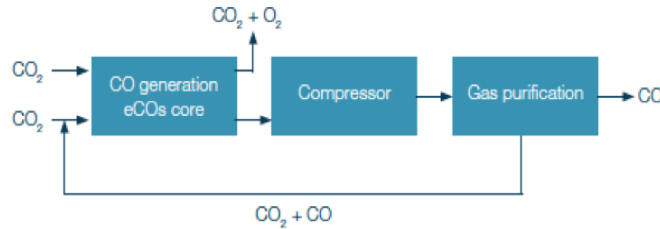


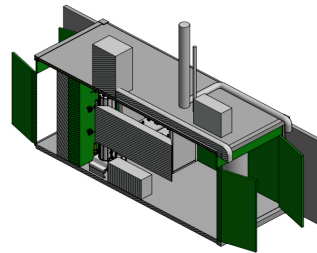
## Produce your own CO on site...

### How does the eCOs work

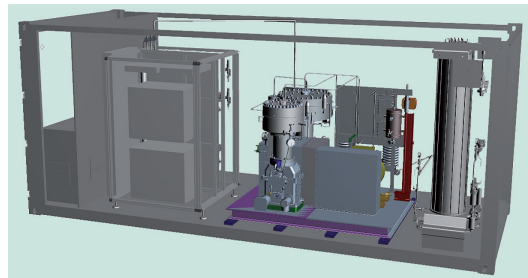
The name **eCOs** stands for “electrolytic Carbon Monoxide solution”. The heart of the **eCOs** is a solid oxide electrolysis cell (SOEC) that at elevated temperatures efficiently reduces CO<sub>2</sub> to CO through the electrochemical process of electrolysis. Remaining unconverted CO<sub>2</sub> is removed from the CO product gas using a combination of PSA and polisher units.



### eCOs Core and SOEC stack



### eCOs plant layout and capacity



With a modular design the **eCOs** plant can have a turn down ratio down to 30%. The modular design allows for plants as small as 225 scf/h (6 Nm<sup>3</sup>/h) or as big as 7500 scf/h (200 Nm<sup>3</sup>/h). For capacities larger than 7500 scf/h, multiple units can be operated in parallel mode.

The **eCOs** plant is delivered as a stand-alone unit with power, CO<sub>2</sub> and product gas connections. The **eCOs** unit is fitted into one or more standard 40' containers depending on the capacity.

The **eCOs** technology provides high levels of purity, producing CO at 99.5% assay with minimal contaminants and CO<sub>2</sub> as the main contaminant. The **eCOs** technology also offers customization options that can produce CO at 99.995% purity.

### Consumption figures

Parameter	Value per 100 scf CO produced	Value per 1 Nm <sup>3</sup> CO produced
CO <sub>2</sub>	200 scf	2 Nm <sup>3</sup>
Power	16 kW	6 kW

# eCOs™

electrolytic Carbon Monoxide solution

## Have you experienced challenges in sourcing CO readily and affordably?

### ***Consider producing your own CO on-site....***

The answer to reliable, affordable CO productions is a Topsoe eCOs unit. A safe, reliable, turnkey CO generator housed in a container located on your own premises. Offered by Gas Innovations.

#### ***eCOs benefits***

*(Chemical, Pharmaceutical, & Industrial applications)*

- Designed for permanent, temporary and portable
- Production on-demand and ground storage available
- Multiple sizes and purity options up to 99.995%
- Fully replaces tube trailer or cylinder supply
- Eliminates transportation and storage
- Eliminates storage of hazardous gas
- Delivered production ready as a containerized unit
- Plug and play installation, push-and-go operation
- Remote monitoring and operation
- Minimal personal required

#### **Toll / Contract Production**

- No extended lead time for delivery or installation
- Small capital investment
- No additional employees
- Freedom to adjust production levels at any time

#### **Optional service, maintenance and CO<sub>2</sub> add-ons**

- Ground storage, inventory & pressurization

For more information, please reach Gas Innovations on the web at [www.gasinnovations.com](http://www.gasinnovations.com) or by phone at 281-471-2200



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