

Is there CO₂ in compressed air?

During the compression of air with a compressor, neither is CO₂ added nor removed. Hence, compressed air does contain CO₂.

Why do we need to remove CO₂?

For most compressed air applications, CO₂ isn't harmful. However, it has severe consequences on the quality of the end product for a few.

- Battery: CO₂ negatively influences the lifetime and quality of chemical raw materials used in lithium battery cells
- Air Separation: CO₂ freezes in the cold box of an air separation unit, obstructing the separation of the air gases (Nitrogen, Oxygen, and Argon), causing production losses and downtime
- **Pharmaceutical**: CO₂ contaminates instruments in the laboratory environment rendering them unable to give reliable and constant measurement results
- Electric vehicles: The EV battery production also requires dry, non-contaminated compressed air and nitro gen to manufacture Lithium-ion batteries. CO₂ removal units are deployed to remove unwanted traces of CO₂ from the compressed air

How to remove CO₂ from the air?

We offer dedicated CO₂ removal units with a proven design similar to our desiccant air dryers' design. CO₂ removal units are filled with a zeolite specifically designed to remove CO₂ below 10 ppm or 1 ppm. Our CO₂ removal units are qualified for indoor and outdoor use and are made of carbon steel or stainless steel.

Advantages of using Atlas Copco CO2 removal units

Protect your compressed air systems and processes from CO₂: Purified air protects your processes and increases your end product reliability.

Maintain the quality of your end product: Quality sustains by removing carbon dioxide from compressed air down to 10 ppm or 1 ppm and by removing moisture from compressed air below 0.5 ppm (-70°C/-70°F)

Benefit from our proven drying and purification technology: All our compressed air purifiers are designed to perform in the most energy-efficient and ecological way, contributing to a reduced carbon footprint.

Discover our CO₂ removal-related products:



ZR and ZT (VSD) oil-free rotary tooth and screw compressors



DD (+) and PD (+) oil coalescing filters



Desiccant air dryer range



DDp (+) and PDp (+) dry dust filters

