

Fortuna

“Premier Vertical Flow Clean Air Cabinets”

That sets the standards in quality, design, and innovation from a heritage of over 40 years experience in clean-air design technology and engineering, giving the ultimate in product protection and operator comfort.

»ScanLaf

*Probably the best in Class 1, Class 2
and Laminar flow technology.*

Fortuna Clean Air



Fortuna

Premier Vertical Flow
Clean Air Cabinets

"Advanced designs with the integration of energy-saving technologies epitomises the Fortuna range of clean air cabinets. In your daily work you will experience the advantages of clean air technology at its best."

"The Fortuna vertical laminar air flow provides the best in product protection with innovation and customised options suited to your individual requirements."

Optimal Operator Comfort

- Angled front window that gives a correct ergonomic working position.
- Side windows and glare free rear wall for ultimate visibility & comfort.
- Diffused laminator allows shadow-free, variable light distribution in the chamber with no shadows.
- Front window options, with fixed 35cm or 55cm openings or motorised variable opening.
- Eye level control panel with reduced speed function, hour counter, light and alarm indication.

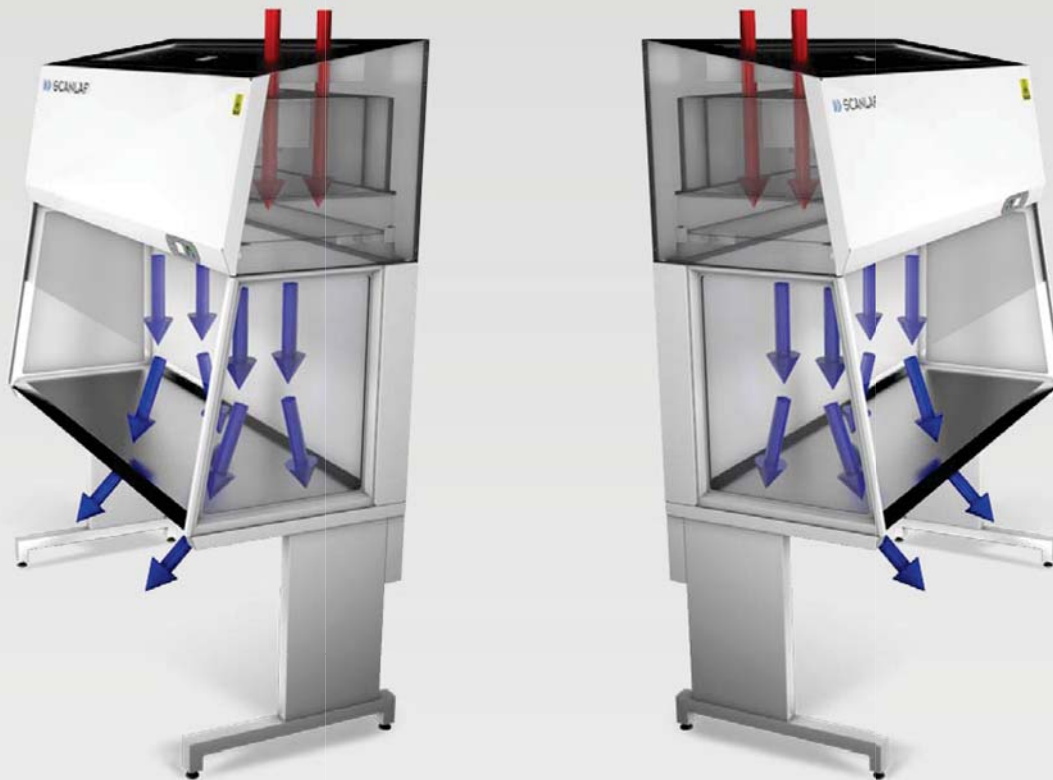


The Fortuna range of cabinets offer the ultimate in sample protection, operator comfort and optional fittings.

Ultra Clean Environment

- 11cm deep HEPA/ULPA filters; EN1822 with efficiency of 99.999% against 0.3 μ particles.
- Diffuser technology giving turbulent-free air flow and laminarity > \pm 10 %.

- Easy cleaning and decontamination of all surfaces.
- Angled Pre-filter for easy inspection and filter exchange.




Energy Saving Benefits

- Digital technology & EC fans* equates to low energy consumption of 0.7amps.
- Use of low energy fans allows the use of 11cm deep HEPA filters giving longer filter life.
- Low energy consumption results in less heat transmission to work chamber, lower evaporation of any samples, less laboratory air conditioning requirements.

- Digital control operation.
- More efficient, less energy consumption.
- Lower operating temperatures & increased life.
- Quieter in operation, < 47dBA.
- Enables alarm outputs, speed monitoring & control, reduced starting current.

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***EC Fans from Papst™ are DC output fans with integrated AC converters which are at the leading edge of energy saving technology, giving the following advantages:**



All cabinet controls and functions easily viewed from both a standing or seated position.

Eye Level Control Panel

- Gives view of all cabinet functions from both standing or seated position
- Functions for fan speeds, resettable hour counter, lighting level, UV light timer and air flow alarm indication
- Service program access via key pad code

Microprocessor Control

- Precise, direct fan speed settings, control & measurement giving low noise levels.
- Airflow control for down flow air measurement with precise alarm settings.
- Energy saving reduced speed facility for fast, safe start up and for maintaining cabinet integrity whilst cabinet is unattended..
- Automatic start up/shut down via time setting.



| Fortuna Model | External Dimensions (DxWxH) (mm) |
|----------------|----------------------------------|
| Fortuna F-900 | 679 x 1016 x 1253 |
| Fortuna F-1200 | 679 x 1321 x 1253 |
| Fortuna F-1500 | 679 x 1626 x 1253 |
| Fortuna F-1800 | 679 x 1931 x 1253 |

| Fortuna Model | Working Chamber Dimensions (DxWxH) (mm) |
|----------------|---|
| Fortuna F-900 | 530 x 950 x 646 |
| Fortuna F-1200 | 530 x 1255 x 646 |
| Fortuna F-1500 | 530 x 1560 x 646 |
| Fortuna F-1800 | 530 x 1865 x 646 |

| Working Height (cm) | Overall Height H (mm) |
|---------------------|-----------------------|
| 76 - 81 | 1982 - 2032 |
| 79 - 84 | 2012 - 2062 |
| 89 - 94 | 2112 - 2162 |

Slender, Compact Design

The Fortuna cabinets can either be bench or stand mounted, with an overall depth of less than 80cm they are easily located in the laboratory and moved without disassembly.

The low cabinet height when on support stand of 2metres, allows for easy location and positioning.

Service Access

All service is performed from the front of the cabinet, including:

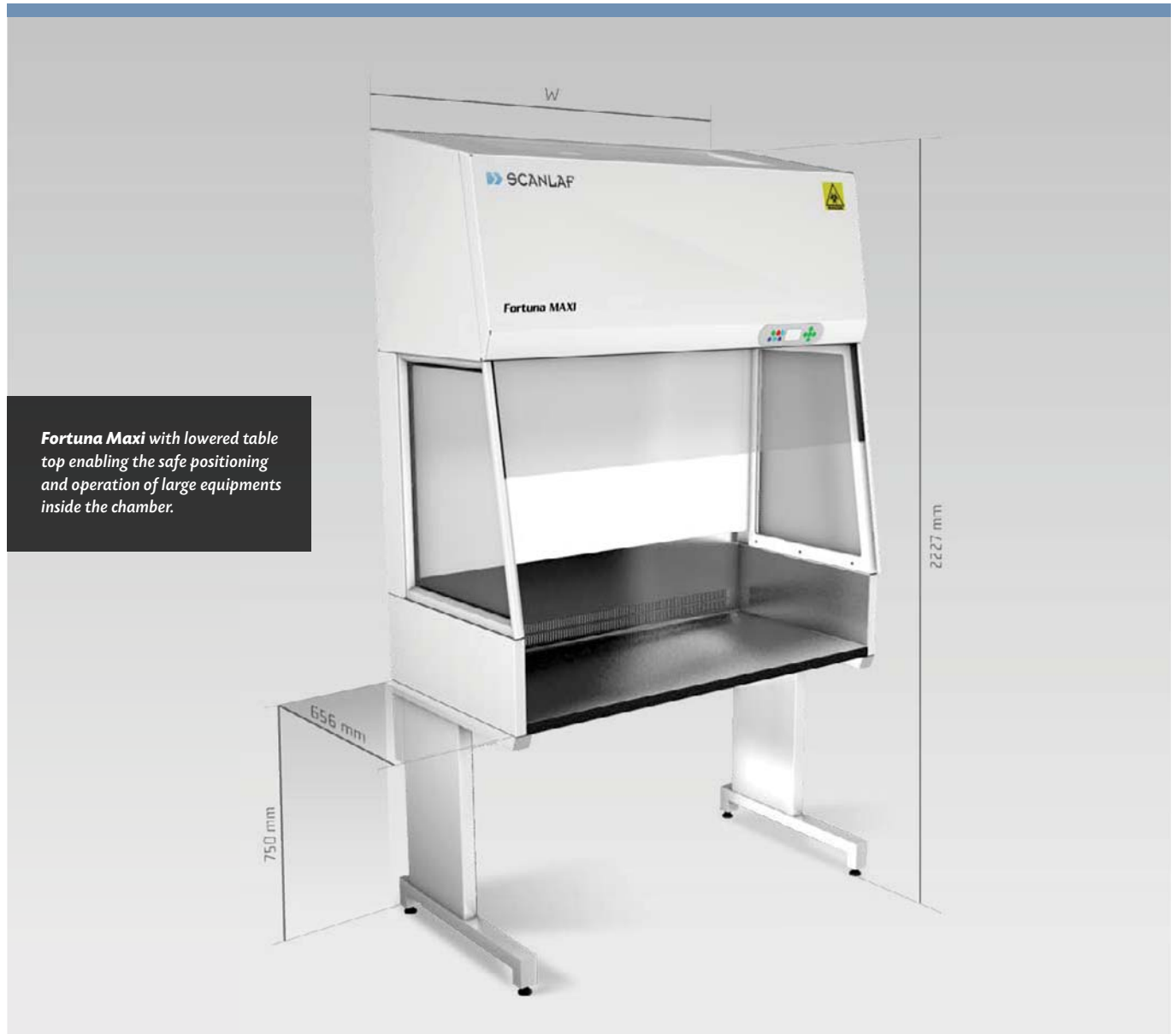
- Change of HEPA filters.
- Adjustment or change of circuit boards and sensors.
- All adjustments to alarms, fan speeds are made via the micro-processor control panel - (Service code protected).

Options

- USB port for pc connection, data logging or air flow speeds, alarms, settings. Link up to BMS or central alarm systems
- High Work opening of 35 cm or 55 cm to front window.
- Electrically operated, elevated support stand.
- Wall mounted (without support stand).
- Eco-Save auto-start/auto-stop using PIR sensor (Passive Infra Red).
- Standard height of 65 cm internally – optional.

Fortuna Maxi

The Fortuna Maxi is designed and constructed to give a large internal working height of 90 cm, thus providing a clean air environment for the positioning and location of large equipments such as fermenters, robotic manipulators etc.



Large Equipments in a Clean Air Environment

- Allows equipments to be located safely.
- Safe and convenient operation of equipments in the chamber.
- Turbulent-free clean air protection.
- Low centre of gravity with equipments located maximises overall stability.
- All round visibility of equipments inside the chamber.
- High fixed front opening of choice 62 cm or 82 cm or motorized.

Designed for most Applications

The Fortuna cabinet's versatility of design allows for ultimate adaptability for many specific applications and procedures, whilst ensuring total product/sample protection..

Bespoke configurations can be incorporated within the Fortuna cabinet's enclosure, thereby giving total protection for the protocols being performed.

These include:

- Weighing applications with an anti-vibration plate inserted into the work top, weighing to 6 decimal places.
- Location of fermenters or robotic manipulators, with lowered table tops and increased cabinet depth dimensions.
- IVF procedures with built-in heated and/or cooled table top sections with microscope installed.
- UV light positioned on rear wall, with timer and working aperture closure, for PCR protocols.
- ULPA filter installation to enable servicing of micro-electronics and delicate/sensitive instruments. Optical lens and contact lens production.



Technical Specifications

| Model | Unit | F-900 | F-1200 | F-1500 | F-1800 |
|---|-------------------|---|---|---|---|
| Catalogue no. | - | 9.000.023.000 | 9.000.020.000 | 9.000.022.000 | 9.000.021.000 |
| External dimensions (D x W x H) | mm | 679 x 1016 x 1253 | 679 x 1321 x 1253 | 679 x 1626 x 1253 | 679 x 1931 x 1253 |
| Working chamber, dimensions (D x W x H) | mm | 530 x 950 x 646 | 530 x 1255 x 646 | 530 x 1560 x 646 | 530 x 1865 x 646 |
| Working height | m | 0,75-0,95 in 2,5 rooms | 0,75-0,95 in 2,5 rooms | 0,75-0,95 in 2,5 rooms | 0,75-0,95 in 2,5 rooms |
| Front opening, fixed | mm | 350 optional 550 | 350 optional 550 | 350 optional 550 | 350 optional 550 |
| Air velocity, vertical flow | m/s | 0,28 (adjustable 0.10-0.70) | 0,28 (adjustable 0.10-0.70) | 0,28 (adjustable 0.10-0.70) | 0,28 (adjustable 0.10-0.70) |
| Air velocity, deviation | ±% | 10 | 10 | 10 | 10 |
| Down flow rate | m ³ /h | 500 | 650 | 810 | 975 |
| Noise level, ISO 6081 | dB(A) | <47 | < 47 | < 47 | < 47 |
| Light intensity variable | Lux | 0-2000 | 0-2000 | 0-2000 | 0-2000 |
| HEPA filters, EN 1822 | - | « Efficiency is 99.999 % against 0.3 µm particle H-14 size 99.995 % in MPPS » | | | |
| Voltage/frequency | V/Hz | 220-240/50-60 or 110-120/50-60 | | | |
| Negative pressure chamber | - | Yes | Yes | Yes | Yes |
| Clean room box design | - | Yes | Yes | Yes | Yes |
| Power consumption | W | 180 | 180 | 220 | 220 |
| Fuses | A | 10 | | | |
| Window material | - | Hardened safety glass | Hardened safety glass | Hardened safety glass | Hardened safety glass |
| Cabinet material | - | Polyester coated steel/AISI 304 Stainless steel | Polyester coated steel/AISI 304 Stainless steel | Polyester coated steel/AISI 304 Stainless steel | Polyester coated steel/AISI 304 Stainless steel |
| Net weight | kg | 150 | 170 | 190 | 210 |
| Shipping volume | m ³ | 2.2 | 2.9 | 3.2 | 4.1 |



LaboGene™ is a Danish Company that specialises in the design, development, manufacture and sales of laboratory and industrial equipments in the fields of Clean Air & Laminar Flow, Vacuum & Cooling and Centrifugation.

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Clean Air & Laminar Flow

ScanLaf represents the best in Class II and laminar flow cabinets with the advantage of low energy consumption, digital control and ergonomic design.

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The Industrial **ScanLaf** program offers a range of Down Flow modules and enclosures for powder and animal handling as well Air showers and Glove boxes, all of which can be produced to Customers specifications. A truly unique bespoke portfolio!

Vacuum & Cooling

ScanVac epitomizes the best in Freeze Drying and Vacuum Concentration equipments and offers a wide range of bench or floor standing units with temperatures down to -110 °C.

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Together with accessories and components compatible with previous Danish produced models, **ScanVac** can offer continuity of supply, service, advice and assistance.

ScanCool the brand that describes a range of Ultra Freezers for sample storage offering a choice of Chest or Upright models from 100 to 600 litres capacity. Environmentally friendly and energy saving design concepts are standard features of all units in the ScanCool range.

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The **ChillSafe** range of cooling & cryogenic baths and circulators with capacities of 8 to 18 litres and temperatures from -30 °C to -90 °C completes the ScanCool offering.

Centrifugation

ScanSpeed, the name that defines quality centrifuges from **LaboGene**. Offering bench-top high and low speed models with or without refrigeration for today's discerning laboratory technician. Quality engineering with modern designs and features that exemplifies Danish craftsmanship.

Incubators & Environmental Testing

ScanCell-Caron, a range of CO2 Incubators & Environmental Chambers that bring a new dimension to Cell Culture and the Environmental Sciences.

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The ScanCell-Caron programme provides innovative designs, superior build quality and complete sample security and with over 30 years experience and expertise we offer today's scientists the best in Incubator and Environmental chamber technology available today.



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