

**Best Practices**

- 1.) **Slow the process equipment during low production**
- 2.) **Switch off auxiliary process equipment during idle time**
- 3.) **Eliminate inappropriate uses of compressed air in machine lines**
- 4.) **Optimize control set points**
- 5.) **Waste Heat recovery**

Any recommended changes to production must involve discussion and agreement with production leaders

System	Things to Check	Comments
Production Line - General	<ul style="list-style-type: none"> <li>• Opportunities with scheduling the production line during non-production</li> <li>• Opportunities during periods of low load/ idle time</li> <li>• Opportunity with set points. (Temperature/ pressure etc.)</li> <li>• Waste Heat Recovery opportunities</li> <li>• Opportunities with system optimization</li> </ul>	<ul style="list-style-type: none"> <li>• Can the equipment be turned off during breaks?</li> <li>• Is the equipment turned off right after the end of the shift? Can the warm up time be reduced?</li> <li>• Can the equipment be slowed down when production is low?</li> <li>• Is batch production possible?</li> <li>• Is it possible to change the min/max set point requirements to save energy?</li> <li>• Is there wasted energy that can be recovered or reused?</li> <li>• What is the overall system requirement? Operate 2 pieces of equipment at 80% instead of 1 at 40%?</li> <li>• Are there any gaps in the production line that can be shortened/eliminated (where a product can lose heat)</li> </ul>
Production Line – Auxiliary Equipment	<ul style="list-style-type: none"> <li>• Opportunities with auxiliary equipment control</li> <li>• Opportunities with auxiliary equipment scheduling</li> <li>• Compressed air inappropriate use in production</li> </ul>	<ul style="list-style-type: none"> <li>• Are exhaust systems / steam supply / water supply inter-locked with production as opposed to running continuously</li> <li>• Can pumps, agitators, etc be pulsed rather than run full time? Throttling of fluid flow?</li> <li>• Heaters left on during idle time</li> <li>• Eg. Compressed air used to move parts/ personnel cooling</li> </ul>