



## Compressor optimization control

To cut energy use by compressors, is it enough to control the number of compressors and to use inverter drives?

Annual energy savings

**↓52,300** USD  
(unit price: 0.16 USD/kwh)

CO<sub>2</sub> emissions reduction

**↓167** tons

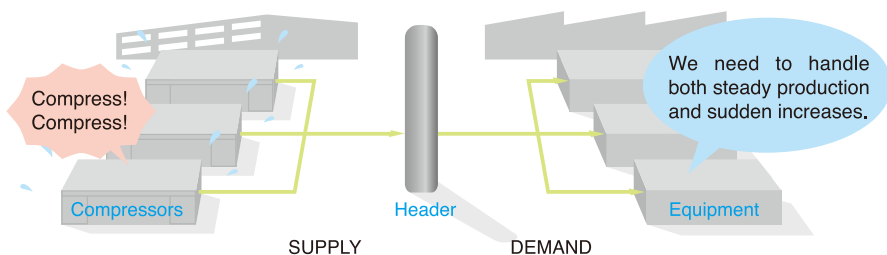
Return on investment

**↻ 2** years

\* Figures are for operation of four 150-kW compressors on weekdays (260 days x 20 hours) and one on weekends (100 days x 10 hours).



Have you had the following experience?



From the viewpoint of energy savings, there is always some waste somewhere. But I don't know where the energy is being wasted...



Usually, when the number of compressors is controlled,

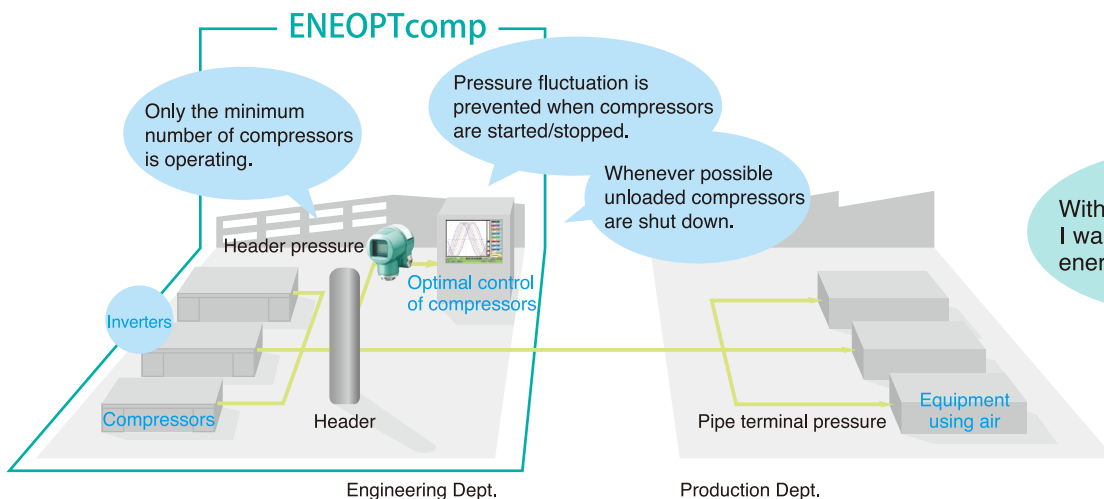
- It's a case of playing catch-up, such as when compressors are started/stopped after pressure has already reached a maximum/minimum point. → Pressure fluctuation occurs.
- It's a case of automatic starting/stopping at a scheduled time or in a predetermined order. → Not so effective if device capacity or compression methods differ

Usually these measures don't work as well as you expect.



But, when there are multiple compressors, if you optimize the number used...

**You can reduce waste by roughly 10%!**



With all this improvement, I want to know how much energy we're saving.



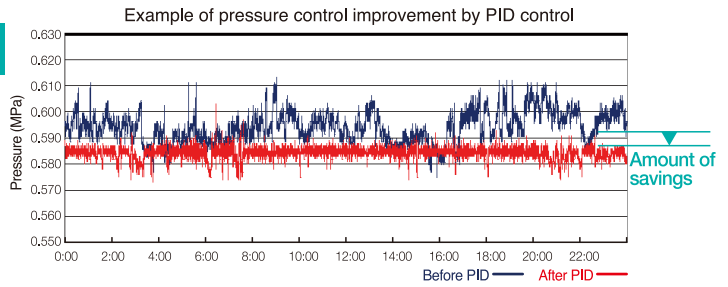


## More energy savings!

ENEOPT™comp compressor optimization control ensures supply of the right amount of compressed air for production.

### Energy savings by matching the actual load

- Reduce compressor operation due to unnecessary pressure fluctuations. Appropriate loading, unloading, and stopping of compressors.
- Use of PID control. Reduction of set pressure is possible due to an increase in pressure stability.



### Energy savings that match the production schedule

- Operation automatically matches the production schedule for weekdays, holidays, and production start time. In addition to compressor operating status (load/unload/off), settings for pressure, wait time between unloading and shutdown, etc. can also be scheduled.

### Increased efficiency by using a device with good load adjustment efficiency as the capacity controller

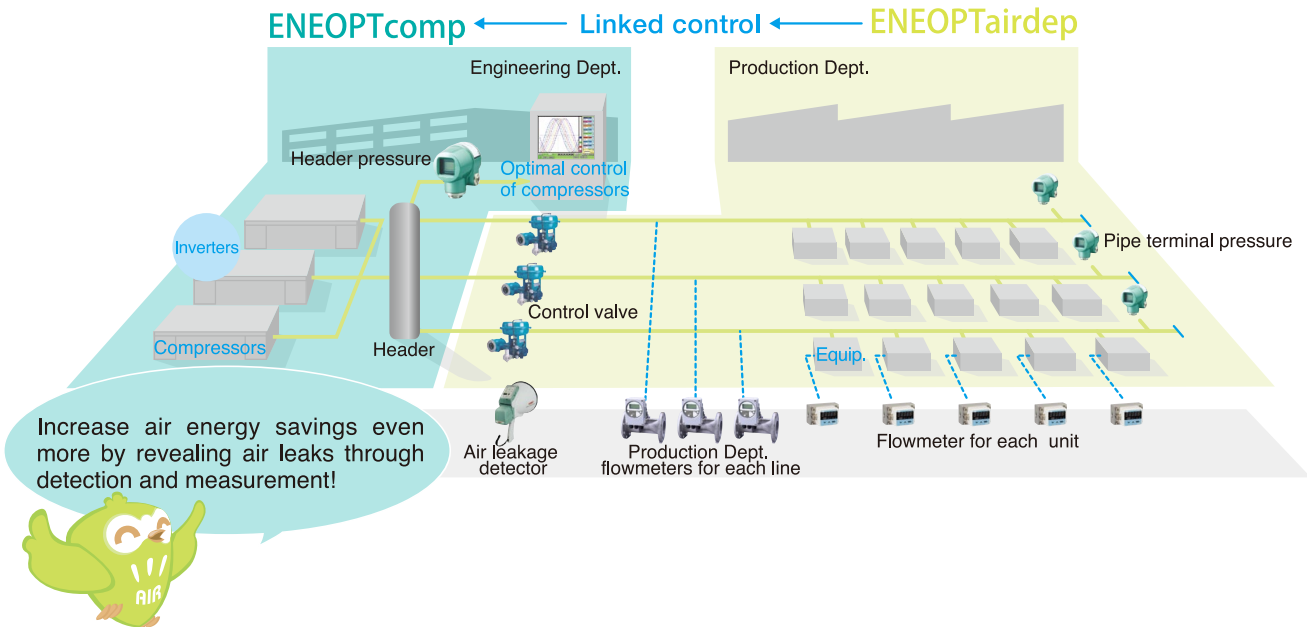
Ability to monitor power usage, CO<sub>2</sub> emissions, and air unit consumption rate to quickly determine the actual energy savings and efficiency.



## Even more energy savings!

Energy efficiency by individually supplying the necessary amount of air to each system → Control of air-pressure reduction with ENEOPTairdep

- The supply air pressure for each production line is controlled by adjusting the pressure from the air compressor.



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A wide range of diagnostic options are available as a part of the ENEOPT series of detailed diagnosis services, which includes optimal control of pumps, control of air-pressure reduction, and a regular on-site air leakage diagnostic service. Please feel free to contact us any time.

**Azbil Corporation**  
Advanced Automation Company

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1-12-2 Kawana, Fujisawa  
Kanagawa 251-8522 Japan

URL: <http://www.azbil.com/>

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