The safety storage cabinet for storing and filtering various hazardous materials
Flammable, toxic or environmentally hazardous substances, acids and bases: In our modern industrial world, the trend is moving towards the use of small quantities of hazardous materials, but the number of different chemicals is increasing steadily! This makes correct handling and storage of these materials vitally important as incorrect storage can cause problems such as: a build up of unpleasant odours; vapours that are harmful to health; corrosion damage to storage equipment from acids; lack of connection options for technical ventilation of safety storage cabinets; an almost unending demand to store small quantities of hazardous materials.

The solution is provided by asecos’ recirculating air filter storage cabinets - a combined hazardous materials cabinet and recirculating air filter unit, with or without fire protection. With robust and corrosion resistant interior equipment, the cabinet is capable of joint storage of different chemicals. The recirculating air filter technology extracts dangerous vapours of any kind directly at the source ensuring filtration and the return of clean air to the installation room.

The benefits at a glance

- Permanent and supervised technical ventilation of the cabinets, no exposure of hazardous vapours to employees
- Elimination of EX zones around the cabinet (when storing flammable liquids)
- Avoid complex wall and ceiling openings and expensive exhaust air ducts
- High flexibility when selecting the installation location - plug in solution
The technology - how does the recirculation air filter work?

Multi-stage wideband filters (e.g. FlameFlex: five-step) with a high absorbency capacity are used in all models. An optimised combination of the most diverse, partly impregnated types of activated carbon achieves the correspondingly required wideband effect in all devices.

Depending on the model, asecsos recirculating air filter storage cabinets are able to permanently retain more than 99.998 % of the vapours from hydrocarbons and inorganic hazardous materials up to filter saturation.

The filters used for the filtering of inorganic hazardous materials must be checked with all models by means of a manual testing device for filter saturation. This is supported by an electronic reminder function (visual and audible). The models from the FX-LINE additionally carry out the automatic electronic detection of hydrocarbons. The filter and exhaust air monitoring is displayed on the touch panel. Visual and audible warning signals and a voltage free switch contact provide for maximum safety.

All models are equipped with a control filter. As a last resort, the control filter ensures your protection in the event of accidental damage. Should the unlikely event of a filter breakthrough occur (e.g. in case of over-saturation) the control filter will retain the pollutants for a certain period of time and prevent the release of hazardous vapours into the surrounding air.
The recirculating air filter storage cabinets of the FlameFlex and ChemFlex model groups combine the regulatory compliant storage of hazardous materials with safe, technical ventilation in the most efficient way.

They form a system comprising two components - the asecos safety storage cabinet and a recirculating air filter module, which are individually covered by the applicable certifications and documentations:

**Component safety storage cabinet**
(Q90.195.xxx/Q30.195.xxx in FX-models, SL.196.xxx in SLX-models)
- Fire resistance test of safety storage cabinets in accordance with EN 14470-1 (FX LINE only)
- GS-test of the safety storage cabinets according to ProdSG and the requirements of the laboratory furniture standard EN 14727

**Component recirculation air filter module**
- Certification by accredited measuring point infraserv utmost in accordance with GefStoffV (German Hazardous Substances Act), test report no. S084-14

**Recirculating air filter storage cabinet**
- CE-declaration of conformity
- ATEX conformity CE II 3 /-G Ex ic nA IIB T4 Gc (FX-LINE only)

Our certified quality management system in accordance with the international standard ISO 9001 as well as voluntary, permanent external monitoring by a recognised and independent material testing body ensures a consistently high quality standard for all asecos products.
There are innumerable hazardous materials with different characteristics and requirements. Every application requires a suitable solution. Three different model lines offer the right product for every range of application. Need assistance in the selection of your cabinet? As experts on the subject of hazardous materials storage and extraction we are happy to help you.

**FX LINE**
For the fire-protected storage of hazardous materials of any kind.
5 different models are available for selection

**SLX LINE**
For the safe storage of acids and bases.
2 different models are available for selection

**CX LINE**
For safe storage of non-flammable liquids and toxins.
3 different models are available for selection
RECIRCULATING AIR FILTER STORAGE CABINETS OF FX-LINE

For the fire-protected storage of hazardous materials of any kind.

Safety in operation
The user-friendly touch display offers electronic monitoring of:
- Filter saturation by hydrocarbons
- Service intervals
- Air change rates

Door choices
Choose from:
- Separately lockable wing doors and cabinet body with dividing wall
- Wing doors with glass cut-out - for a quick overview of the stored substances
- Wing doors with single-handed operation - for easy opening of two doors with one hand, automatic door closing

Interior equipment
Choose between:
- Height adjustable shelves
- Type-tested bottom collecting sumps
- Drawers
- Metal-free tray shelves
Model Information / Equipment Order No.
FX90.229.120.MV Without interior equipment, with vertical dividing wall 33286

Interior equipment packages (can only be ordered in combination with the cabinet)
- Material
  - 3x shelf, 1x perforated insert, 1x bottom collecting sump (PP), 6x drawer (sheet steel powder-coated)
- Material
  - 3x tray shelf (V=13.0L), 1x bottom collecting sump (V=11.0L)

Material
- sheet steel powder-coated RAL 7035, PP grey 33656
- sheet steel powder-coated RAL 7035, PP grey 33657

Order No. 33286-041-33657 (base cover optional)

Function / construction:
- robust construction and longevity: triple hinged door, safety elements assembled outside the storage compartment for increased protection against corrosion, scratch- and impact-resistant surface, easy to clean
- easy handling with comfort: doors stop in any position, self-closing in the event of fire
- no unauthorised use: doors lockable with cylinder locking (integration in an existing locking system possible) and locking state indicator (red/green)
- easy transport: integrated transport base with removable, optional base cover
- easy alignment: adjusting aids to compensate for uneven floor

Model with dividing wall:
- Separately lockable compartments and a choice of interior equipment allow separate storage of the most different hazardous materials in one cabinet

Recirculating air filter storage cabinet
Model FX90.229.120.MV

Body colour Anthracite grey (RAL 7016), with wing doors in Light grey (RAL 7035), interior equipment with 3x tray shelf, 1x bottom collecting sump (PP), 6x drawer (sheet steel powder-coated)

Order No. 33286-040-33657

Order example - how to order correctly

Experti REMARK
The only product on the market that offers fire-protected storage of a wide range of hazardous materials and air filter recirculation technology in one.

Andreas Hübner
Product Manager asecos GmbH

Ready for dispatch within 7 Days 2 Weeks
Recirculating air filter storage cabinet
Model FX30.229.086.WDFW
Body colour Anthracite grey, with wing door incl. glass cut-out in Light grey (RAL 7035), interior equipment with 3 x shelf, 1 x perforated insert, 1 x bottom collecting sump (sheet steel powder-coated).
Order No. 32946-061-33622 (base cover optional)

Recirculating air filter storage cabinet
Model FX30.229.086.WDFW
Body colour Anthracite grey, with wing door incl. glass cut-out in Traffic red (RAL 3020), interior equipment with 6 x drawer (sheet steel powder-coated).
Order No. 32946-066-33629 (base cover optional)

Model with wing door and large glass cut-out:
- Quick and easy overview of the stored containers - even with closed doors

Function / construction:
- Robust construction and longevity: triple hinged door, cabinet body made of melamine resin and flame retardant special plates, safety elements assembled outside the storage compartment for increased protection against corrosion, doors with metal front as well as scratch-and impact-resistant surface, easy to clean
- Easy handling with comfort: doors stop in any position, self-closing in the event of fire
- No unauthorised use: doors lockable with cylinder locking (integration in an existing locking system possible)
- Easy transport: integrated transport base with removable, optional base cover
- Easy alignment: adjusting aids to compensate for uneven floor
**Model with automatic door closing:**
Convenient and safe removal or storage of containers due to one-hand operation and automatic door closing.

**Function / construction:**
- **robust construction and longevity:** triple hinged door, safety elements assembled outside the storage compartment for increased protection against corrosion, scratch- and impact-resistant surface, easy to clean
- **effortless use:** one-hand operation for double-door cabinets
- **no unauthorised use:** doors lockable with cylinder locking (integration in an existing locking system possible) and locking state indicator (red/green)
- **easy transport:** integrated transport base with removable, optional base cover
- **easy alignment:** adjusting aids to compensate for uneven floor

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### Recirculating air filter storage cabinet

**Model FX90.229.090.WDAC**
- Body colour Anthracite grey (RAL 7016), with wing door in Warning yellow (RAL 1004), interior equipment with 3 x shelf, 1 x perforated insert, 1 x bottom collecting sump (sheet steel powder-coated)
- Order No. 32910-046-33622 (base cover optional)

**Model FX90.229.060.WDAC**
- Body colour Anthracite grey (RAL 7016), with wing door in Warning yellow (RAL 1004), interior equipment with 4 x drawer (sheet steel powder-coated)
- Order No. 32915-040-33608 (base cover optional)

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### Interior equipment packages for FX90.229.120.WDAC

**Material**
- 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)
- 4x drawer (V=19.0L)
- 6x drawer (V=10.0L)
- Sheet steel powder-coated RAL 7035

**Material**
- 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=22.0L)
- 4x drawer (V=10.0L)
- 6x drawer (V=15.0L)
- Sheet steel powder-coated RAL 7035

**Material**
- 3x shelf, 1x perforated insert, 1x bottom collecting sump (V=33.0L)
- 4x drawer (V=30.0L)
- 6x drawer (V=5.0L)
- Sheet steel powder-coated RAL 7035

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### Accessories for FX90.229.120.WDAC and FX90.229.090.WDAC

**Activated carbon replacement filter**
- Activated carbon
- 270 x 270 x 165
- 32905-046-33635

**Base cover for FX90.229.120.WDAC**
- Sheet steel powder-coated RAL 7016
- 818 x 35 x 85
- 30906-046-33622

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**Activated carbon replacement filter**
- Activated carbon
- 270 x 270 x 165
- 32915-040-33635

**Base cover for FX90.229.090.WDAC**
- Sheet steel powder-coated RAL 7016
- 524 x 35 x 85
- 30112-040-33622

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**EXPERT REMARK**
With normal usage of the Flameflex cabinets, we recommend a filter change every 12 months. The experts at asecos are happy to assist you!
For the safe storage of acids and bases

**Safety in operation**
The filters used for the filtering of inorganic hazardous materials must be checked with all models by means of a manual testing device for filter saturation. This is supported by an electronic reminder function (visual and acoustic). The check itself takes place using suitable means of testing (e.g. test tube with pump).

**High quality and durable**
Exterior body made of powder-coated sheet steel and interior body made of highly resistant melamine resin-coated special panels - highly corrosion resistant.

**Interior equipment**
Corrosion-resistant pull-out shelves offer maximum safety and are particularly suitable for the clear storage of small containers.
Recirculating air filter storage cabinet
Model SLX.230.120.MV
in Light grey (RAL 7035), interior equipment with 8 x pull-out shelf (panel/PP)
Order No. 32936-001-30607

Recirculating air filter storage cabinet
Model SLX.230.060.MH
in Light grey (RAL 7035), interior equipment with 6 x pull-out shelf (panel/PP)
Order No. 32939-001-30615

Function / construction:
- **robust construction and longevity:** cabinet body made of powder-coated sheet steel, safety elements assembled outside the storage compartment for increased protection against corrosion
- **easy handling with comfort:** doors stop in any position, self-closing in the event of fire
- **unauthorised use:** doors lockable with cylinder locking (integration in an existing locking system possible)
- **two in one:** two hermetically separated storage compartments allow the isolated storage of acids and bases in one cabinet
- **easy alignment:** adjusting aids to compensate for uneven floor

**EXPERT REMARK**
Filters for SLX models are filled with specially coated activated carbon. Chemisorption permanently binds hazardous materials to the surface of activated carbon. Hydrochloric acid is particularly suitable as a guiding component for manual filter saturation control. Tests with direct-indicating test tubes are performed quickly (usually only 1 stroke).

**Order example - how to order correctly**

<table>
<thead>
<tr>
<th>Model</th>
<th>Information / Equipment</th>
<th>W x D x H (mm)</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLX.230.120.MV</td>
<td>without interior equipment, with vertical dividing wall</td>
<td>1197 x 615 x 2300</td>
<td>32936</td>
</tr>
<tr>
<td>SLX.230.060.MH</td>
<td>without interior equipment, with horizontal dividing wall, left hinged</td>
<td>600 x 615 x 2300</td>
<td>32939</td>
</tr>
<tr>
<td>SLX.230.060.MH.R</td>
<td>without interior equipment, with horizontal dividing wall, right hinged</td>
<td>600 x 615 x 2300</td>
<td>32942</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Body colour</th>
<th>Door colour</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light grey RAL 7035</td>
<td>Light grey RAL 7035</td>
<td>001</td>
</tr>
</tbody>
</table>

Intermediate equipment packages for SLX.230.120.MV

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>panel/PP</td>
<td>30607</td>
</tr>
</tbody>
</table>

Intermediate equipment packages for SLX.230.060.MH(R)

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>panel/PP</td>
<td>30614</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>activated carbon</td>
<td>32953</td>
</tr>
</tbody>
</table>

Sven Sievers
Head of Division
Product Management & Marketing asecos GmbH
For safe storage of non-flammable liquids and toxins

**Safety in operation**

The filters used for the filtering of inorganic hazardous materials must be checked with all models by means of a manual testing device for filter saturation. This is supported by an electronic reminder function (visual and acoustic). The check itself takes place using suitable means of testing (e.g. test tube with pump).

**Door variants**

Choose from:
- Wing doors with glass cut-out - for a quick overview of the stored hazardous materials
- 4 wing doors - the separate sections allow optimal matching to the stored materials

**Interior equipment**

Choose between:
- Height adjustable shelves
- Type-tested bottom collecting sumps
- Pull-out shelves
Recirculating air filter storage cabinet CX-CLASSIC-G
Model CX.229.081.WDFW
Body colour Anthracite grey (RAL 7016), with wing doors incl. glass cut-outs in Light grey (RAL 7035), interior equipment with 3 x shelf, 1 x perforated insert, 1 x bottom collecting sump (sheet steel galvanised)
Order No. 32929-041-30542

Recirculating air filter storage cabinet CX-CLASSIC-MultiRisk
Model CX.229.105.MM.4WD
Body colour Anthracite grey (RAL 7016), with wing doors in Pure white (RAL 9010), interior equipment with 2 x shelf, 1 x bottom collecting sump, 2 x perforated insert, 1 x bottom collecting sump (sheet steel powder-coated), 4 x pull-out shelf (sheet steel/polyethylene powder-coated/–)
Order No. 32933-050-30807

**Function / construction:**
- **robust construction and longevity:** robust, high-quality, scratch-resistant outer body with powder-coated textured surface
- **no unauthorised use:** doors lockable with cylinder locking (integrated in the turning handle)
- **easy alignment:** adjusting aids to compensate for uneven floor
- **Model MultiRisk - all in one:** different compartments (multiple separation) allow the storage of different hazardous materials in one cabinet

**Exper**

The preferred recirculating air filter solution for safe storage of non-flammable and non-aggressive hazardous materials.

**Andreas Hübner**
Product Manager asecos GmbH

**Order example - how to order correctly**

32933 — 041 — 30805

**Limited**

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**Interior equipment packages for CX.229.105.MM.4WD**

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sheet steel powder-coated, sheet steel galvanised</td>
<td>30805</td>
</tr>
<tr>
<td>sheet steel/polyethylene powder-coated</td>
<td>30807</td>
</tr>
</tbody>
</table>

**Interior equipment packages for CX.229.105.WDFW**

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sheet steel galvanised</td>
<td>30508</td>
</tr>
<tr>
<td>sheet steel powder-coated</td>
<td>30516</td>
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</table>

**Interior equipment packages for CX.229.081.WDFW**

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sheet steel galvanised</td>
<td>30542</td>
</tr>
<tr>
<td>sheet steel powder-coated</td>
<td>30548</td>
</tr>
</tbody>
</table>

**Accessories for CX.229.105.MM.4WD and CX.229.105.WDFW**

<table>
<thead>
<tr>
<th>Material</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>activated carbon</td>
<td>270 x 270 x 165</td>
</tr>
</tbody>
</table>

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* CX.229.105.MM.4WD only available in this colour combination
We are extremely specific about the maintenance of your safety-related equipment. Particularly as safety storage cabinets with recirculating air filter technology are designed to prevent the worst possible damage to people and the environment in an emergency and every day situation.

The full function of the device is guaranteed only with proper use and regular maintenance or filter replacement. If the product is not properly serviced, it may result in filter failure and other malfunction. This would result in the exposure of health-endangering hazardous material vapours and lack of fire protection. Legally, improper maintenance can have dire consequences: in the event of damage, operators may not only lose their insurance cover but also incur immense, unmanageable costs such as production stop, relocation of the production, logistical changes, etc.

Rely on the asecos original service! Our specialised Service Technicians ensure the safe functioning of your recirculating air filter storage cabinets.

The annual safety-related inspection of the cabinets of the FX, CX and SLX-LINE through asecos includes:

- Safety inspection, fire protection inspection incl. functional test of the cabinet
- Air-technical inspection of the filter components
- Filter change including professional disposal of the contaminated filter
- Legal security check (installation conditions, statutory labelling)
- 12 months warranty on the services

Commissioning

The FlameFlex and ChemFlex cabinets are delivered as two individual components. After the cabinet has been positioned and leveled, you can put the recirculating air filter attachment into operation in just a few steps. You can easily install the plug-in recirculation air filter technology by yourself. Your device is ready for use in four steps:

1. Unpack the device, open the housing front and remove the filter
2. Place the recirculating air filter system on top of the cabinet and connect it to the cabinet ventilation
3. Insert the filter unit, fasten it and close the housing front
4. Plug in the low-temperature IEC power cable and switch on the device

We offer you all of the above services through our comprehensive competent service team across a wide geographical area. Contact us at info@asecos.com.
With every safety storage cabinet with recirculation air filter technology, you will receive an asecos recommended list of substances. The reference book clearly shows all substances and mixtures suitable for storage and offers insights into the testing and testing procedures of our recirculating air filter storage cabinets. Furthermore, the list was developed in close cooperation with the accredited measuring station for hazardous materials of Infraserv GmbH & Co. Höchst KG.
**Caption**

- Type 90
- Type 30
- CE declaration
- Flammable liquids
- Skin irritation
- Acute toxicity
- Corrosive (limited)
- Dangerous for the environment
- asecos warranty

- Recirculating air filter
- Wing door
- Wing door with glass cut-out
- Profile cylinder locking
- Dividing walls
- One-hand operation for double door cabinets
- Automatic door closing system
- Adjusting aids

**Imprint**

We refer to the general terms and conditions of asecos GmbH under www.asecos.com as well as to the sales conditions of your respective seller/trading partner.

**Disclaimer:**

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