Compressed Air Leak Management Pilot Project was funded by an Iowa Economic Development Authority grant. IWRC conducted 25 audits at small businesses – auto body and manufacturing facilities – throughout Iowa to document energy loss and cost savings. For more information, visit [iwrc.org/services/compressed-air](http://iwrc.org/services/compressed-air).

# 2

## COMPRESSED AIR SYSTEM TIPS

from the Iowa Waste Reduction Center

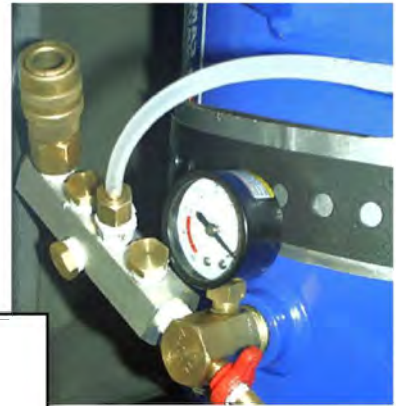


### Install Shutoff Valves

Shutoff valves should be installed on air-operated equipment that tends to leak and/or is used intermittently (example: tire mounting machines). Be sure to instruct employees to use the shutoff valves.

### Other Common Leak Sources

- QDs and QD manifolds
- Spliced hoses
- Blow guns
- Air filtration housings and fittings
- Tire machines
- Valves
- CNC machine fittings
- Air regulators
- Spray booth air switches



***Check and repair compressed air leaks often!***

The 2014 Compressed Air Leak Management Pilot Project was funded by an Iowa Economic Development Authority grant. IWRC conducted 25 audits at small businesses – auto body and manufacturing facilities – throughout Iowa to document energy loss and cost savings. For more information, visit [iwrc.uni.edu/services/compressed-air](http://iwrc.uni.edu/services/compressed-air).

**IWRC** Iowa Waste Reduction Center

**UNI** / University of Northern Iowa.  
Business & Community Services