

THE PROBLEM

More than 98% of factories using compressed air started out with a dead-end network.

Over the years, their systems have come to resemble a giant "octopus" whose growth reminds us of a monster escaping our control.

At the very least, the dead-end network they have has sacrificed air flow in order to maintain point of use pressure.

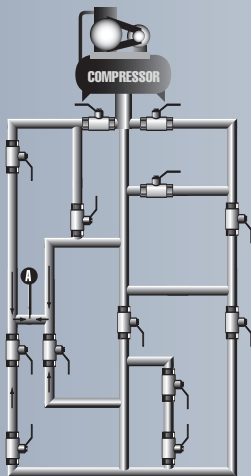
THE SOLUTION

The secret to planning an efficient, problem-free distribution network is actually quite simple. The goal is to achieve a balance between flow and pressure to maintain the ideal situation at all points of use, while providing for future expansion and remaining flexible in the face of varying compressed air needs.

How is this balance achieved ?

The best solution remains the **CLOSED LOOP NETWORK** design.

CLOSED LOOP NETWORK



The equipment located at point **A** demonstrates that the air supply flows through several lines at a time, providing balanced pressure and air flow.

A closed loop network allows the air supply to flow through several lines at a time to any given point on the network. The balance between pressure, air flow and stability of supply is ensured by using a single diameter for piping. This type of system will also easily accommodate modifications and can easily supply tools and equipment with varying supply requirements anywhere on the network.

Ball valves permit the isolation of a particular portion of the air line network to allow for easy:

- Repairs
- Connections
- Enlargements
- Periodic maintenance

The size of each loop does not need to be uniform. The important thing is to have at least two different supply routes available simultaneously for each feeder pipe descending toward a tool or piece of equipment.

This type of network is the ideal situation for compressed air distribution systems, providing the balance between flow and pressure required to provide the most efficient distribution of compressed air.

OPTIMAL NETWORK EFFICIENCY

A well-built closed loop network is therefore most often the ideal situation for the distribution of compressed air.

In addition to being easy to plan and to modify when needed, this type of distribution system becomes an immense compressed air reservoir that:

- **Offers a constant air flow at all times**
- **Guarantees a uniform pressure throughout**
- **Contributes to the life of the compressor by limiting functioning time**
- **Reduces the electrical consumption of the compressor**