



Shielded Laminair Flow Cabinet



General product description.

MNT Kwint *Shielded Laminar flow Cabinets* are designed to protect your products and your employees from microbiological contamination and radiation.

Using microprocessor controlled *Laminar down flow* and filtration with *Class H14 HEPA* filters a safe work environment is guaranteed.

The approximated 70% recirculation of air and a modern control system makes the Cabinet energy efficient.

The exhaust air is filtered through a H14 Class HEPA Filter to protect the environment, an active carbon filter filtering halogens is optional.

The Cabinet is fitted with a UVC TL to sanitise the cabinet when not used.

Easy to clean cabinet interior completely constructed out of stainless steel Fully automated controls for front window and generator safes.

Integrated automated generator safes are optional and can be designed to meet the customer needs. Integration of waste and ionisation chambers to customer needs.

Lead glasses placed in front of the cabinet to not interfere with airflow and cleanliness requirements stated in ISO14644-1 and EN12469 and other international standards.

Multiple sizes of lead glasses varying from 3mm Pb eq. up to 50mm Pb. Eq.. Can be fitted, always easy to move due to a high quality railing system.

The cabinets are available in three sizes (1300/1600/1900) lead shielding varying between 3mm and 50mm Lead. External dimension depending on the thickness of the shielding.

Filtration agents:

ISO Class 5 Air cleanliness within work zone as per ISO 14644.1.

High quality HEPA class H14 filter with a typical efficiency off 99,995% of 0,3 microns per EN1822 are used for main filtration and exhaust.

Filters are shielded with a steel guard to prevent accidental damage while using.

Control features:

Specially designed control system in combination with an inverter makes sure the cabinet is working perfect al the time. Visual / audible airflow alarms alerts

users in case of a malfunction.

Audible alarm in case of malfunctioning of the generator safe.

Cabinet airflow velocity is constantly monitored and adjusted by the inverter.

The airflow is displayed by a led array in the control board.

Touch panel for better hygiene.

Fire alarm integrated closes active generators automatically and shuts down the cabinet to prevent further damage to the cabinet and surrounding.

Construction features:

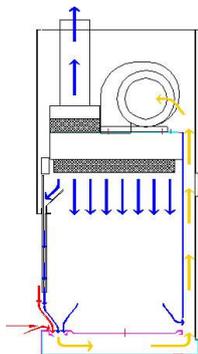
Cabinet interior is constructed entirely of stainless steel. Easy-to-clean stainless steel work zone is more durable than

other materials and will never rust, chip, or generate particles.

Industrial-grade main body constructed of steel: with an abrasion-resistant white powder-coated finish.

Maintenance free direct drive centrifugal blower(s); energy efficient external rotor motor type design reduces operating costs; extremely low noise and vibration levels

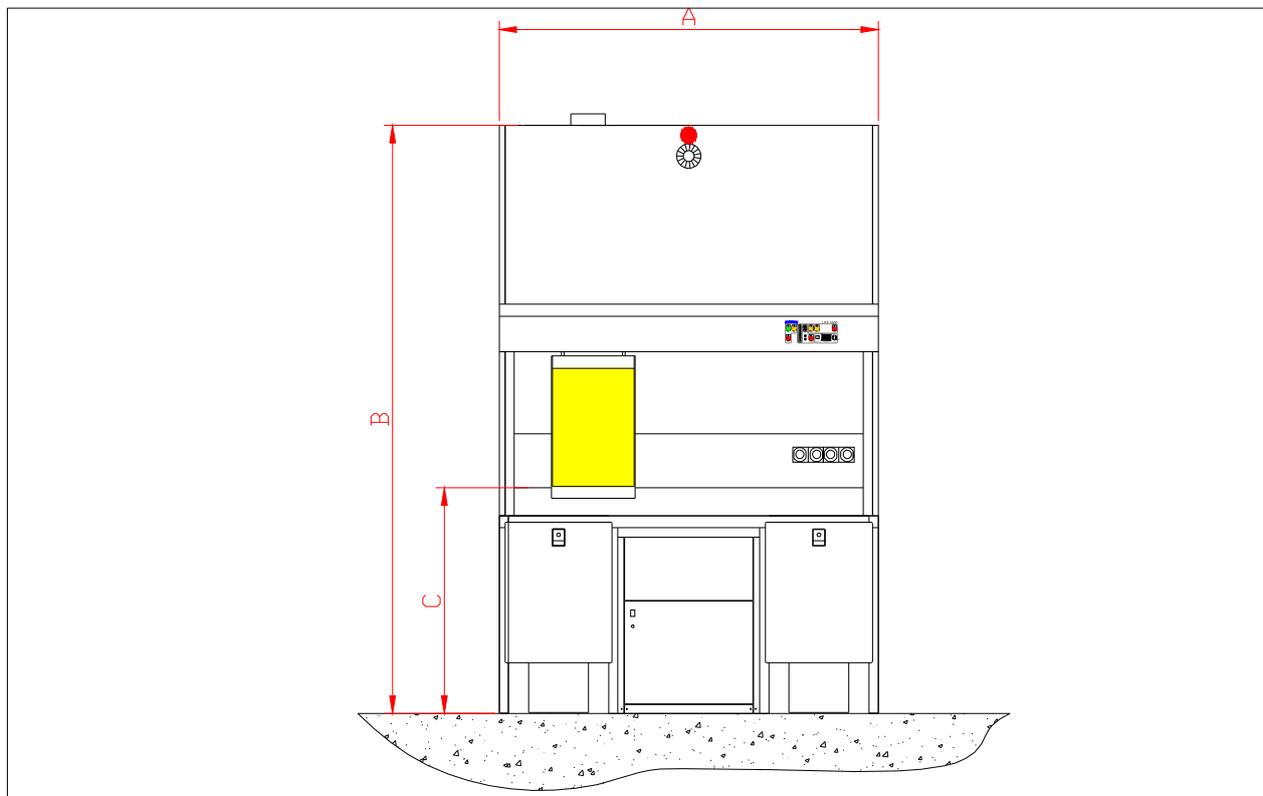
Built-in warm white, lighting offers excellent illumination throughout the work zone in order to reduce operator fatigue and is comfortable to the eyes.



Cabinet Airflow Profile

Room air is taken from the front side at the work opening and passes direct via the space under the working area to the ventilator. Then forced into the positive plenum 70 percent passes through the main filter and 30 percent through the exhaust filter. A nominal down flow of 0,45 M/s over the working area assures a sterile working environment. A higher airflow >0,7 M/s through the double front window acts as a additional barrier between the inside and outside of the cabinet

Standards Compliance	Biological Safety Cabinets	For Air Quality	For Filtration	Radiationprotection 2000
	EN 12469, Europe	ISO 14644.1 Class 5, Worldwide	IEST-RP-CC034.1, Worldwide	guideline 96/29-97/43
	US Fed Std 209E, Class 100 USA	EN 1822, Europe		



Tecnical drawing

Technical specifications.

General specification		LMF1300	LMF1600	LMF1900
External dimensions (With (A) x Depth x Height(B) ^{*1})	5/10mm Pb eq.	1345x820x2560	1645x820x2560	1945x820x2560
	20/30mm Pb eq.	1385x850x2560	1685x850x2560	1985x850x2560
	50mm Pb eq.	1425x850x2560	1725x850x2650	2025x850x2650
Internal Work zone (With x Depth x Height)		1220x705x640	1520x705x640	1820x705x640
Working Height ^{*2}		930-980mm	930-980mm	930-980mm
Air volume(rated at 0,45M/s in M ³ /H)Main Filter		1205M ³ /H	1510M ³ /H	1810M ³ /H
Air volume(rated at 0,45M/s in M ³ /H)Exhaust		Max 250M ³ /H	Max 600M ³ /H	Max 600M ³ /H
Laminar airflow velocity (M/s)		0,45+/-20% M/s (measured at 150mm at working height per IEST-RP-CC001.1)		
Standards Compliance		Cabinet performance: IEST-RP-CC001.1 / DIN EN 12469. Cleanliness: ISO14644-1 / US Fed Std 209E. Filter performance: EN1822.		
Air Cleanliness within working area:		ISO14644-1 class 5 / US Fed Std 209E class 100		
Main filter type		HEPA H14 fully compliant with EN1822 and IEST-RP-CC001.3		
Exhaust filter type		HEPA H14 fully compliant with EN1822 and IEST-RP-CC001.3		
Noise level		<58 decibel depending of Fouling level of filters		
Main body construction		Steel framing all parts powder coated		
Work zone construction		Completely constructed out of RVS304 or 316		
Maximum power consumption 220VAC / 50Hz / 1Ph		2,2 kW (Fused 10A slow)		

^{*1} Overall height can vary depending on the thickness of lead shielding and the type of generator used

^{*2} Working Height van vary depending on the thickness of lead shielding and the type of generator used for cabinet without Generators the height is according to costumer needs