

# Atlas Copco Compressor Technique Services



## Energy Recovery

Help protect our environment reusing wasted energy

- **80 to 93 percent of the electrical energy input for the compression process is converted into heat and lost through radiation losses**
- **A well designed energy recovery system can capture part of that wasted energy and transform it into useful energy**
- **Using the ERS1, efficiencies between 50 to 90 percent can be achieved**
- **Preheated water or air can be used in the application process to reduce the use of traditional energy sources reducing the amount of CO<sub>2</sub> emissions**

*Atlas Copco*

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### A heart for the environment

At Atlas Copco, care for the environment is part of the company culture. It is our belief that there is always a better way of doing things. Being innovative, for us, also means that we give high priority to environmental concerns in our product development.

Because Atlas Copco's products and services have an impact on the environment, it is our duty to minimize this impact, by using less damaging resources.



#### • Drive down the energy costs

Nearly 70% of all industrial processes include the use of hot water. If your process requires the use of external fuel sources, our energy recovery units can help you reduce the consumption of this fuel, providing you with a substantial reduction in costs. At the same time, you can achieve indirect process savings by reducing the maintenance costs of associated equipment. In some cases the overall efficiency of your processes can be boosted by up to 20%.

#### • A sustainable solution

By recovering wasted energy and reintroducing it in your process, you can reduce your dependency on fossil fuel combustion (coal, natural gas, petroleum derivatives) and the use of associated ancillaries (oven, furnaces, fans, ducts, burners) that produce exhaust gases. At the same time you decrease your CO<sub>2</sub> emissions, helping you to comply with increasingly stringent environmental legislation.

#### • Cost effective

By reusing wasted energy, you reduce your overall costs per produced item. All this without affecting the compressor's performance or your production quality.

In some cases, the preheated air can be used for ventilation, which leads to improvements in the overall efficiency of the compressed air system (for example by helping the regeneration of desiccant dryers). It can also improve the ambient conditions of your compressor rooms, thereby reducing the need for large investments in associated ancillaries (like fans, pumps, boilers and such).

#### • Save money and maximize your productivity

Recovered energy can be put to the good use of improving your site conditions. In dirty environments, this may mean a significant reduction of maintenance costs that are associated, among other things, with the cleaning of cooling fans and radiators, or the extended oil life due to lower oil temperatures. Another important benefit is the increased longevity of your compressed air equipment and ancillaries, which decreases the need for replacements and the associated environmental impacts thereof (energy, raw materials, etc.).

