

- **What is breathing air?**

Breathing air is respiration air gained from compressed air, i.e. compressed air purified to a high degree and relieved to a low gauge pressure.

In order to produce breathing air, not only particles, water, moisture, oil and oil vapor are removed to a high degree from compressed air, but also harmful gases as carbon dioxide (CO₂), carbon monoxide (CO), nitrogen oxide (NO_x) and sulfur dioxide (SO₂) are reduced to specified residual values by respecting the requested oxygen content (O₂)

There is a differentiation between:

- **Industrial breathing air**
(normally according to EN 12021 – respiratory equipment – compressed gases for respiratory protection devices)
Specifications for water content (H₂O), lubricants (oil), carbon dioxide (CO₂), carbon monoxide (CO) and oxygen (O₂)
- **Medical breathing air**
(Pharmacopée Européenne / Pharmaceutical law)
Specifications for water content (H₂O), lubricants (oil), carbon dioxide (CO₂), carbon monoxide (CO), oxygen (O₂), nitrogen oxide (NO_x) and sulfur dioxide (SO₂)

In order to produce breathing air, the application of catalysts is necessary in addition to normal treatment processes. Catalysts are not resistant to moisture – which is why compressed air needs to be dried by an adsorption dryer first.

Breathing Air Systems

PARAMINA in cooperation with FST offers complete, integrated breathing air systems for industrial and medical breathing air.



DPS BI

Achievable breathing air quality

Industrial breathing air according to EN 12021

Maximal volume flow

8 – 1.000 m³/h

Maximal operating pressure

16 bar

Connection

G $\frac{3}{8}$ – G 2



DPS BM

Achievable breathing air quality

Medical breathing air

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