

Sertronic®

Gas production, purification and filling



Purifiers brochure

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*® was created in 1986 and became *Sertronic*® 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.



Sertronic® offers a complete range of gas purifiers with capacities up to several thousand Nm³/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...). 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.

With more than one hundred units operating across the world, Sertronic® is now recognized as an expert in gas purification.

Turnkey Solutions

In close collaboration with its clients, SERTRONIC constantly surveys, develops and optimizes its systems in order to offer reliable and easy to use “turnkey” solutions for the production, treatment and processing of industrial gases.

These installations are usually managed through an automatic system with touch screen, giving to the operators a comprehensive and simple interface.

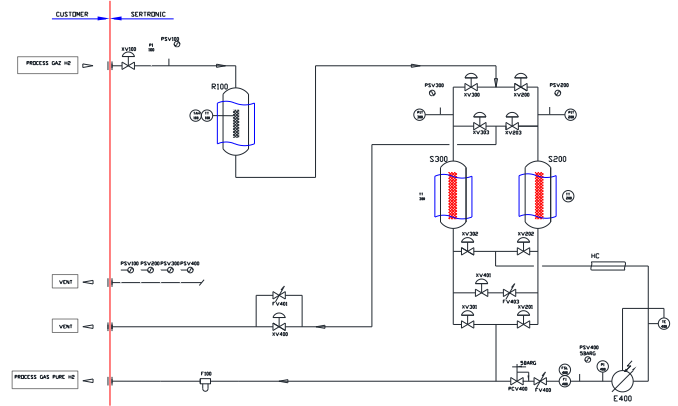
The carrying out of your project by a single team of experts makes you benefit from a deep and global vision of your systems, while diminishing the number of actors.



Purifier type TSA 34 000 Nm³/h – 10 barg
(Air Liquide India)

Gas purifiers type D/DS

Hydrogen



Removed impurities : H₂O, O₂, CO₂

Design data

Pressure: from 1 up to 350 barg
Flow rate: from 5 up to 5 000 Nm³/h

Purification process

Catalysis + Adsorption

Performances

Outlet level of impurities less than 10 ppb
Availability: > 99.5%

Lifetime

> 20 years

Typical applications: welding gases, metallurgical industry, semi-conductor industry, H₂ mobility, purification of hydrogen produced by electrolysis



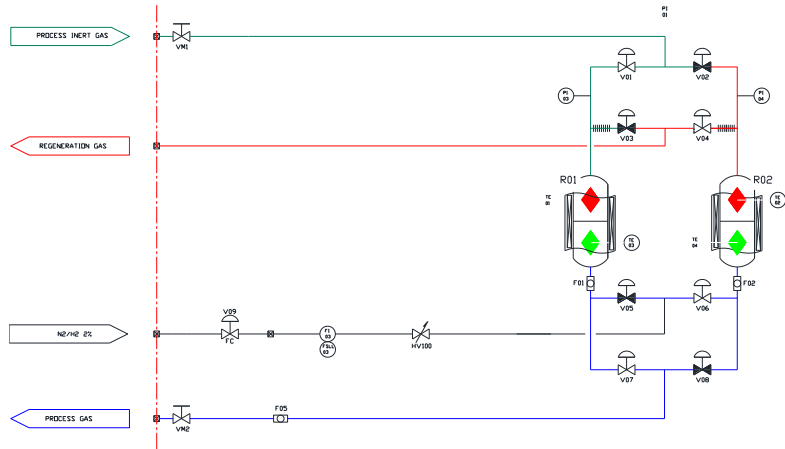
Hydrogen purifier D 900-250
900 Nm³/h - 250 Barg



Hydrogen purifier D 16-165
16 Nm³/h - 165 Barg

Gas purifiers type N / C

Inert gas (N₂, He, Ar, Kr, Xe, Ne)



Removed impurities : H₂O, O₂, CO, CO₂

Design data

Pressure: from 1 up to 400 barg
Flow rate: from 5 up to 5 000 Nm³/h

Purification process

Chemisorption + Adsorption

Performances

Outlet level of impurities less than 10 ppb
Availability: > 99.5%

Lifetime

> 20 years

Typical applications: Lighting equipment, high quality welding, protective gases



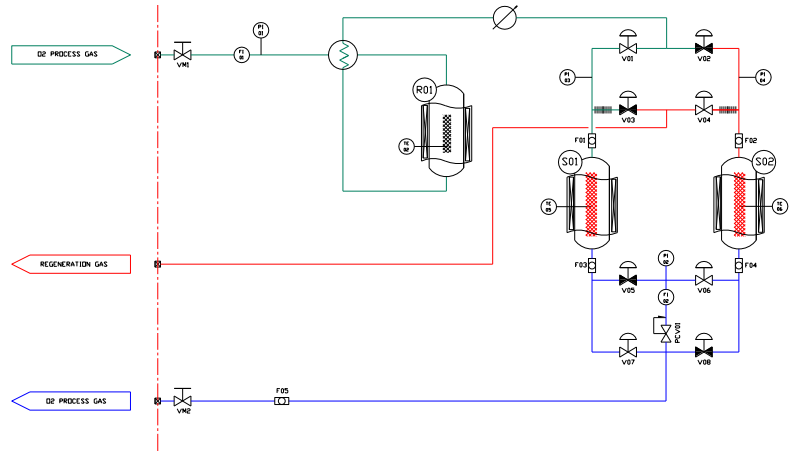
Helium purifier C 240 – 240
240 Nm³/h – 240 Barg



Nitrogen purifier N 500 – 15
500 Nm³/h – 15 Barg

Gas purifiers type M

Oxygen, Air



Removed impurities : H₂O, CH₄, CO, CO₂

Design data

Pressure: from 1 up to 350 barg
Flow rate: from 5 up to 5 000 Nm³/h

Purification process

Catalysis + Adsorption

Performances

Outlet level of impurities less than 10 ppb
Availability: > 99.5%

Lifetime

> 20 years

Typical applications: laboratories, chemical industry, fiber optics industry, semi-conductor industry



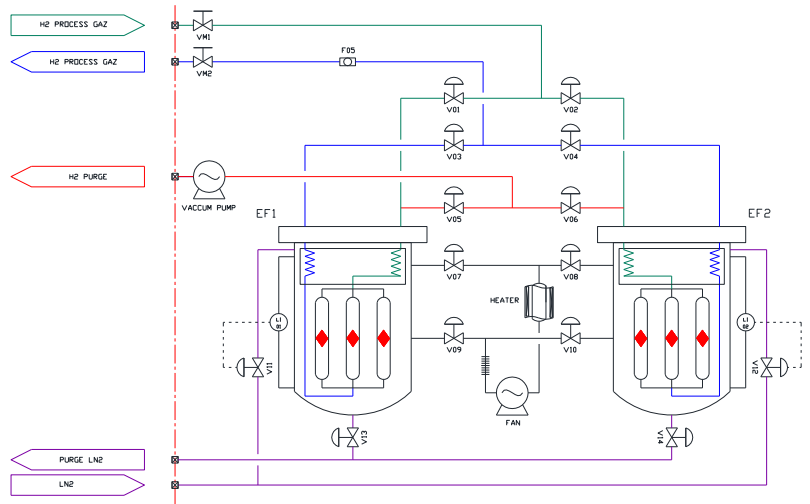
Oxygen purifier M 220-4
220 Nm³/h - 4 Barg



Air purifier M 5-10
5 Nm³/h - 10 Barg

Gas purifiers type EF

Hydrogen, Helium



Removed impurities : H_2O , CO , CO_2 , N_2 , O_2

Design data

Pressure: from 1 up to 400 barg
Flow rate: from 5 up to 5 000 Nm³/h

Purification process

Cryogenic adsorption

Performances

Outlet level of impurities less than 10 ppb
Availability: > 99.5%

Lifetime

> 20 years

Typical applications : Solar energy, gas industry, nuclear energy, fuel cell, semi-conductor industry, laboratories, metallurgical industry,



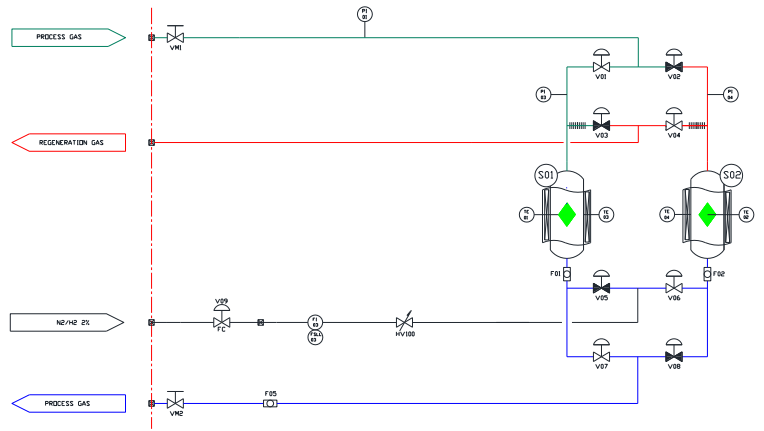
Helium cryogenic purifier EF 840-10
840 Nm³/h - 10 Barg



Hydrogen cryogenic purifier EF 450-250
450 Nm³/h - 250 Barg

Gas dryers type TSA

Most of gases



Removed impurities : H₂O, CO₂

Design data

Pressure: from 1 up to 400 barg
Flow rate: from 5 up to 50 000 Nm³/h

Purification process

Adsorption

Performances

Outlet level of impurities less than 10 ppb
Availability: > 99.5%

Lifetime

> 20 years

Typical applications: All processes requiring dry gas



Helium dryer & CnHm removal
600 Nm³/h – 30 Barg



Nitrogen dryer
34 000 Nm³/h – 10 Barg



Main clients and location



Air Liquide



Alcatel-Lucent



www.sertronic.com