

WEIGHING CABINET

FASTER WS

MICROPROCESSOR CONTROLLED WITH DOUBLE FAN

FOREWORD

Degrees of concentration and 'activity' levels of Active Pharmaceutical Ingredients (API) have seen a strong increase in use in recent years – with a reduction at the same time of quantities employed. This required provision of better protection for the operators and the environment while handling hazardous, toxic compounds.

WS Weighing Cabinets or powder weighing stations belong to the latest generation of laminar flow cabinets, combining rigid safety requirements with high quality construction.

WS Weighing Cabinets have been designed as Class II Microbiological Safety Cabinet to conform to EN 12469:2000 Standard.

These provide ISO5 vertical laminar airflow with part of the air recirculated via the main H14 HEPA filter, whilst the remaining part is discharged through an exhaust Class H14 HEPA filter. These cabinets protect operators, the products and the environment.



APPLICATIONS

FASTER WS Weighing Safety Cabinets can be used in a wide range of disciplines as they are particularly suitable for laboratory or industrial applications - where it is necessary to handle and weigh toxic, irritant or carcinogenic powders - such as drugs, chemicals, cosmetic and other hazardous compounds.

BENEFITS

- Weighing accuracy: 0.00001g= 0.01 mg
- Special "weighing work surface" in order to reduce vibrations to 0.002 mm RMS
- 250mm x 350mm x 20 mm weighing-slab (in granite). Other dimensions are available on request.
- Sophisticated microprocessor based monitoring system
- Self-adjusting airflow-control system to ensure a constant laminar airflow speed even in the presence of a progressive saturation or clogging of the filters.
- The negative pressure plenum "bio-dynamic seals" ensure that all powder particles are kept inside the system and are automatically drawn to the pressure chamber to be captured by the main and exhaust HEPA filters.
- The fan system assures that no part of the cabinet is under contaminated positive pressure, thus protecting the environment and personnel from exposure to contaminants.
- Access from the front panel for ease of maintenance service.
- A special software provides the possibility to work at two different vertical LAF speeds: 0.40 m/sec or 0.30 m/sec , by pressing the "reduction" button. In both cases the air barrier velocity is maintained at 0.45 m/sec, guaranteeing protection to operators and the laboratory.

SPECIFICATIONS

Construction: Epoxy powder-coated steel structure for enhanced strength and added chemical resistance to corrosive compounds and atmospheric agents.

Work Surface: solid Stainless- Steel AISI-316L grade work-top consisting of autoclavable sections. On request the following work surfaces are available:

- AISI-316L grade Stainless Steel perforated work surface in one or more pieces
- AISI-316L grade Stainless Steel solid work surface in one-piece

Work Chamber: in AISI-304 grade Stainless Steel interior.

Filters: Two Class H14 HEPA filters EN1822, tested with D.O.P. aerosol, with efficiency higher than 99,995% MPPS - 0.005% penetration - ensure performance exceeding the requirements of EN 1822, U.S. Federal Standard 209-e, British Standard BS5295, VDI-2083 and AS 1386-1976.

Motor-blower/s: Two centrifugal fans direct driven motors - protection factor IP-55, controlled by two automatic speed regulators and microprocessor system showing laminar flow and protection barrier work conditions.

Microprocessor based monitoring system: new generation fully digital system controlling all functions of the cabinet performing high level control and data processing.

The user-friendly practical keyboard and the rearlit LCD display keep the user constantly informed of the cabinet conditions and operation, in particular by virtue of:

- display of laminar airflow velocity and frontal air barrier velocity
- display of inside and outside temperature
- display of residual lifetime of HEPA filters, U.V. Lamp and activated carbon filter (if installed)
- display of total time of cabinet operation
- display of power rating factor of the main and exhaust (if installed) motor-blowers.

Alarms for:

- out of range laminar airflow velocity and front air barrier velocity
- front sash outside working position.
- HEPA filters saturation (clogging)
- End of UV lamp life-cycle (if installed)
- Activated carbon filter saturation (if fitted)
- Power-cut causing blackout
- signal of other possible malfunctions and relevant remedies.

Power Supply : 230 V, 50Hz, single phase.

Lighting: fluorescent tubes in built-in housing, placed outside the contaminated area.

Front sash window of ergonomically angled sloping-front, fitted with **electrically operated vertically sliding safety glass sash window**, the framework of which is also hinged and can be opened up for easy access during cleaning and maintenance.

Additional Features:

- two vacuum or gas connections in the working area are provided, one with manual tap, the other with solenoid valve (on right-hand side).
- A stainless steel spillage tray beneath the work surface collects spilt liquids.
- An inlet allows the DOP test of the HEPA filters.
- Electrical socket with protection IP-44 (on the right-hand side)
- Maintenance: access to filters, motor-blower/s and control panel by lifting the front panel.

As option

UV lamp for sterilization of the work chamber installed on the rear wall of the working chamber, controlled by two timers, one with 0÷3 hours scale (1 minute steps), the other 3 fixed hours.





TECHNICAL CHARACTERISTICS WS

CODE	MODEL	USEFUL DIMENSION mm			OVERALL DIMENSION mm		
		W	H	D	W	H	D
F74 701210	WS 2003	885	600	635	1090	1470	795
F74 701220	WS 2004	1190	600	635	1395	1470	795
F74 701240	WS 2006	1800	600	635	2005	1470	795

Working aperture mm	Exhaust duct Ø	Temperature rise	Volts Hz	Noise dBA	Lighting lux	Vibration mm rms
200	200mm	<4° C	230/50	<58	>1000	<0.002

ACCESSORIES

CODE	DESCRIPTION
F74 700910	Epoxy powder-coated modular stand for WS-3
F74 700920	Epoxy powder-coated modular stand for WS-4
F74 700940	Epoxy powder-coated modular stand for WS-6
F74 700500	UV Lamp for WS
F72 702020	Exhaust activated carbon filter with filter-housing for WS
F72 799521	Additional exhaust HEPA filter with filter-housing for WS
F72 799510	Anti-blowback valve
F72 702050	Additional service connection for electrical power
F72 799790	Additional service connection for gas/vacuum (manual tap)