

# POWER-TO-GAS COMPRESSOR STATIONS



SYSTEM SOLUTIONS FOR THE ENERGY TRANSITION

# POWER-TO-GAS COMPRESSOR STATIONS

With Power-To-Gas compressor stations, **sera** offers innovative system solutions to make hydrogen usable for various areas of application. The hydrogen can be compressed directly from electrolysis, trailers or delivery in pipelines. With the **sera** Power-To-Gas compressor station, the highly compressed hydrogen is ready for use in cylinder bundles, trailers and many other possible applications such as feeding into hydrogen pipelines or natural gas grid.

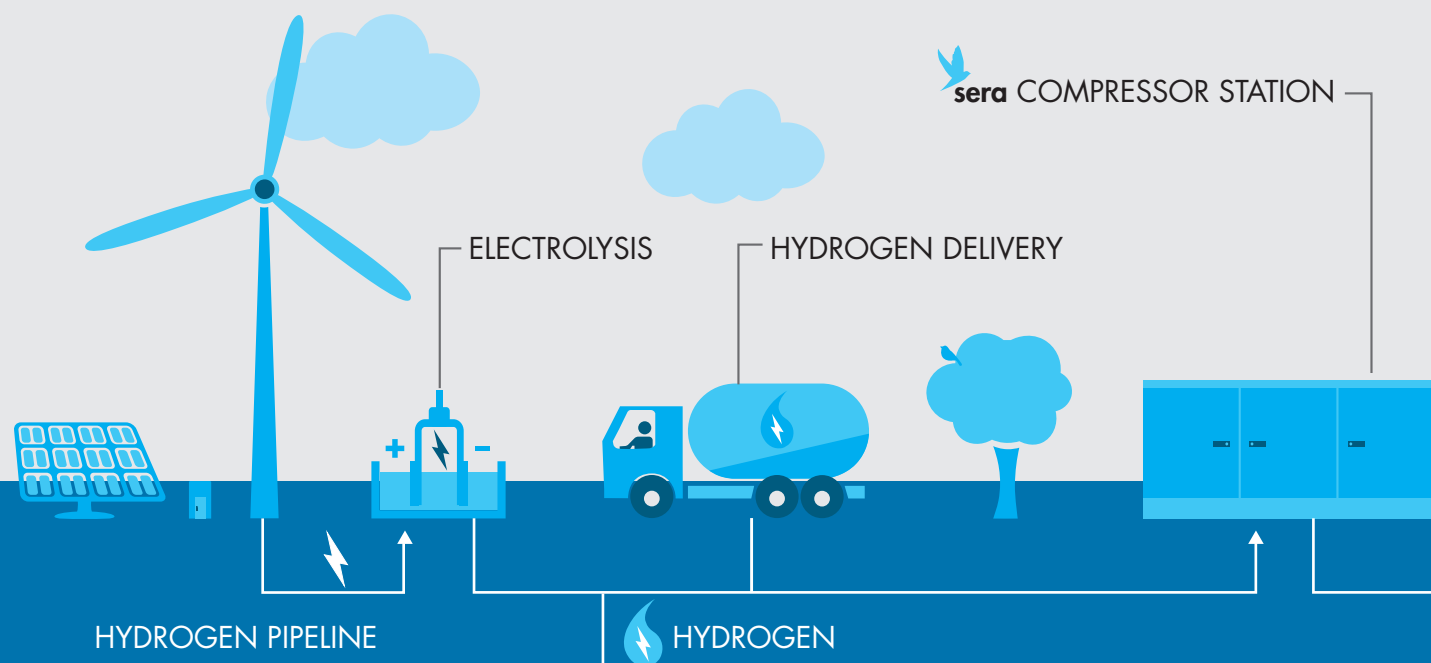
With the **sera** Power-To-Gas compressor station, hydrogen can be used as an energy store and fluctuations in power generation with wind and solar energy can be balanced out.

## DESIGN

- Complete compressor technology integrated in a system container (subdivided into Ex Zone II (compressor room) and Non-Ex Zone (control cabinet room))
- Equipped with all necessary mechanical and electrical safety devices
- Gas flow control technology with all control fittings
- Lighting and ventilation of the system container
- Ambient temperatures from -20°C to +40°C
- CE conformity

## ADDITIONAL FEATURES

- Flow rate control by means of frequency converter or bypass
- Filling device for trailer refuelling
- Larger delivery rates and special dimensions
- Container housing in various sizes (3 and 4 doors)
- Individual housing
- Indoor installation
- Remote connection
- Closed cooling water circuit
- Switch and load cabinet with fail-safe SPS for control of the entire system
- Further, specific customer requirements can be offered as an option



## TECHNICAL SPECIFICATIONS

| SIZES <sup>1)</sup>           |        | PTG 50 | PTG 100 | PTG 150 | PTG 200 |
|-------------------------------|--------|--------|---------|---------|---------|
| Flow rate                     | Nm³/h  | 50     | 100     | 150     | 200     |
| Flow rate                     | kg/h   | 4,5    | 9       | 13,5    | 18      |
| Electrolysis power            | kW     | 250    | 500     | 750     | 1000    |
| Inlet pressure <sup>1)</sup>  | bar(a) | 30     | 30      | 30      | 30      |
| Outlet pressure <sup>2)</sup> | bar(a) | 500    | 500     | 500     | 500     |

<sup>\*)</sup> Deviating delivery rates must be requested individually with the specific application.

<sup>1)</sup> Special solutions up to 1 bar(a) inlet pressure must be requested individually in the specific application.

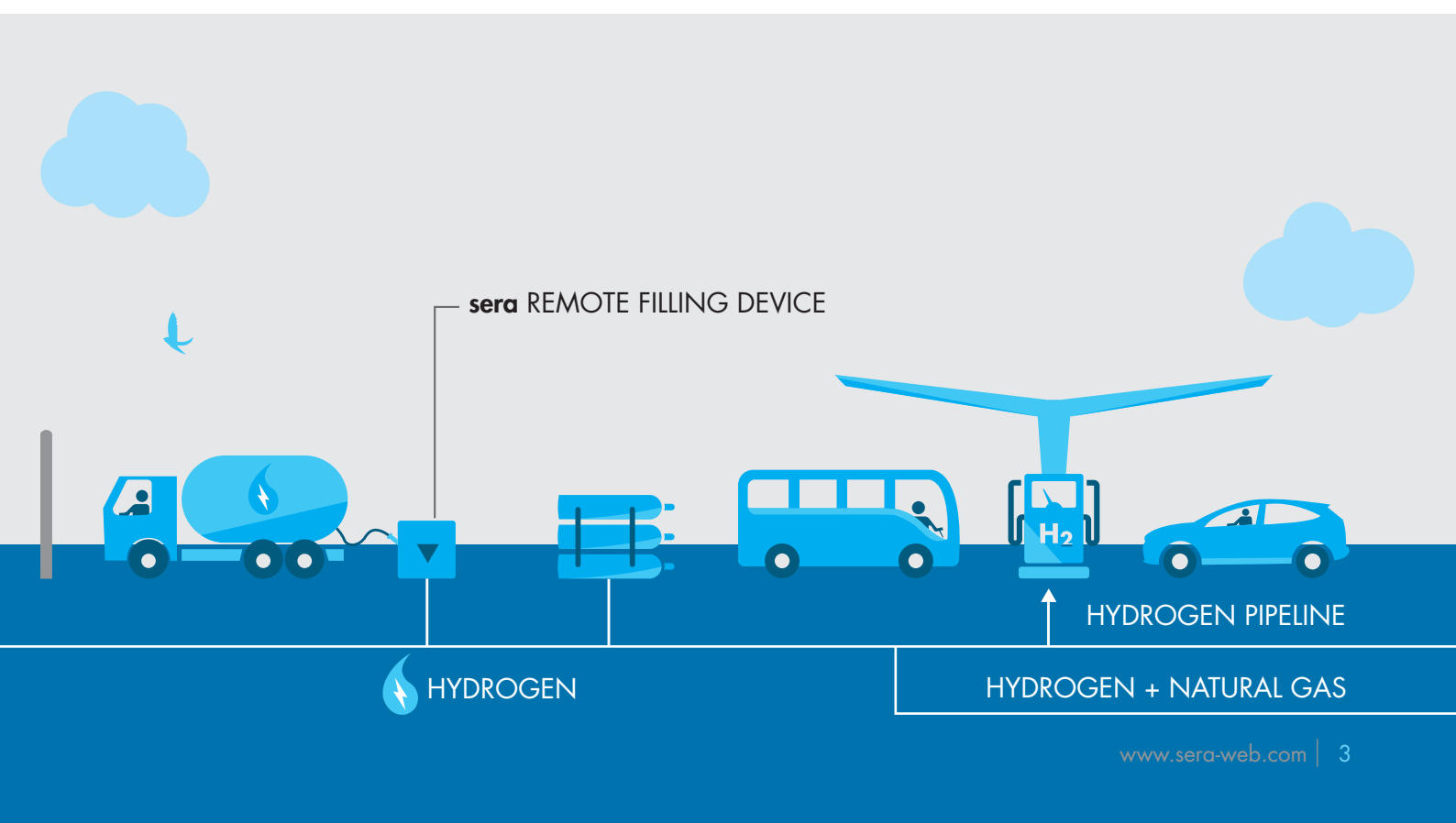
<sup>2)</sup> Other outlet pressures possible; standard versions with outlet pressures of 300 bar(a) and 500 bar(a) available.

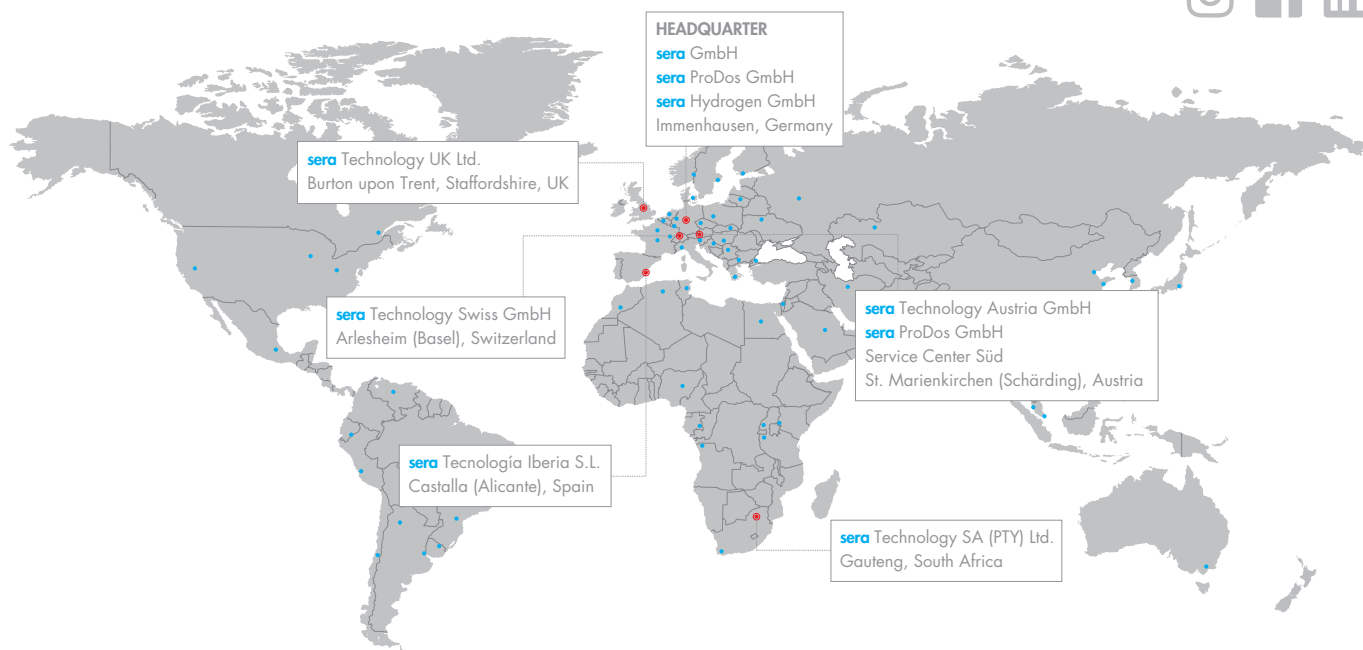
## FIELDS OF APPLICATION

- Buffer storage in stationary medium pressure, high pressure and cavern storage
- Trailer filling up to 500 bar(a)
- Feeding into the natural gas grid
- Feeding into hydrogen pipelines
- Cylinder bundle filling up to 500 bar(a)

## ADVANTAGES AT A GLANCE

- Energy efficient
- Reliable
- Oil-free compression of hydrogen
- Modular design
- Compact
- Flexibly expandable





## WORKING FOR YOU ALL OVER THE WORLD

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