

How energy efficiency drives demand for compressed air solutions



Atlas Copco Capital Markets Day, December 1, 2010
Adam Airosto, General Manager, Compressor Technique
Scandinavia

Sustainable Productivity




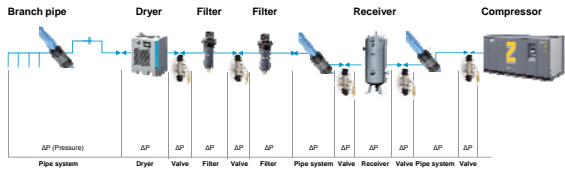
Compressed air is used almost everywhere



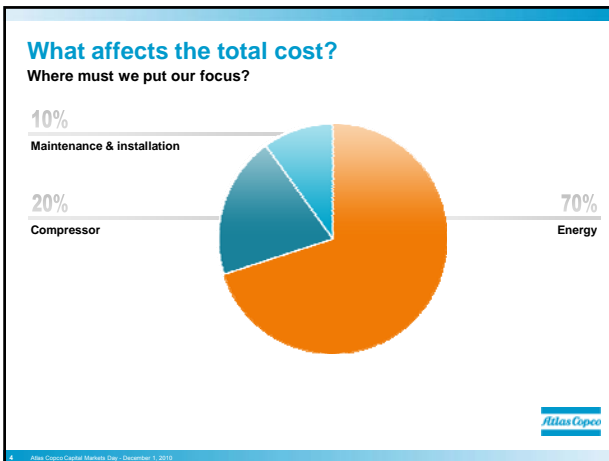
Atlas Copco Capital Markets Day - December 1, 2010

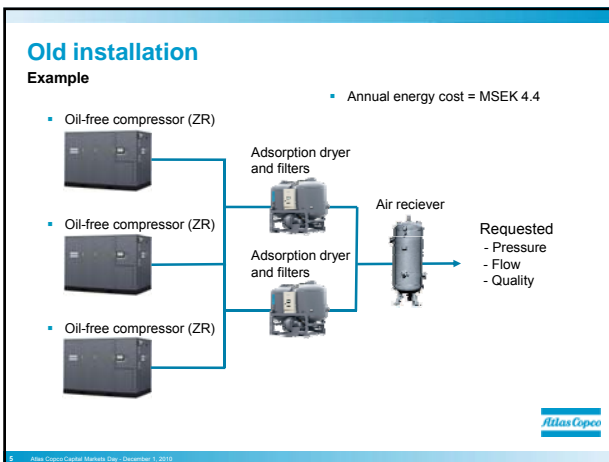
Air treatment

- Different solutions are required, based on need
- Pressure drops occur in all steps of the compressed air system



Atlas Copco Capital Markets Day - December 1, 2010



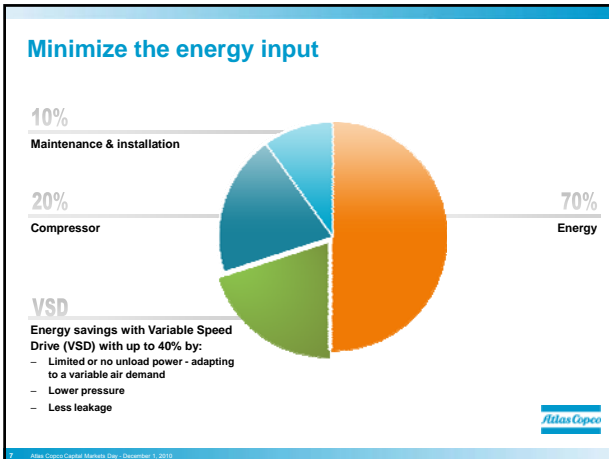


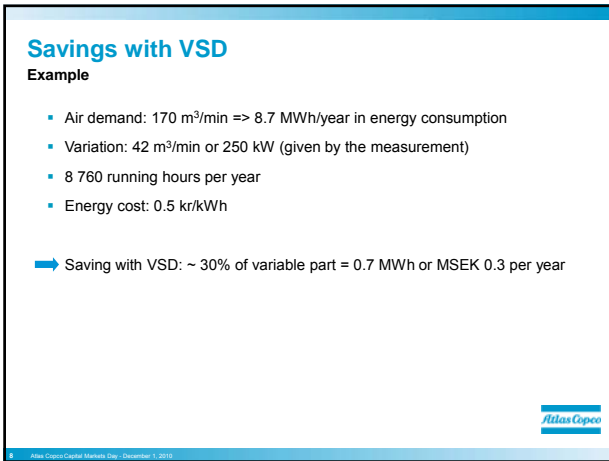
How to design a new installation?

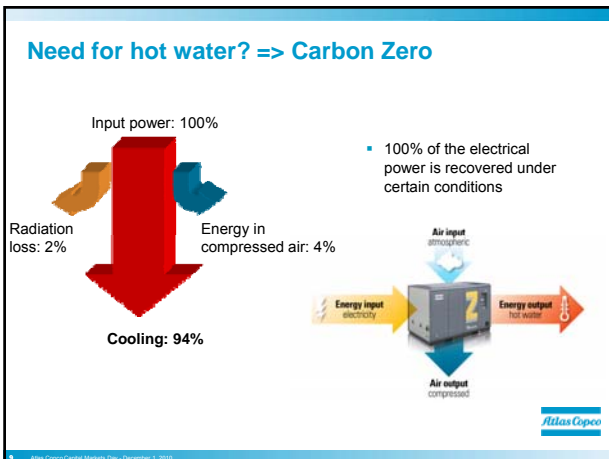
Analysis of the current situation – simulations of alternative solutions

Equipment logging	Air Scan
Measurement of Air consumption	Measurement of Air consumption Flow Power Air leakage Air quality
<p>Variation</p> <p>Base load</p>	

Atlas Copco








Savings with energy recovery

Example

- Air demand: 170 m³/min => 8 MWh/year with VSD
- Recoverable energy (ZR): 94% (100%) with a temperature up to 95°C
- Energy cost: 0.5 kr/kWh


➔ Possible yearly saving of MSEK 3.8, if there is a need for energy (hot water)



10 Atlas Copco Capital Markets Day - December 1, 2010

Conclusions – how do we minimize energy?

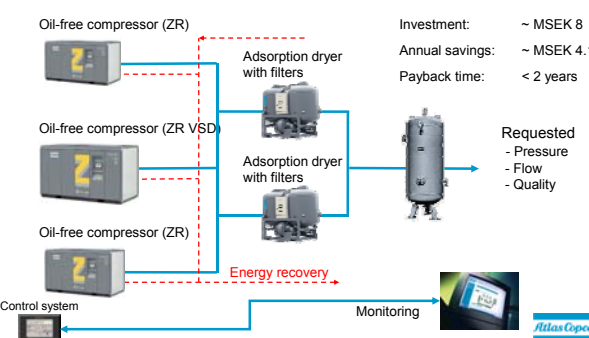
- VSD compressor in the installation
- Smart choice of dryer
- Limit the number of filters
 - Oil-free air => no oil filter
- Energy recovery
 - If there is a need for heat
- Optimize the service
 - Reduces pressure drop => energy
 - Reduces risk for break downs => more up time



11 Atlas Copco Capital Markets Day - December 1, 2010

The new installation

Example




Oil-free compressor (ZR)
Oil-free compressor (ZR VSD)
Oil-free compressor (ZR)

Adsorption dryer with filters
Adsorption dryer with filters

Investment: ~ MSEK 8
Annual savings: ~ MSEK 4.1
Payback time: < 2 years

Requested
- Pressure
- Flow
- Quality


Control system
Monitoring



12 Atlas Copco Capital Markets Day - December 1, 2010

What is important for an industrial producer?
Why choose Atlas Copco?

- Minimized production losses
 - maximize up time => highest quality possible
- Lowest compressed air cost possible
 - energy efficiency => latest innovations
- World class service
 - highly trained technicians, geographical coverage => back-up when needed
- World class support
 - problem solving when urgent => access to highly trained technical support locally
- A partner that takes responsibility
 - stable supplier => strong financial situation
- One partner
 - total solution provider
- Atlas Copco will remain First in mind – First in choice® in all areas!



13 Atlas Copco Capital Markets Day - December 1, 2010

Committed to sustainable productivity.



14 Atlas Copco Capital Markets Day - December 1, 2010