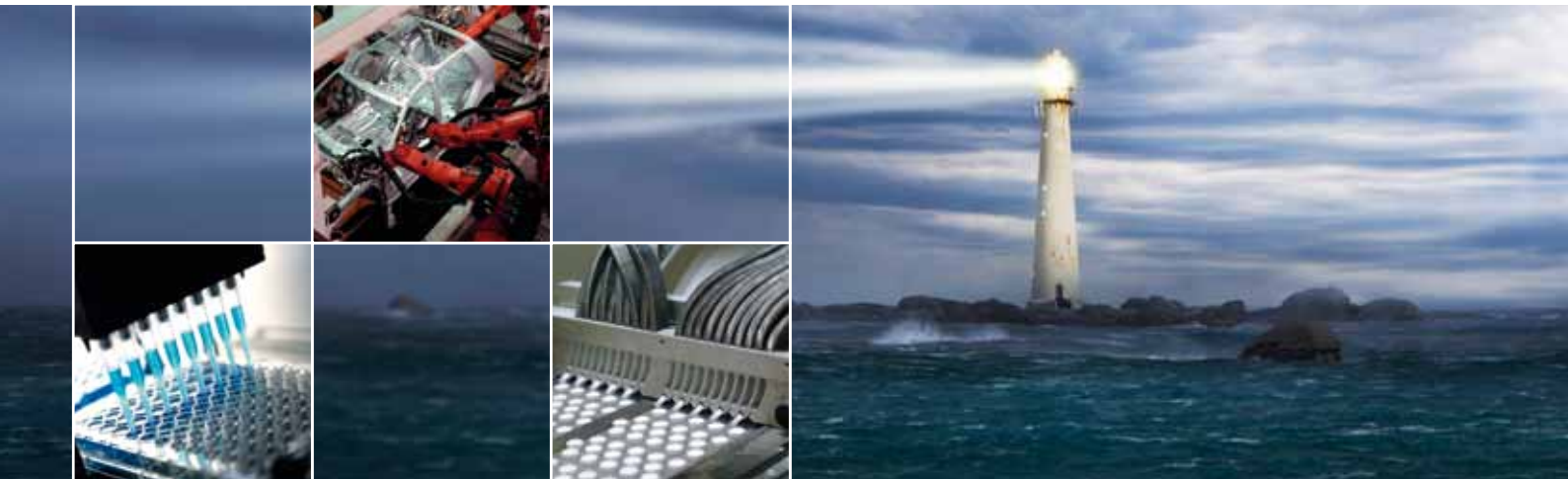


# Control Solutions

ES - The latest in control technology



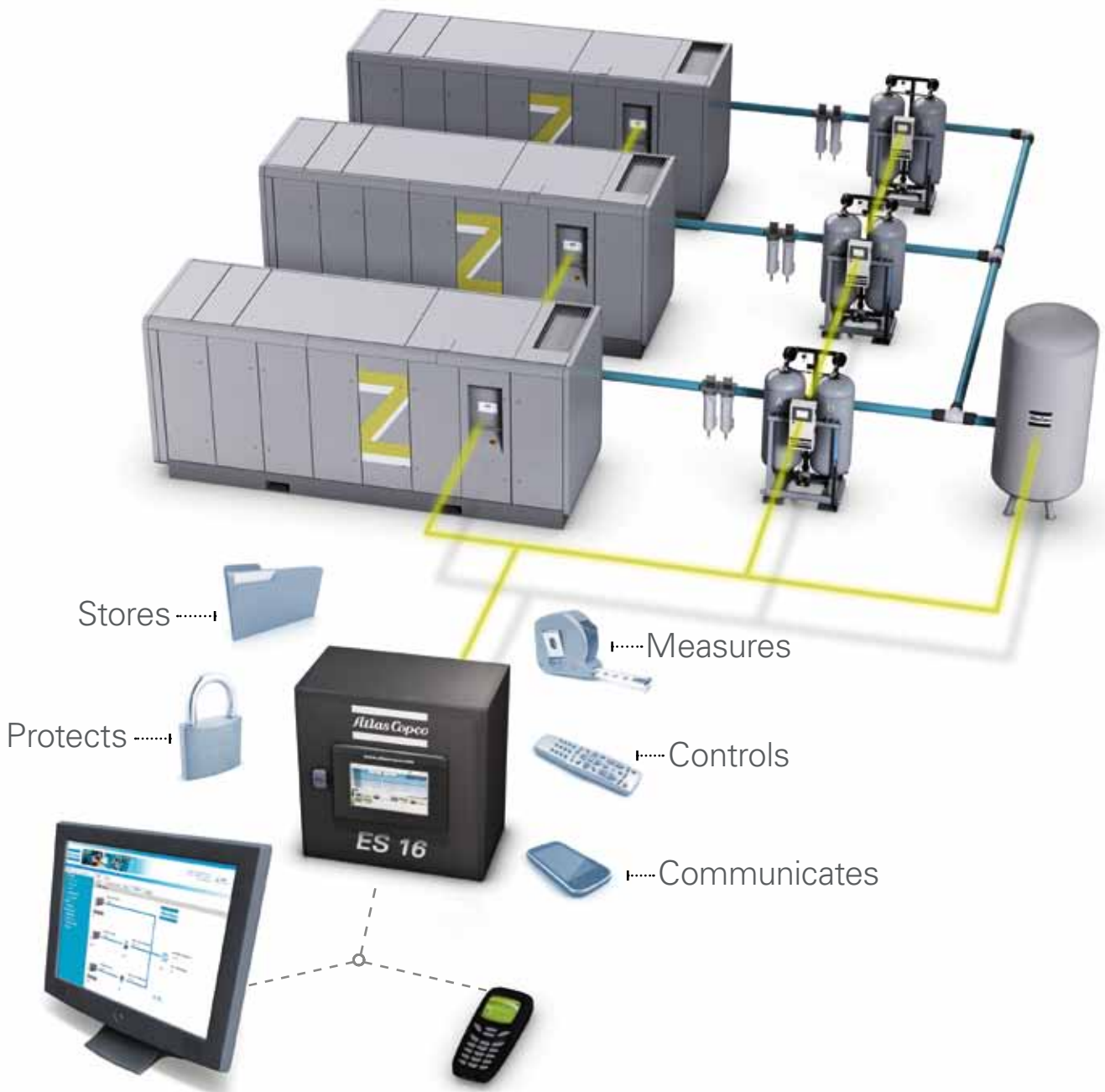
*Sustainable Productivity*

**Atlas Copco**

# Limit costs for the best return on investment

A properly managed compressed air network will save energy, reduce maintenance, decrease downtime, increase production and improve product quality. Atlas Copco's ES central controllers are the most efficient way to monitor and control multiple compressors simultaneously as well as dryers and filters.

An ES controller offers one central point of control for your whole compressed air network, ensuring all compressors provide optimum performance for your process. The result is a completely dependable and energy efficient network, giving you peace of mind and keeping your costs to a minimum.



# See how ES can benefit your network

With four customized solutions to choose from – from the integrated ES for up to four compressors to the ultimate ES for all sizes and types of machines – Atlas Copco’s range of ES central controllers allows you to get the most out of your complete compressed air installation.

## The best fit for varying demands

### Priority management

ES makes sure your most economic and efficient machines are prioritized to reduce downtime and match your workload requirements.

#### 1 Machine priority sequences



Normal priority sequence

- In the normal priority sequence, newer machines are prioritized over older, less effective models.



Temporary priority sequence

- In the temporary priority sequence, older machines can be temporarily prioritized to avoid long periods of non-usage, cutting down the risk of machine faults.



#### 2 Workload priority settings



Daytime priority settings

ES can prioritize machines in an installation to find the most economically efficient way to suit different workload demands in different periods.



Nighttime priority settings

## Variable working pressure, maximum savings

### Multiple pressure set point (centrally controlled)

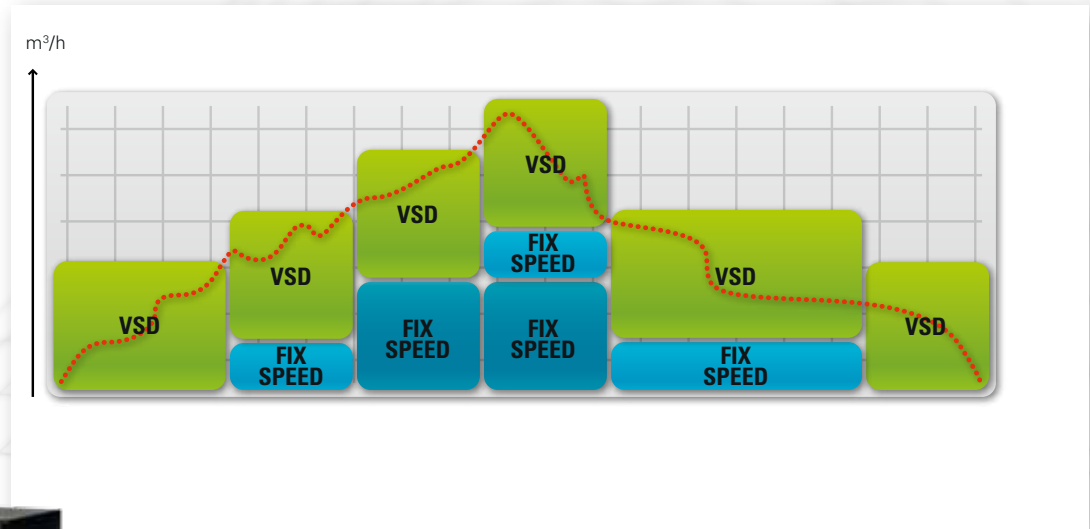
Compressed air networks that don't adapt to this fluctuating demand can waste energy. With ES you can manually or automatically create two different pressure bands to optimize energy use within different periods, avoiding costs during non-production hours.



# The most suitable product mix at all times

## Flow controlled product selection

ES automatically selects the 'best size' compressor mix according to your fluctuating demand for maximum energy savings.



## Reduced maintenance costs

### Equalizing running hours

Comprehensive and flexible machine sequence control lets installed machines work in groups, allowing running hours to be equalized. ES ensures that system running hours are equal across all machines in the same group. This reduces service costs because all machines can be serviced at the same time requiring fewer service visits.



## Increased efficiency through optimal technology combination

VSD compressors are kept in the optimum zone, close to the optimum point:

- Active VSD control - ES controls motor speed.
- ES adjusts speed of regulating VSD every half second.

Turbo compressors are kept in the optimum (turndown) zone, close to the optimum point:

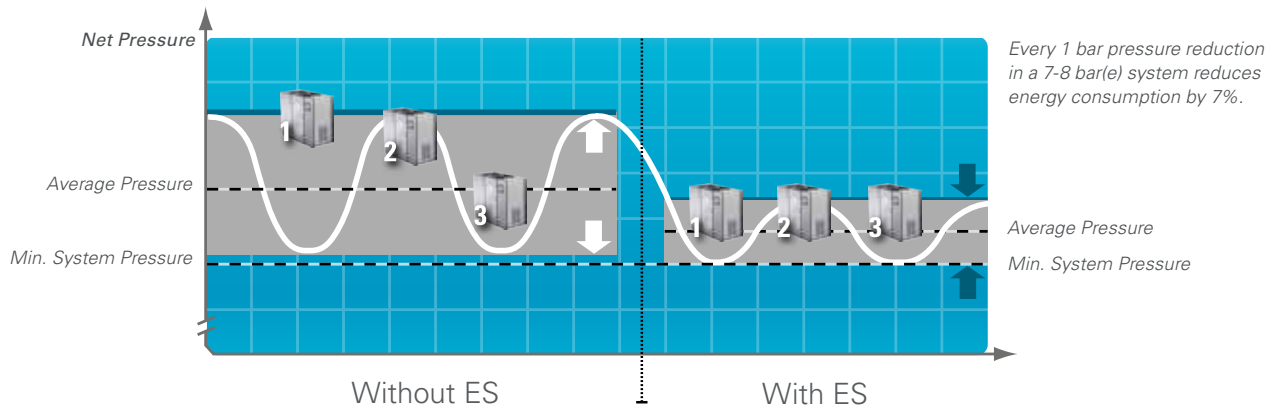
- Regulation in blow-off is minimized.



## Stable process, lower energy consumption

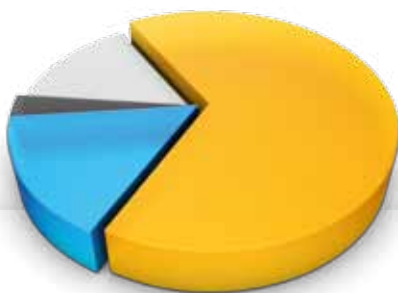
### Reduced pressure band

Without a central controller, a complete compressed air installation has to work in a pressure cascade with a large pressure band. ES central controllers keep your network running within a narrow, predefined pressure band. This increases the stability of the process and optimizes overall energy consumption.



## Maximize your savings

Energy can represent over 70% of a compressor's lifecycle cost, and energy consumption can account for more than 40% of a plant's total electricity bill. For these reasons, optimizing energy consumption is essential. ES central controllers ensure your compressed air network matches your precise needs, optimizing your energy usage and minimizing your energy costs.



### Standard compressors without ES control

- Investment
- Maintenance
- Installation
- **Energy consumption**

### ES controlled compressors

- Investment
- Maintenance
- Installation
- **Energy consumption**
- **Savings**

ES ensures the continuous usage of VSD machines, the most energy efficient machines for variable load. This ensures the overall energy usage of your network is kept to an absolute minimum.

## Continuous operation and high uptime

### Online monitoring

Thanks to ES, you can control and monitor your complete compressed air network over the LAN. Features include warning indications, compressor shutdown warning and maintenance scheduling.





### **Driven by innovation**

With more than 135 years of innovation and experience, Atlas Copco will deliver the products and services to help maximize your company's efficiency and productivity. As an industry leader, we are dedicated to offering high air quality at the lowest possible cost of ownership. Through continuous innovation, we strive to safeguard your bottom line and bring you peace of mind.



### **Building on interaction**

As part of our long-term relationship with our customers, we have accumulated extensive knowledge of a wide diversity of processes, needs and objectives. This gives us the flexibility to adapt and efficiently produce customized compressed air solutions that meet and exceed your expectations.



### **A committed business partner**

With a presence in over 170 countries, we will deliver high-quality customer service anywhere, anytime. Our highly skilled technicians are available 24/7 and are supported by an efficient logistics organization, ensuring fast delivery of genuine spare parts when you need them. We are committed to providing the best possible know-how and technology to help your company produce, grow, and succeed. With Atlas Copco you can rest assured that your superior productivity is our first concern!

