# COMPRESSED AIR ENERGY EFFICIENCY CHEAT SHEET

## HOW IS YOUR MAINTENANCE?
- Change your filters on a regular basis.
- Clean filters mean less work for the compressor and therefore less energy used.
- Regularly scheduled, properly performed maintenance reduces contamination in the air stream which can clog filters and make your compressor work harder.
- Automated drains with moisture sensors can reduce the amount of time they are open, meaning less work for the compressor.

## ARE YOU USING IT RIGHT?
- Can you use it less? If your system sits idle for long periods with the compressor working you are wasting a lot of energy and increasing your costs.
- Do you have to use compressed air for all your applications? For example, vacuum-based systems designed for that purpose may be cheaper than using your compressed air for that purpose.
- Have you established usage guidelines for your employees to educate them as to when to use your compressed air system?

## WHAT ABOUT LEAKS?
- Approximately 20% of compressed air is wasted via leaks in a typical plant. If the compressor has to work harder to produce more air due to leaks you are losing money.
- Excessive leakage can force you to buy a larger compressor than you need.
- To start, monitor and establish a baseline for leaks in your system. This helps to understand when leaks are on the rise.
- Log all leaks; this gives you a starting point for future leak detection.
- Finding leaks can be done simply with

## IS IT DESIGNED WELL?
- Piping that is too small impedes air flow and the ability to support your operation effectively.
- Piping that is too large forces the compressor to overwork to provide sufficient air for your operations. When in doubt the larger pipe is a better option.
- Is your air intake drawing in cool air? Cooler denser air at the start means less work for the compressor to compress the air as opposed to hotter thinner air.
- Is your air pressure correct? If you are operating at an air pressure beyond what you require you are wasting energy.
soap and water, but far more efficiently with leak detection equipment.

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<tr>
<th>ARE YOU USING TECHNOLOGY?</th>
<th>CONSIDER LIFE-CYCLE COSTS?</th>
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<tbody>
<tr>
<td>- The Industrial Internet of Things (IIoT) has delivered advances in compressed air monitoring capability.</td>
<td>- It is an error to think only in terms of the cost of the air compressor unit. Over the life of your <strong>compressed air system</strong> the life-cycle costs for a fixed speed compressor can be broken down as:</td>
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<td>- This advanced monitoring capability can lead to improvements in both uptime and efficiency, saving a considerable amount.</td>
<td>- 7% purchase price</td>
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<td>- 11% maintenance</td>
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<td>- 82% energy costs</td>
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<td>- A variable speed compressor will reduce the energy costs by approximately 35% to 50%.</td>
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