

Fume cupboards

Stainless or acid-proof steel is used as fume cupboard material to meet the strict requirements of laboratories and hospitals in terms of chemical resistance and hygiene. If necessary, the worktop and sink material can also be ceramic.

Fume cupboards are available with straight or sloped front wall. Models with straight wall are well suited for large equipment. Sloped front wall facilitates the sedentary work (see the photo). The standard and additional accessories are listed in the Technical information section under. Cabling and pipe lines are running inside the double structure of rear and side walls. The pool like structure of the worktop makes it easier to keep clean.

In addition to cabinets and drawers, fireproof cabinets can also be placed at the foot of the fume cupboard for storing of flammable liquids. Cabinets can be connected to the fume cupboard's ventilation.

Special fume cupboards are available e.g. for radiation therapy units, pathology laboratories and as environments for larger equipment.

Trolleys that can be connected to fume cupboards are also available for transporting samples and storing them during the work phase.



Technical information

Models	1010 Fume cupboard straight front wall 1015 Fume cupboard sloped front wall 1015 Standard fume cupboard models: width 1200 mm, 1500 mm and 1800 mm are equipped with exhaust air monitoring and alarm system, and if necessary, with one Broen laboratory faucet and a slop sink
Materials	Stainless steel AISI 304 Acid proof steel AISI 316
Widths	Standard 1200, 1500 and 1800 mm Special widths 800–3000 mm
Depths	Standard 790 mm Special depths 600–1400 mm
Heights	Straight front wall 2300 mm Sloped front wall 2220 mm
Height of the worktop	Standard 700 and 900 mm Height adjustment range 300 mm (-200 – +100 mm) Special heights 350–1100 mm
Hauling dimensions	Standard cupboards (width +200 mm) x 900 x 2400 mm The cupboard can be detached into two parts for easier hauling (not applicable for height adjustable models)
Standards and directives taken into account	EN 14175-2 Fume cupboards EN 60204-1 Electrical equipment of machines ISO 12100 Safety of machinery Low Voltage Directive 2014/35/EU EMC Directive 2014/30/EU Machinery Directive 2006/42/EU
Certificates	I.F.I. Institut für Industrieaerodynamik GmbH Type test approval (EN14175-3) for standard fume cupboard models.
Accessories included	Lighting 1000 lx, pressure difference gauge, operation switch 0-1-2, signal light, double socket outlet
Accessories	ATEX-protection (inside) Basins (RST and HST) Lock of the sash in upper position Cold section Connections (data-, gas-, compressed air-) Ceramic worktop (and sink) Double socket outlet Drains (formalin, special waste, water) Fire proof cabinet Height adjustment Light intensity 1000 lx Painted interior Pass through hatch Radiation protection Scale platform, stone Shelves Side walls, glass Sinks (stainless or acid proof) Slop sink

	<p>Taps (ethanol, formalin, water, water-suction) HEPA-filter</p> <p>Ventilation connection to cabinets or formalin trolley</p> <p>Waste bin hole</p> <p>Waste bin for confidential material</p>
Lighting	25 W LED, light intensity on worktop 1000 lx (fume cupboards under 1500 mm)
Ventilation connection	<p>Widths under 1000 mm 1 pc d=160 mm</p> <p>Widths 1000–2000 mm 2 pcs d=160 mm</p> <p>Widths over 2000 mm 3 pcs d=160 mm</p> <p>If necessary, connections can be joined together (adds +300 mm to the height)</p>
Exhaust air volume	<p>Nominal air volume 500 m³/h (140 l/s) per meter of fume cupboard width. This results a flow rate of 0,5m/s with 30 cm sash opening and 0,3m/s with full 50 cm sash opening.</p> <p>Standard fume cupboard 1200mm 600 m³/h</p> <p>Standard fume cupboard 1500mm 750 m³/h</p> <p>Standard fume cupboard 1800mm 900 m³/h</p>
Electrical connections	<p>Lighting 230 V, 1N, 50 Hz</p> <p>Sockets 230 V, 1N, 50 Hz</p> <p>Separate connection boxes for both on top of the fume cupboard</p>
Connections for water and drain	<p>The size of the connection depends on tap configuration</p> <p>Water line connection h=2400 mm on top of the cupboard or under the worktop</p>
Water and drain connections	<p>Drain connection according to the sink configuration</p> <p>Water line connection h=2400 mm on top of the cupboard or under the worktop</p> <p>Drain connection according to the sink configuration</p>
Gas connections	<p>The size of the connection depends on the socket configuration</p> <p>Connection point h=2400 mm on top of the cupboard</p>
Control of the ventilation	<p>Standard: signal light, pressure difference gauge and operation switch (0-1-2)</p> <p>As an option an automatic air volume adjustment device can be installed</p>
Manufacturer	<p>KAVIKA OY, Tempo 4, 04430 Järvenpää, Finland</p> <p>Tel. 358 9 8362 0055, kavika@kavika.fi, www.kavika.fi</p>