

# *Sertronic*<sup>®</sup>

***Gas production, purification and filling***



***Main client references***



## Hydrogen Purifiers type D / DS



**Containerized hydrogen purifier D 150-4  
150 Nm<sup>3</sup>/h - 4 Barg**



**Hydrogen purifier D 1500-350  
1500 Nm<sup>3</sup>/h - 350 Barg**

<b>AIR LIQUIDE DEUTSCHLAND</b>	2022	Hydrogen purification unit (CO eraser) N 4000-45	4000 Nm <sup>3</sup> /h - 45 barg
<b>AIR LIQUIDE DEUTSCHLAND</b>	2022	Hydrogen purification unit DS 4000-45	4000 Nm <sup>3</sup> /h - 45 barg
<b>ELOGEN</b>	2021	Hydrogen purification unit D 200-40	200 Nm <sup>3</sup> /h - 40 barg
<b>AIR LIQUIDE RUSSIA</b>	2020	Hydrogen purification unit D 500-6	500 Nm <sup>3</sup> /h - 6 barg
<b>AREVA</b>	2020	4 x Hydrogen purification units D 10-40	10 Nm <sup>3</sup> /h - 40 barg
<b>AIR LIQUIDE SPAIN</b>	2019	Hydrogen purification unit D 1500-350	1500 Nm <sup>3</sup> /h - 350 barg
<b>AIR LIQUIDE RUSSIA</b>	2018	Hydrogen purification unit D 150-4	150 Nm <sup>3</sup> /h - 4 barg
<b>AREVA H2GEN</b>	2017	Hydrogen purification unit D100-40	100 Nm <sup>3</sup> /h - 40 barg
<b>AREVA H2GEN</b>	2016	Hydrogen purification unit D 10-40	10 Nm <sup>3</sup> /h - 40 barg
<b>AREVA H2GEN</b>	2016	2 x Hydrogen purification units D 100-16	100 Nm <sup>3</sup> /h - 16 barg
<b>AIR LIQUIDE EGYPT</b>	2010	Hydrogen purification unit D 220-200	220 Nm <sup>3</sup> /h - 200 barg
<b>AREVA-TA</b>	2003	Electrolytic hydrogen / oxygen purification unit D 0,5-5	0,5 Nm <sup>3</sup> /h - 5 barg
<b>LINDE</b>	1999	Hydrogen purification unit D 900-250	900 Nm <sup>3</sup> /h - 250 barg
<b>LINDE (PORCHEVILLE)</b>	1995	Hydrogen purification unit D 400-350	400 Nm <sup>3</sup> /h - 350 barg
<b>AIR LIQUIDE SOLVAY</b>	1995	Hydrogen purification unit D 200-25	200 Nm <sup>3</sup> /h - 25 barg
<b>AIR LIQUIDE YPF (ARGENTINA)</b>	1994	Hydrogen purification unit D 1100-30	1100 Nm <sup>3</sup> /h - 30 barg
<b>AIR LIQUIDE BOZ (NETHERLAND)</b>	1993	Hydrogen purification unit D 1800-22	1800 Nm <sup>3</sup> /h - 22 barg
<b>AIR LIQUIDE CARBONICA (GREECE)</b>	1990	Hydrogen purification unit D 300-200	300 Nm <sup>3</sup> /h - 200 barg
<b>AIR LIQUIDE / SMOA (MAROCCO)</b>	1988	Hydrogen purification unit D 150-200	150 Nm <sup>3</sup> /h - 200 barg
<b>THOMSON SGS</b>	1988	Hydrogen purification unit D15-20	15 Nm <sup>3</sup> /h - 20 barg





## Hydrogen & Helium cryogenic purifiers type EF



**Helium cryogenic purifier  
500 Nm<sup>3</sup>/h - 380 Barg**



**Hydrogen cryogenic Purifier  
715 Nm<sup>3</sup>/h - 100 Barg**

<b>AIR LIQUIDE DEUTSCHLAND</b>	2022	Hydrogen cryogenic purifier EF 1000 - 45	1000 Nm <sup>3</sup> /h - 45 barg
<b>REICAT</b>	2021	Helium cryogenic purifier EF 840-30	840 Nm <sup>3</sup> /h - 30 barg
<b>KOBE STEEL (JAPAN)</b>	2017	Helium cryogenic purifier EF 840-10	840 Nm <sup>3</sup> /h - 10 barg
<b>ECO TITANIUM (FRANCE)</b>	2017	Helium cryogenic purifier EF 840-30	840 Nm <sup>3</sup> /h - 30 barg
<b>AIR LIQUIDE SPAIN</b>	2017	Hydrogen cryogenic purifier EF 600-27	600 Nm <sup>3</sup> /h -27 barg
<b>REICAT (Aubert &amp; Duval)</b>	2015	Helium cryogenic purifier EF 850-30	850 Nm <sup>3</sup> /h - 30 barg
<b>AIR LIQUIDE GAS AB</b>	2014	Containerized hydrogen cryogenic purifier EF 150-250	150 Nm <sup>3</sup> /h - 250 barg
<b>SAPIO / ST MICROELECTRONIC</b>	2014	Hydrogen cryogenic purifier EF 500-13	500 Nm <sup>3</sup> /h - 13 barg
<b>AIR LIQUIDE ALFI</b>	2013	Helium cryogenic purifier EF 500-385	500 Nm <sup>3</sup> /h - 385 barg
<b>AREVA</b>	2007	Hydrogen isotopic cryogenic purifier EF 30-10	30 Nm <sup>3</sup> /h - 10 barg
<b>AIR LIQUIDE</b>	2006	Hydrogen cryogenic purifier EF 715 - 100	715 Nm <sup>3</sup> /h - 100 barg
<b>LINDE / ATMEL</b>	1999	Hydrogen cryogenic purifier EF 450-250	450 Nm <sup>3</sup> /h - 250 barg



## Rare & neutral gases purifiers type N, type C



**Helium purifier  
200 Nm<sup>3</sup>/h – 220 Barg**



**Nitrogen dryer 20 Nm<sup>3</sup>/h -230 Barg  
& Argon purifier 15 Nm<sup>3</sup>/h – 15 Barg**

<b>AIR LIQUIDE FRANCE INDUSTRIE</b>	2022	Nitrogen / Argon Filltronic® purifiers N 500-250	500 Nm <sup>3</sup> /h - 250 barg
<b>NIPPON GASES</b>	2019	Nitrogen / Argon Filltronic® purifier N 500-250	500 Nm <sup>3</sup> /h - 250 barg
<b>SOL</b>	2016	Nitrogen Filltronic® purifier N 200-220	200 Nm <sup>3</sup> /h - 220 barg
<b>LINDE GAS ALGERIA</b>	2016	Nitrogen / Argon purification unit N 500-380	500 Nm <sup>3</sup> /h - 380 barg
<b>AIR LIQUIDE</b>	2011	Helium purification unit C 240-240	240 Nm <sup>3</sup> /h - 240 barg
<b>AIR LIQUIDE</b>	2005	Nitrogen purification unit N 5-10	5 Nm <sup>3</sup> /h - 10 barg
<b>PRAXAIR (BELGIUM)</b>	2002	Nitrogen dryer unit SAC 30-230 & Argon purification unit N 15-15	30 Nm <sup>3</sup> /h - 230 barg
<b>PRAXAIR</b>	2001	Nitrogen purification unit N 5-10	5 Nm <sup>3</sup> /h - 10 barg
<b>CEA DAM</b>	1999	2x Argon dryers (gloves box) SAC 80-1	80 Nm <sup>3</sup> /h - PA
<b>AIR LIQUIDE SPAIN</b>	1997	Argon nitrogen C 5-220	5 Nm <sup>3</sup> /h -220 barg
<b>AIR LIQUIDE / BP CHEMICALS</b>	1996	Nitrogen purification unit N 1000-40	1000 Nm <sup>3</sup> /h - 40 barg
<b>LINDE</b>	1995	Nitrogen purification unit N150-230	150 Nm <sup>3</sup> /h - 230barg
<b>AIR LIQUIDE / TOPSIL (DANEMARK)</b>	1992	Argon purification unit C 30-10	30 Nm <sup>3</sup> /h - 10 barg
<b>AIR LIQUIDE DGR</b>	1989	Helium / Neon purification unit SAC 18-25	18 Nm <sup>3</sup> /h - 25 barg



## Oxygen & Air purifiers type M



**Oxygen purifier**  
**5 Nm<sup>3</sup>/h – 10 Barg**



**Air purifier**  
**5 Nm<sup>3</sup>/h – 10 Barg**

<b>CNRS LMA</b>	2007	Air purification unit M 5-10	5 Nm <sup>3</sup> /h - 10 barg
<b>ECMSSA / ABSOGER</b>	2006	Medical oxygen generator – PSA M 1-4,5	1 Nm <sup>3</sup> /h - 45 barg
<b>AIR LIQUIDE (Miribel)</b>	2001	Oxygen purification unit M 5-10	5 Nm <sup>3</sup> /h - 10 barg
<b>ALCATEL</b>	2000	Oxygen purification unit M 30-10	30 Nm <sup>3</sup> /h - 10 barg
<b>AIR LIQUIDE / PHILIPS</b>	1994	Oxygen purification unit M 50-10	50 Nm <sup>3</sup> /h - 10 barg
<b>ALCATEL</b>	1993	Oxygen purification unit M 20-10	20 Nm <sup>3</sup> /h - 10 barg
<b>AIR LIQUIDE / PHILIPS</b>	1992	Oxygen purification unit M 10-10	10 Nm <sup>3</sup> /h - 10 barg
<b>ECMSSA / SNPE</b>	1990	Chemical medical oxygen generator M 10-300	10 Nm <sup>3</sup> /h - 300 barg
<b>ALCATEL</b>	1990	2 Oxygen purification units M 12-10	12 Nm <sup>3</sup> /h - 10 barg





## Dryers type SAC / TSA



**VF2 dryer**  
1800 Nm<sup>3</sup>/h - 2,5 Barg

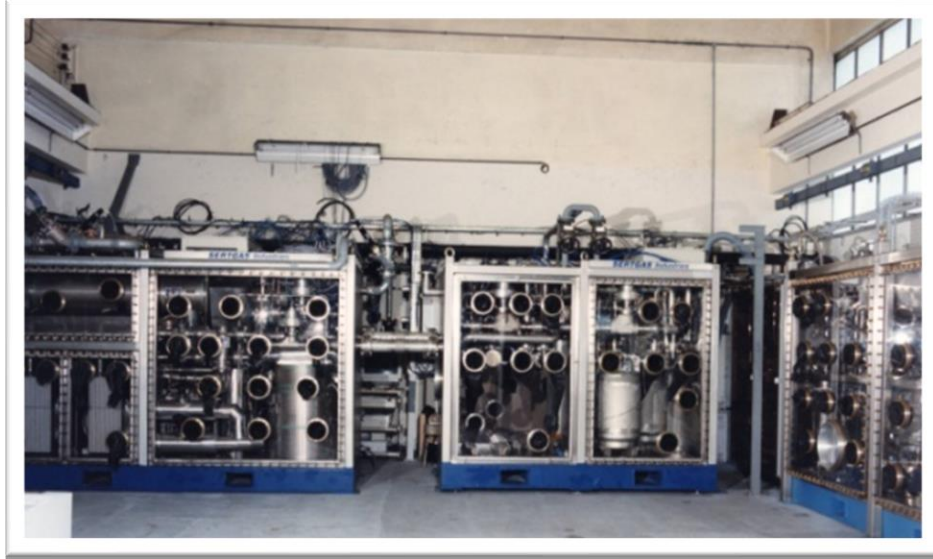


**Helium dryer**  
600 Nm<sup>3</sup>/h - 30 Barg

<b>EXXON MOBIL</b>	2021	Hydrogen purifier TSA 1200 – 35	1200 Nm <sup>3</sup> /h – 35 barg
<b>AIR LIQUIDE FI</b>	2019	NO purifier TSA 18-0,5	18 Nm <sup>3</sup> /h – 0,5 barg
<b>AIR LIQUIDE ADVANCED TECHNOLOGIE</b>	2017	Helium dryer TSA 600-27	600 Nm <sup>3</sup> /h – 27 barg
<b>SOLVAY</b>	2012	VF2 dryer TSA 1 800 – 2,5	1800 Nm <sup>3</sup> /h – 2,5 barg
<b>AIR LIQUIDE INDIA</b>	2009	Nitrogen dryer unit TSA 34000-10	34000 Nm <sup>3</sup> /h - 10 barg
<b>PRAXAIR (BELGIUM)</b>	2002	Nitrogen dryer unit TSA 30-230	30 Nm <sup>3</sup> /h - 230 barg
<b>CEA DAM</b>	1999	2x Argon dryers (gloves box) TSA 80-1	80 Nm <sup>3</sup> /h - PA
<b>EDF (CHINA)</b>	1998	Hydrogen dryer unit TSA 15-200	15 Nm <sup>3</sup> /h - 200 barg
<b>SAGIM (CHINA)</b>	1995	Hydrogen dryer unit TSA15-200	15 Nm <sup>3</sup> /h - 200 barg
<b>CERT ONERA</b>	1994	Air purification unit TSA 1500-80	1500 Nm <sup>3</sup> /h - 80 barg
<b>CEA DAM</b>	1990	Air purification unit TSA 50-1	50 Nm <sup>3</sup> /h - PA
<b>AIR LIQUIDE DGR</b>	1989	Helium / Neon purification unit TSA 18-25	18 Nm <sup>3</sup> /h - 25 barg



## Special purifiers : Nuclear field



**Tritium removal unit mounted into gloves box  
300 Nm<sup>3</sup>/h – 1 barg**

AREVA-TA	2003	Electrolytic hydrogen and oxygen purification unit D 0,5-5	0,5 Nm <sup>3</sup> /h - 5 barg
CEA DAM	2001	Catalytic reactor for tritium removal	5 Nm <sup>3</sup> /h
CEA DAM	2000	Xe concentration system	9 Nm <sup>3</sup> /h - 4 barg
SGN	1995	Argon / Hydrogen mixer 90-4	90 Nm <sup>3</sup> /h - 4 barg
COGEMA	1994	Helium cryogenic purification unit EF 100-1	100 Nm <sup>3</sup> /h - 1 barg
COGEMA	1994	1 Exchanger + 2 adsorbent vessels	100 Nm <sup>3</sup> /h - 1 barg
COGEMA / MELOX	1993	Argon / Hydrogen mixer 90-4	90 Nm <sup>3</sup> /h - 4 barg
CEA DAM	1993	Purification for tritium removal	15 Nm <sup>3</sup> /h - PA
CEA DAM	1993	Cooling exchanger for tritium removal	20 Nm <sup>3</sup> /h – PA
COGEMA	1992	Humidifier catalytic Ar / Hydrogen	25 Nm <sup>3</sup> /h - 200 mbarg
COGEMA	1990	Argon / Hydrogen mixer 25-8	25 Nm <sup>3</sup> /h - 8barg
COGEMA	1990	Argon / Hydrogen humidification system 18-300	18 Nm <sup>3</sup> /h - 300 mbarg
CEA DAM	1990	Dryer unit SAC 50-1	50 Nm <sup>3</sup> /h - PA
CEA DAM	1990	3 Units for tritium removal	250 Nm <sup>3</sup> /h - PA
CEA DAM	1990	Purification system model unit M 1-1,1	1 Nm <sup>3</sup> /h – 1,1 barg
AIR LIQUIDE DGR	1988	Krypton/xenon dryer unit SAC 2-3	2 Nm <sup>3</sup> /h- 3 barg



## Main clients and location



Air Liquide

