

# Gas production, purification and filling



Company Overview

www.sertronic.com

#### Our gas purification experience to your benefit

Our first purification reactors were developed with the american company previously named ENGELHARD now BASF, a noble metal catalyst producer until 2006. In order to meet the increasing global demand of purification units, the company *Sertgas industries*<sup>®</sup> was created in 1986 and became *Sertronic*<sup>®</sup> in 2001. Our first complete hydrogen production, purification and filling installation, was installed in 1988 for a well known french gas company. This installation is still in operation, attesting to the reliability of our equipment.



VF<sub>2</sub> Dryer 1800 Nm<sup>3</sup>/h – 2.4 barg

Nitrogen Dryer 34 000 Nm<sup>3</sup>/h - 8 barg

Sertronic<sup>®</sup> offers a complete range of gas purifiers with capacities up to several thousand Nm<sup>3</sup>/h, at service pressures up to 400 barg. Gas purity can reach a total impurity level below 1 ppb. Our purifiers are designed and built in our manufacturing workshop according to international standards (PED, ASME, TrCu, ATEX...). With more than one hundred units operating across the world, Sertronic<sup>®</sup> is now recognized as an expert in gas purification.

Process gas	H <sub>2,</sub> He, O <sub>2</sub> , N <sub>2</sub> , Ar, Rare gases
Removed impurities	H <sub>2</sub> O <sub>,</sub> O <sub>2</sub> , CH <sub>4</sub> , Ar, N <sub>2</sub> , CO, CO <sub>2</sub>
Purification methods	Catalysis, adsorption at ambient and cryogenic temperatures
Max pressure	400 barg
Applications	Gas industry, Chemical industry, Greenhouse gas reduction, Semi-conductor industry, Research laboratories, Healthcare, (etc.)



Thanks to many years of business relationships in various industries, our engineering department takes in charge all kind of projects relating to gas production, purification and filling.

Our main domains of expertise include gas purification for industries and research laboratories, hydrogen production by electrolysis and hydrogen fueling stations for mobility through our strong partnership with Nel hydrogen.



Cryogenic Hydrogen purifier 700 Nm<sup>3</sup>/h – 100 barg



Cryogenic Helium purifier 500 Nm<sup>3</sup>/h – 385 barg



Oxygen purifier 10 Nm<sup>3</sup>/h – 8 barg

Standardization : we have developed dedicated ranges of products that fit to industrial and chemical plant requirements :

« **POINT OF USE** » **SERTRONIC**<sup>®</sup> **and SUBTRONIC**<sup>®</sup> **line** : Purifiers dedicated to laboratories and regenerable in our manufacturing workshop. Applications : H<sub>2</sub>, He, O<sub>2</sub>, N<sub>2</sub>, Ar, Rare gases...

**FILLTRONIC**<sup>®</sup> : Gas purifiers dedicated to filling plants. These units are designed at 250 or 380 barg and allow the purification of the neutral gases.

**VAPOTRONIC**<sup>®</sup> : Water bath vaporizers dedicated to filling plants. Our vaporizers are designed at cryogenic pump pressure (up to 300barg) and are able to vaporize the entire flow of the pump. Eg :  $CO_2$  : 500Kg/h @120 barg.



DUAL Subtronic 500



CARBOTRONIC vaporizer (CO<sub>2</sub>)



**FILLTRONIC** purifier

### Hydrogen : Our commitment for a cleanest world

H2 Production



#### H2 Purification





H2 fueling station

## SERTRONIC & NEL Complete solutions to fit your needs





Zone Industrielle de Torcy -Bâtiment 3 – Rue des ébénistes-77200 TORCY – France Phone: +33 1 64 30 48 60 - Fax: +33 1 64 30 48 61 - @: contacts@sertronic.com