The technical data and the dimensions are subject to change without notice. The elements such as photographs and graphics and information are not contractual.
## OVERVIEW

**Business organization** 6

**Business presentation** 7

## PRODUCTS

### Decision tree

<table>
<thead>
<tr>
<th>BSC</th>
<th>BIO-PURE</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OPTIMALE</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>BIOII</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>PPS</td>
<td>13</td>
</tr>
<tr>
<td>CLEAN AREAS</td>
<td>PS / MS</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>PS(X) / EQL</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>SBM</td>
<td>16/17</td>
</tr>
<tr>
<td>VERTICAL FLOW</td>
<td>VFL</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>UNIVERS MV</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>IV GEL SPACE</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>IV GEL</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>22</td>
</tr>
<tr>
<td>HORIZONTAL FLOW</td>
<td>OPTIGEL</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>OPTIMUM</td>
<td>24</td>
</tr>
<tr>
<td>FUME HOOD</td>
<td>BCS</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>T</td>
<td>26</td>
</tr>
<tr>
<td>FAN FILTER UNITS</td>
<td>I GEL / FANJET</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>CONVOYAIR</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>S/SP</td>
<td>29</td>
</tr>
<tr>
<td>ASPIRING CABINETS</td>
<td>PROTEC I</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>POWDERJET</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>C-PURE</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>UNIVERS MAV</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>AD</td>
<td>34</td>
</tr>
<tr>
<td>AIR SHOWER</td>
<td>AIR SHOWER</td>
<td>35</td>
</tr>
<tr>
<td>VARIOUS</td>
<td>GLOVES BOX</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Storagebox/Furnitures</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Exhaust fans</td>
<td>38</td>
</tr>
</tbody>
</table>

## OUR SERVICES

### Consumables

### Filters

- Flow Air Filters 40
- After sales service 41
R&D
Sales Manager (France - Belgium - Luxemburg - Swizerland)
Thomas PETITJEAN - +33 6 6057 5124
thomas@adslaminaire.com

Export
Bernard Bijaoui
Warda LOUADJED +331 4817 8510
bernard@adslaminaire.com
warda.louadjed@adslaminaire.com

Air filtration department
Max ELHARAR +331 7747 0015
max@flowairfilters.com

Consumables department
Cindy HENRY +336 6130 5161
cindy.henry@adslaminaire.com

Account department
Nathalie BERNARD +331 4817 8518
nathalie@adslaminaire.com

After Sales Service
Nora HASSINE +331 4817 8512
nora.hassaine@adslaminaire.com

Sales Manager (USA - CANADA - MEXICO)
Marina CENTENO CASSIN
(312) 622 1697
marina.cassin@adslaminaire.com

Design/development department
Eric FITOUSSI +331 4817 8520
eric@adslaminaire.com
Ralph OBIANG +331 4817 8517

Purchasing department
Etienne CHAUMARD
etienne.chaumard@adslaminaire.com
+331 4817 8519

Q.A department
Carine VOITURIER
carine.voiturier@adslaminaire.com
+331 4817 8516

Logistic department
Yannick Mailly +336 6030 7478
yannick.mailly@adslaminaire.com

In 1981 ADS Laminaire began manufacturing and marketing air filters. Over the years ADS Laminaire has become a leading authority in cleanroom industry. Amongst others, our worldwide clientele are prestigious and leading HI TECH, microelectronics and semi-conductor, companies, hospitals, research centers, universities etc.

Recirculating Fume Hood
Laboratory Fume Hood
Certifications and Standards:
Standard NF EN 12128:
High efficiency air filters and Very low penetration air filters (HEPA and ULPA)

ISO 14644-1:
Definition and Classification of Particular Cleanliness of Air.

 XPX 15-203 / EN 14175:
Biotechnology: performance criteria for Microbiological Safety Posts

Standard EN 1822-1:
Standard NF EN 12469:

Standard NFX 15-211:

Our after sales service are in charge of maintenance, controls, and validations with capacity to respond quickly in France, European countries and worldwide. We ensure maintenance and quality service of our equipment worldwide.
ADS LAMINAIRE, a family owned company was established in 1968 by Abraham Bijaoui. It is the first French company to specialize in the field of manufacturing and marketing clean room solutions & Laminar Flow products).

Amongst others, our worldwide clientele are prestigious and leading HI TECH, microelectronics and semi-conductor, companies, hospitals, research centers, universities etc.

IN 1973, ADS Laminaire to meet their customer’s growing demanded, expanded their range of products by adding consumables and utilities in the clean room environment

In 1981 ADS Laminaire began manufacturing and marketing air filters.

In 2009 we opened a commercial center in Chicago to cover the American market.

Our after sales service are in charge of maintenance, controls, and validations with capacity to respond quickly in France, European countries and worldwide. We ensure maintenance and quality service of our equipment worldwide

Over the years ADS Laminaire has become a leading authority in cleanroom industry thanks to our long experience but also thanks to the meeting international quality standards, setting challenging goals and excellent achievements as well as a wide range of high quality products.

Certifications and Standards:

- **ISO 14644-1:** Definition and Classification of Particular Cleanliness of Air.
- **Standard EN 12469:** Biotechnology: performance criteria for Microbiological Safety Posts
- **Standard EN 1822-1:** Very high efficiency air filters and Very low penetration air filters (HEPA and ULPA)
- **Standard NF EN 12128:** Laboratory of Research, Development and Analysis
- **XPX 15-203 / EN 14175:** Laboratory Fume Hood
- **Standard NFX 15-211:** Recirculating Fume Hood

**ISO 9001 certified**
HOW TO SELECT YOUR CABINET?

**1** > PROTECTION of PRODUCTS

- **Cabinet**
  - PORTABLE DEVICES
    - Spot VAL
    - MV / Univers
  - Laminar Flow Cabinet
    - Optimum Verticale V
    - IV Gel
    - Optigel
    - VFL
    - IV GEL SPACE
- **Clean environment**
  - Ceiling Blower
  - Blowing wall
  - Convoyair
  - SBM : I Gel / FANJET

**BIOLOGICAL RISK**

**POWDERS**

**CHEMICALS**

**BIO-PURE**

**SPOT VAL MV / Univers**

**OPTIMUM VERTICALE V IV GEL OPTIGEL VFL IV GEL SPACE**

**PORTABLE DEVICES**

**LAMINAR FLOW CABINET**

**CEILING BLOWER BLOWING WALL CONVOYAIR SBM : I GEL / FANJET**
BIO-PURE
Biosafety Cabinet Type II

**Triple Protection:**
Operator
Product
Environment

Complies with standard:
EN 12469 & NSF 49

- Anticorrosive structure 100% compatible with decontamination products.
- Automatic flow regulation ECM.
- Coplast Structure (expanded PVC).
- Stainless steel 316L, work volume/work surface.
- Perfect ergonomy: inclined sash window and 2 sides windows.
- Two fans system.
- Easy access

Microbiological safety stations type II are intended to protect the operator, the product and the environment from any airborne contamination.

<table>
<thead>
<tr>
<th>BIO-PURE 9</th>
<th>BIO-PURE 12</th>
<th>BIO-PURE 16</th>
<th>BIO-PURE 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>Internal</td>
<td>Overall</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td>915</td>
<td>953</td>
<td>1220</td>
</tr>
<tr>
<td>Height</td>
<td>590 to 620</td>
<td>1400</td>
<td>590 to 620</td>
</tr>
<tr>
<td>Depth</td>
<td>600</td>
<td>790</td>
<td>600</td>
</tr>
<tr>
<td>Power (MIN) (W)</td>
<td>130</td>
<td>190</td>
<td>250</td>
</tr>
<tr>
<td>Power(MAX)(W)</td>
<td>800</td>
<td>800</td>
<td>1200</td>
</tr>
</tbody>
</table>

FLAGSHIP PRODUCT
Microbiological safety stations type II are intended to protect the operator, the product and the environment from any airborne contamination.

The OPTIMALE is adapted to the handling of agents that require biosafety level class 1, 2 or 3.

<table>
<thead>
<tr>
<th></th>
<th>Optimale 9 NF</th>
<th>Optimale 12 NF</th>
<th>Optimale 16</th>
<th>Optimale 18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Width</strong></td>
<td>921</td>
<td>971</td>
<td>1226</td>
<td>1276</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>650</td>
<td>1400</td>
<td>650</td>
<td>1400</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>616</td>
<td>786</td>
<td>616</td>
<td>786</td>
</tr>
<tr>
<td><strong>Weight (Kg)</strong></td>
<td>190</td>
<td>230</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td><strong>Power (W)</strong></td>
<td>1.4</td>
<td>1.4</td>
<td>1.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>
BIO II
Biosafety Cabinet Type II

Triple Protection:
Operator
Product
Environment

Complies with standard:
EN 12469 & NSF 49

The BIO II is adapted to handling of agents that require biosafety level class 1, 2 or 3.

<table>
<thead>
<tr>
<th>BIO II 9</th>
<th>BIO II 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Width</strong></td>
<td><strong>Width</strong></td>
</tr>
<tr>
<td>internal</td>
<td>Overall</td>
</tr>
<tr>
<td>919</td>
<td>922</td>
</tr>
<tr>
<td>1226</td>
<td>1229</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td><strong>Height</strong></td>
</tr>
<tr>
<td>internal: 500</td>
<td>Overall: 1080</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td><strong>Depth</strong></td>
</tr>
<tr>
<td>internal: 495</td>
<td>Overall: 640</td>
</tr>
<tr>
<td><strong>Weight (Kg)</strong></td>
<td><strong>Weight (Kg)</strong></td>
</tr>
<tr>
<td>120</td>
<td>150</td>
</tr>
<tr>
<td><strong>Power (W)</strong></td>
<td><strong>Power (W)</strong></td>
</tr>
<tr>
<td>1500</td>
<td></td>
</tr>
</tbody>
</table>

- compact size
- Automatic flow regulation ECM
- flip window
- UV Lamp

FLAGSHIP PRODUCT
Microbiological safety stations type II are designed to protect the operator, product and the environment from any airborne contamination.

The PPS is suitable for handling pathogenic germs of class 1, 2 and 3.
The PPS can be fitted with a marble for accurate weighing at (0,01 mg)

### PPS 9 | PPS 12 | PPS 16 | PPS 18
---|---|---|---
Useful Width | 921 | 1226 | 1531 | 1836
Total width | 971 | 1276 | 1581 | 1886
Height | internal: 650 | overall: 2200
Depth | | | | |
Weight (kg) | 270 | 330 | 420 | 490
Power (KW) | 1,4 | 1,4 | 1,5 | 1,5
PS / MS
Ceiling "Vertical" / Wall "Horizontal" Laminar Flow

Protection :
Product
GMP: GRADE A

Complies with standard:
ISO 14644

custom made
Automatic flow rate control ECM
cost effective solution for large volumes

The laminar flow, vertical or horizontal creates an overpressure zone, to guarantee a clean environment in sterile environment, up to ISO 5 (or more)
The laminar flow blowing ceiling, type PS (x) / EQL is particularly suitable for the handling and packaging of allergenic powders, antibiotics, hormones ... Weighing / sampling of raw materials.

**PS(X) / EQL**
Weighting booth : sampling booth

**Triple Protection :**
Operator
Product
Environment

Comply with standard:
**ISO 14644**

- custom made
- Automatic airflow regulation ECM
- Perfect sterility of product
- Integration of screens, printers ...
**Modular Cleanroom**

**SBM**

Clean environment

*Protection:*

- **Product**

*Comply with standard:*

**ISO 14644**

The laminar flow blowing ceiling, type PS (x) / EQL is particularly suitable for the handling and packaging of allergenic powders, antibiotics, hormones ...

Weighing / sampling of raw materials.

**Triple Protection:**

- **Operator**
- **Product**
- **Environment**

Comply with standard:

**ISO 14644**

**Modular Cleanroom**

- Clean environment

The cleanroom responds to an increasing demand from industry and research laboratories. The major asset is to improve air quality without altering the existing infrastructure.

- custom made (size, cleanliness level)
- modularity & Quality
- cost effective
SBM equipped with BSC cabinets (biological research)

SBM entrance with material pass trough

Sketches for approval are delivered before any production. This procedure guarantees very quick setup at installation.
**VFL**
Vertical laminar flow - Class ISO 5

The VFL is a vertical flow cabinet manufactured in COPLAST. COPLAST is an ultra clean expanded PVC for easy cleaning and decontamination. Its properties allow it to be installed in clean room and the handling of sensitive products. The filtration system based on a self-regulating unit type FANJET, guarantees a work in sterile and clean environment of ISO 5.

<table>
<thead>
<tr>
<th>VFL 9</th>
<th>VFL 12</th>
<th>VFL 18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td><strong>Overall</strong></td>
<td><strong>Internal</strong></td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>905</td>
<td>945</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>internal : 790</td>
<td>OVERALL : 1285</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>761</td>
<td></td>
</tr>
<tr>
<td><strong>Weight (kg)</strong></td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td><strong>Flow Rate</strong></td>
<td>750</td>
<td>990</td>
</tr>
</tbody>
</table>
UNIVERS MV
Vertical flow cabinet - Class ISO 5

Protection:
Product

Complies with standard:
ISO 14644

Manual regulation
Economical solution
Glass volume
Flip window

The cabinet ISO class 5 are designed to protect the product thanks to a vertical flow of sterile air.
The enclosure is easy to install and can be installed by you.

<table>
<thead>
<tr>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>905</td>
<td>700</td>
<td>592</td>
<td>30</td>
</tr>
<tr>
<td>925</td>
<td>1030</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>
IV GEL SPACE
Vertical laminar flow - Class ISO 5

The enclosures Type IV GEL consist of a blowing and filtration unit, guaranteeing work in a sterile environment.
The cabinets class ISO 5 are designed to protect the handling thanks to a vertical air flow.
The filtration system based on a self-regulating unit type FANJET, guarantees a work in sterile and clean environment of ISO 5.

<table>
<thead>
<tr>
<th></th>
<th>IV GEL SPACE 9</th>
<th>IV GEL SPACE 12</th>
<th>IV GEL SPACE 16</th>
<th>IV GEL SPACE 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (mm)</td>
<td>internal 885</td>
<td>internal 1190</td>
<td>internal 1556</td>
<td>internal 1792</td>
</tr>
<tr>
<td></td>
<td>Overall 930</td>
<td>Overall 1223</td>
<td>Overall 1573</td>
<td>Overall 1825</td>
</tr>
<tr>
<td>Height (mm)</td>
<td>internal 650</td>
<td>OVERALL 1015</td>
<td>internal 590</td>
<td>OVERALL 600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth (mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height base(mm)</td>
<td>1870</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (Kg)</td>
<td>80</td>
<td>100</td>
<td>130</td>
<td>150</td>
</tr>
</tbody>
</table>

ISO 14644

- ECM regulation
- Full front opening
- Glass volume
**IV GEL**

Vertical laminar flow - class ISO 5

The enclosures Type IV GEL consist of a blowing and filtration unit, guaranteeing work in a sterile environment.
The cabinets class ISO 5 are designed to protect the handling thanks to a vertical air flow.

*Other dimensions: please consult us.*

<table>
<thead>
<tr>
<th>IV GEL 6/9</th>
<th>IV GEL 6/12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Width</strong></td>
<td><strong>Height</strong></td>
</tr>
<tr>
<td>Internal</td>
<td>INTERNAL</td>
</tr>
<tr>
<td>Overall</td>
<td>OVERALL</td>
</tr>
<tr>
<td>869</td>
<td>650</td>
</tr>
<tr>
<td>905</td>
<td>OVERALL : 1030</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td><strong>Weight (Kg)</strong></td>
</tr>
<tr>
<td>Internal</td>
<td>INTERNAL : 592</td>
</tr>
<tr>
<td>OVERALL</td>
<td>OVERALL : 595</td>
</tr>
<tr>
<td>1187</td>
<td>60</td>
</tr>
<tr>
<td><strong>Flow rate (m3/h)</strong></td>
<td>750</td>
</tr>
<tr>
<td>1210</td>
<td>80</td>
</tr>
<tr>
<td>990</td>
<td></td>
</tr>
</tbody>
</table>
Vertical flow cabinet - class ISO 5

The V is a vertical flow enclosure made of COPLAST. COPLAST is an ultra clean expanded PVC for easy cleaning and decontamination. Its properties allow it to be installed in clean rooms and allow the handling of sensitive products. Optimum is handling protection thanks to a laminar air flow of class ISO 5.

<table>
<thead>
<tr>
<th></th>
<th>V 9</th>
<th>V 12</th>
<th>V 16</th>
<th>V 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>921</td>
<td>957</td>
<td>1226</td>
<td>1262</td>
</tr>
<tr>
<td>Height</td>
<td></td>
<td></td>
<td>OVERALL : 1370 / 2270 on base</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td></td>
<td></td>
<td>INTERNAL : 658</td>
<td>OVERALL : 766</td>
</tr>
</tbody>
</table>

Protection:
Product

Complies with standard:
ISO 14644

- 3 possible airflow schemes
- ECM regulation
- made in COPLAST
OPTIGEL
Horizontal flow cabinet - Class ISO 5

Complies with standard: ISO 14644

Protection:
- Opens completely
- ECM regulation
- Plexiglas side windows
- Stainless steel work surface

The enclosure Type OPTIGEL consist of a blowing and filtration unit. Optimum handling protection thanks to a sterile air flow of class ISO 5.

<table>
<thead>
<tr>
<th></th>
<th>OPTIGEL 9</th>
<th>OPTIGEL 12</th>
<th>OPTIGEL 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>internal</td>
<td>Overall</td>
<td>internal</td>
</tr>
<tr>
<td></td>
<td>920</td>
<td>925</td>
<td>1225</td>
</tr>
<tr>
<td>Height</td>
<td>INTERNAL</td>
<td>550</td>
<td>OVERALL</td>
</tr>
<tr>
<td></td>
<td>550</td>
<td>813</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td>INTERNAL</td>
<td>550</td>
<td>OVERALL</td>
</tr>
<tr>
<td></td>
<td>550</td>
<td>911</td>
<td></td>
</tr>
<tr>
<td>Height base</td>
<td>1740</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>80</td>
<td>100</td>
<td>150</td>
</tr>
</tbody>
</table>
The cabinets Type Optimum are designed to protect the product, thanks to a horizontal laminar airflow of class ISO 5. There are 12 models of Optimum.

The Optimum is made of COPLAST expanded PVC ultra clean and smooth, allowing an easy cleaning and decontamination. Its properties allow it to be installed in clean rooms and allow handling of sensitive products.
The BCS is an Extraction Fume Hood with vertical flow made in COPLAST. The fume hoods ensure the protection of the user and its environment thanks to a air negative pressure of the work area.

Designed from non-particle-resistant, chemical-resistant materials, they can integrate into a controlled atmosphere zone.

<table>
<thead>
<tr>
<th>BCS 9</th>
<th>BCS 12</th>
<th>BCS 16</th>
<th>BCS 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>921</td>
<td>1226</td>
<td>1531</td>
</tr>
<tr>
<td>Height</td>
<td>202</td>
<td>202</td>
<td>202</td>
</tr>
<tr>
<td>Depth</td>
<td>internal: 660</td>
<td>internal: 1200</td>
<td>overall: 1370</td>
</tr>
</tbody>
</table>
The T is designed to protect the user and its surrounding environment by means of an exhaust system. Made of non-particle-generating materials, they can be installed directly in clean rooms. The optimization of the dimensions makes it possible to integrate in any type of laboratory, even low ceiling.
The air is sucked through a G3 pre-filter by a powerful and quiet motor-driven fan.

The airflow is filtered by a HEPA filter (ULPA option). The MONOBLOC system guarantees the entire box.

The automatic flow control makes it possible to compensate for the clogging of the absolute filter and thus to ensure the constant air flow.

### I GEL

- Custom made
- ECM regulation
- Blue gel gasket for RSR Maintenance
- (with IGel 6/6 or 6/9 or 6/12)

### FANJET

- Customized adaptation
- Automatic regulation
- ECM regulation
- Fanjet 6/6; 6/9; 6/12
CONVOYAIR
Modular box with laminar flow

Laminar flow boxes designed to be integrated into customized structures.

Protection:
Product

Complies with standard:
ISO 14644

- Custom made
- Economic
- Stainless steel structure
- Freestanding

Examples of configurations

<table>
<thead>
<tr>
<th>CONVOYAIR CX 6/12</th>
<th>internal</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>1220</td>
<td>1360</td>
</tr>
<tr>
<td>Width</td>
<td>610</td>
<td>680</td>
</tr>
<tr>
<td>Height box</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Weight (Kg)</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Flow rate (m³/h)</td>
<td>1350</td>
<td></td>
</tr>
</tbody>
</table>
The S-type units are designed to put an ultra-filtered room air in positive pressure in order to reduce their dusting rate very effectively and very simply.

The integrated blower in the wall blows an ultra-filtered air inside the room. This air flow creates a barrier which prevents external particles from entering the room. This ensures the controlled environment thanks to air renewal in the room.
PROTEC I
Horizontal vacuum station / Weighing station

Double Protection :
Operator
Environment

☑️ Structure in COPLAST
☑️ Manual or auto control
☑️ Glass volume

This hood in negative pressure is designed to protect the user and its surrounding environment from any aero-contamination, thanks to a system of horizontal suction on an absolute HEPA filters. PROTEC I are particularly recommended for the handling of powders and harmful products ...

PROTEC I can be installed on a bench or on a base.

<table>
<thead>
<tr>
<th>PROTEC 81</th>
<th>PROTEC 12</th>
<th>PROTEC 161</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>internal</td>
<td>Overall</td>
</tr>
<tr>
<td>Width</td>
<td>775</td>
<td>825</td>
</tr>
<tr>
<td>Height</td>
<td></td>
<td>internal : 662</td>
</tr>
<tr>
<td>Depth</td>
<td></td>
<td>internal : 520</td>
</tr>
<tr>
<td>Weight</td>
<td>120</td>
<td>150</td>
</tr>
<tr>
<td>Flow rate</td>
<td>900</td>
<td>1400</td>
</tr>
</tbody>
</table>
Aspiration Station

POWDERJET
Horizontal safety bench / Weighing station

Negative pressure cabinets are designed to protect the user and its surrounding environment from all airborne contamination by means of a horizontal suction on an absolute filtration system. POWDERJET is particularly recommended for the handling of powders and harmful products...

Double Protection:
Operator
Environment

- Full opening
- ECM regulation
- Economic solution
- Stainless steel worktop

<table>
<thead>
<tr>
<th>POWDERJET 9</th>
<th>POWDERJET 12</th>
<th>POWDERJET 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>Height</td>
<td>Depth</td>
</tr>
<tr>
<td>internal</td>
<td>internal</td>
<td>internal</td>
</tr>
<tr>
<td>Overall</td>
<td>Overall</td>
<td>Overall</td>
</tr>
<tr>
<td>920</td>
<td>550</td>
<td>550</td>
</tr>
<tr>
<td>925</td>
<td>OVERALL : 813</td>
<td>OVERALL : 911</td>
</tr>
<tr>
<td>1225</td>
<td>1250</td>
<td>1820</td>
</tr>
<tr>
<td>1250</td>
<td>813</td>
<td>1840</td>
</tr>
<tr>
<td>1820</td>
<td>911</td>
<td></td>
</tr>
<tr>
<td>1840</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height with base</td>
<td>Weight</td>
<td></td>
</tr>
<tr>
<td>1740</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>
The C-PURE Recirculation Fume Hood is intended for the protection of persons handling dangerous substances from Category 1, 2 and 3 (CMR) and products which have an exposure limit value (ELV).
- Active carbon filters
- HEPA Filters

<table>
<thead>
<tr>
<th>C-PURE 9</th>
<th>C-PURE 12</th>
<th>C-PURE 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>966</td>
<td>1166</td>
</tr>
<tr>
<td>Height</td>
<td>internal : 855</td>
<td>OVERALL : 1150</td>
</tr>
<tr>
<td>Depth</td>
<td>internal : 520</td>
<td>OVERALL : 577</td>
</tr>
<tr>
<td>Weight</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Flow Rate</td>
<td></td>
<td>250</td>
</tr>
</tbody>
</table>

Double Protection:
- Operator
- Environment

Complies with standard: NFX 15211

- Structure in polycarbonate and painted steel
- Control panel 2 touches
- Easy maintenance
- Holding tank in PPH
The Recirculating Fume Hood, type UNIVERS MAV, is intended to protect the user and its environment close to volatile, harmful or malodorous products thanks to a system of vertical aspiration on activated carbon.
Recirculating Fume Hood with Horizontal suction

**AD**

Double Protection:
Operator Environment

Complies with standard: NFX 15211

- Structure in COPLAST
- Manual or auto control
- Large working area
- Active carbon filter with high absorption capacity

The AD-type recirculating Fume Hood is designed to protect the user and its surrounding environment from volatile, harmful or malodorous products thanks to a horizontal aspiration system on activated carbon.

AD is recommended for handling chemicals such as acid, alcohol, solvents, etc.

<table>
<thead>
<tr>
<th></th>
<th>AD 8</th>
<th></th>
<th>AD 12</th>
<th></th>
<th>AD 16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>internal</td>
<td>Overall</td>
<td>internal</td>
<td>Overall</td>
<td>internal</td>
</tr>
<tr>
<td>Width</td>
<td>733</td>
<td>823</td>
<td>1210</td>
<td>1210</td>
<td>1515</td>
</tr>
<tr>
<td>Height</td>
<td>internal: 640</td>
<td>OVERALL: 1150</td>
<td>internal: 640</td>
<td>OVERALL: 880</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td>internal: 520</td>
<td>OVERALL: 880</td>
<td>internal: 520</td>
<td>OVERALL: 880</td>
<td></td>
</tr>
<tr>
<td>Total weight</td>
<td>80</td>
<td>120</td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA Weight</td>
<td>30</td>
<td>60</td>
<td>60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Air showers are used before entering clean environment or clean room, the air shower ensures a complete dedusting of the outfits. This process can also decontaminate users who have manipulated powders at the exit of production zones.
The glove box can isolate critical products from oxidation. The structure of methyl methacrylate gives high resistance to corrosive agents and offers total visibility. The structure can be made of stainless steel or COPLAST.

Note: Realization of custom made structure according to special request.
- Nitrogen sweep
- Flowmeter
- Pass-through for material introduction - in / out, trash.
STORAGE BOX AND FURNITURE
Storage and furniture in clean environment

Protection:
Product

- Custom structure with options
- COPLAST / Stainless steel /
- GLASS / PLEXIGLAS

The boxes are designed for storage of sample in a neutral environment (pure gases) or to keep them protected from dust.

We offer the following furniture:
(Photos on request)
- BENCH / WORK SURFACE
- Shelves
- Cloakrooms
- Shoe benches
- Cupboard
- Lockers
- Wardrobes
These fans are designed for the ventilation of chemical cabinets, fume hoods, etc. They are particularly suitable for the extraction of corrosive vapors.

<table>
<thead>
<tr>
<th>Réf.</th>
<th>Power kW</th>
<th>Rotation speed (Rpm)</th>
<th>Connection diameter</th>
<th>Weight kg</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 202</td>
<td>0.18</td>
<td>2750</td>
<td>Ø 160</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>ADS 254</td>
<td>0.12</td>
<td>1370</td>
<td>Ø 200</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>ADS 242</td>
<td>0.37</td>
<td>2800</td>
<td></td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>ADS 314</td>
<td>0.25</td>
<td>1400</td>
<td>Ø 250</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>ADS 312</td>
<td>1.50</td>
<td>2850</td>
<td></td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td>ADS 354</td>
<td>0.37</td>
<td>1400</td>
<td>Ø 280</td>
<td>23</td>
<td>34</td>
</tr>
<tr>
<td>ADS 352</td>
<td>2.20</td>
<td>2870</td>
<td></td>
<td>32</td>
<td>45</td>
</tr>
<tr>
<td>ADS 404</td>
<td>0.55</td>
<td>1410</td>
<td>Ø 315</td>
<td>33</td>
<td>47</td>
</tr>
<tr>
<td>ADS 402</td>
<td>5.5</td>
<td>2850</td>
<td></td>
<td>33</td>
<td>47</td>
</tr>
<tr>
<td>ADS 454</td>
<td>1.10</td>
<td>1410</td>
<td>Ø 355</td>
<td>40</td>
<td>61</td>
</tr>
<tr>
<td>ADS 452</td>
<td>3.0</td>
<td>2860</td>
<td>Ø 355</td>
<td>37</td>
<td>72</td>
</tr>
</tbody>
</table>
Consumables and Disposables are included in the wide range of clean room products we can offer to our customers and include garments, wipes, swabs, mats etc.

ADS LAMINAIRE has chosen a USA supplier who has been manufacturing industrial wipes for more than 100 years and who has specialized since 1970 in the field of ultra cleanliness.

A fully detailed catalogue of consumables and disposable is available on request.
FLOW AIR FILTERS

Filters

With more than 50 years of experience in designing and producing a complete range of filters we can offer

- Expertise and know how at your disposable
- Competitive prices
- Standard and custom made filters
- Large warehouse in Aulnay Sous Bois, France with standard filters in stock (near CDG Paris Airport)
- Due to our design office and manufacturing plant, Flow Air Filters, are able to meet specialized an customized filter requests

A fully detailed catalogue of consumables and disposable is available on request.
Speed control

**Equipment:** Hot Wire Anemometer
**Objectives:** To carry out a mapping of the speeds and to check the laminarity of the airflow.
Measure frontal airflow velocity. Determine flow rates and hourly turnover rate.
**Equipment to be controlled:** Laminar flow cabinets, biosafety cabinets, clean rooms, blowing ceilings, fume hoods, recirculating fume hoods.

**Smoke test:** With Smoke tube.

Particle counting

**Used Equipment:** Laser particle counter
**Objectives:** To determine the dust class of an area.
Demonstrate leakage (by scanning filters) or contaminated areas.
**Equipment to be controlled:** Laminar flow cabinets, biosafety cabinets, Clean rooms, Blowing ceilings.
**Applicable standards:** ISO 14644, GMP

Other controls (please contact us)

- Qualifications (IQ/OQ/PQ)
- Sound level
- LIGHT intensity
- Bacteriological control
- Temperature / Hygrometry
- Saturation test of activated charcoal filters - SF6 gas confinement test

Spare parts

Quick response to requests or needs due to the large stock available in our warehouse in Aulnay Sous Bois warehouse
- 3000 Absolute filters (standard dimensions)
- 10000 Prefilters
- 500 Fans
- 500 electronic cards
- Various

Emery Integrity Test (option):

**Equipment:** Spectrophotometer Aerosol Generator (product used: Emery 3004)
**Objectives:** leak test of the filters by looking for leaks on the filter media and the frame.
**Material to be controlled:** Laminar flow cabinets, biosafety cabinets, Clean rooms, Blowing ceilings.
**Current standards:** ISO 14644, EN 12469

Maintenance

- Change filters (Absolute, pre-filters, activated carbon)
- Adjustment, compliance
- Decontamination (mandatory for any work on a station used for the manipulation of pathogenic germs)
- trash of the filters for destruction with issuance of a neutralization certificate
- Various repairs, parts change - Technicians specializing in laminar flow and clean rooms
- Detailed control reports
- Calibration certificates for all our measuring devices.
After sales service

Maintenance / Control & Validation

Speed control

Equipment:

- Hot Wire Anemometer

Objectives:

- To carry out a mapping of the speeds and to check the laminarity of the airflow.
- Measure frontal airflow velocity. Determine flow rates and hourly turnover rate.

Equipment to be controlled:

- Laminar flow cabinets,
- Biosafety cabinets,
- Clean rooms,
- Blowing ceilings,
- Fume hoods,
- Recirculating fume hoods.

Smoke test:

- With Smoke tube.

Emery Integrity Test (option):

Equipment:

- Spectrophotometer Aerosol Generator (product used: Emery 3004)

Objectives:

- Leak test of the filters by looking for leaks on the filter media and the frame.

Material to be controlled:

- Laminar flow cabinets,
- Biosafety cabinets,
- Clean rooms,
- Blowing ceilings.

Current standards:

- ISO 14644
- EN 12469

Other controls (please contact us)

- Qualifications (IQ/OQ/PQ)
- Sound level
- LIGHT intensity
- Bacteriological control
- Temperature / Hygrometry
- Saturation test of activated charcoal filters
- SF6 gas confinement test

Maintenance

- Change filters (Absolute, pre-filters, activated carbon)
- Adjustment, compliance
- Decontamination (mandatory for any work on a station used for the manipulation of pathogenic germs)
- Trash of the filters for destruction with issuance of a neutralization certificate
- Various repairs, parts change - Technicians specializing in laminar flow and clean rooms
- Detailed control reports
- Calibration certificates for all our measuring devices.

Spare parts

- Quick response to requests or needs due to the large stock available in our warehouse

- 3000 Absolute filters (standard dimensions)
- 10000 Prefilters
- 500 Fans
- 500 electronic cards
- Various

Particle counting

Used Equipment:

- Laser particle counter

Objectives:

- To determine the dust class of an area.
- Demonstrate leakage (by scanning filters) or contaminated areas.

Equipment to be controlled:

- Laminar flow cabinets,
- Biosafety cabinets,
- Clean rooms,
- Blowing ceilings.

Applicable standards:

- ISO 14644
- GMP

S A v