

## 10 Compressed Air Saving Tips

### 1. Shut off sections and machines that you do not use

A simple manual or motorized valve can save you thousands of euros/dollars. Make sure that air is not lost through leaks or machines standing in idle mode. Flow meters help to determine to which sections air is flowing.

### 2. Breathe cool, fresh and clean air

A compressor converts 90% of its power into heat. The compressor room heats up, while a compressor uses less energy to compress cold air. 3°C cooler air, already results in 1% energy savings.

### 3. Invest in an efficient control system

Have insight in your compressed air usage profile, so you can optimize your compressor control system. Ask an air audit specialist to perform an air audit, and make an improvement plan based upon the results.

### 4. Think about the required air quality

Clean compressed air is important for the life span of your compressed air installation. Choose the right quality carefully for specific processes whenever possible, as higher air quality results in higher energy costs.

### 5. Reduce offload hours

Electricity consumption of a compressor in offload stage costs 10-35% of the consumption during load hours. At >80% use of the capacity, the offload-load control is considered efficient. Choose the right control system.

### 6. Manage your leakage

In general, there is 20-40% of leakage in a compressed air installation. VPVision can be used as a global leakage management system and helps you to rank the leaks on savings potential. Invest in an ultrasound leak detector to find the leaks.

### 7. Balance your system

Is your compressor oversized? In some applications the compressor is bigger than necessary, for instance after changes in the production process. The payback time of the investment in a smaller compressor is often short.

### 8. Reduce the pressure

Every bar pressure reduction gives an instant win of 7% on your energy consumption. Invest in pressure regulators per production area, use buffer vessels and reduce pressure swings in your network.

### 9. Think of alternative uses

Compressed air is 8 times more expensive than electric power. However compressed air is often used, simply because it is present. The VPFlowScope offers insight in the usage and helps you to select the right solution.

### 10. Choose the right pipe size and material

A proper pipe system is crucial to limit your pressure drop. Iron pipes tend to rust. Too small piping creates pressure loss. Use angular feed-ins on the main header to reduce pressure loss.

## About Ren Engineering Solutions

We are an engineering and energy services firm that provides best in class compressed air solutions that improve both productivity and reliability of manufacturing industries. We help you get peak performance and reliability from your compressed air systems through our total systems approach that ensures we identify and eliminate waste at every point in the system.

We offer industrial customers insight into their Energy Flows using compressed air flow and energy monitoring. Energy monitoring allows you to build a baseline, identify loss areas, predict savings and validate them once corrective measures are taken.

We are the official distributors of **VPIstruments** monitoring equipment in Eastern Africa. We have implemented monitoring and audit solutions for companies including Nairobi Plastics, Iber Africa, East African Breweries, BAT. Call us to find out more.