REVERSE LAMINAR AIR FLOW (RLAF)

Reverse Laminar flow cabinets are designed so as to meet the requirements of ISO 14644-1 standards thus providing particle free air to meet ISO 5 Class 100 conditions.

Booth protects the operators from toxic chemicals / raw materials used for manufacturing of tablets, medicines, capsules etc from external contamination during the process of weighing, measuring, sampling or dispensing.

Booths draw powder aerosols away from the operator and the operating environment protecting products, personnel and Environment. It is used for filling, refilling, weighing and sampling of raw material and compounds.

Continuous, clean, laminar down flow air is supplied to work area in order to suppress any dust clouds produced during open powder processing and eradicate and capture airborne particles from the operator's breathing zone
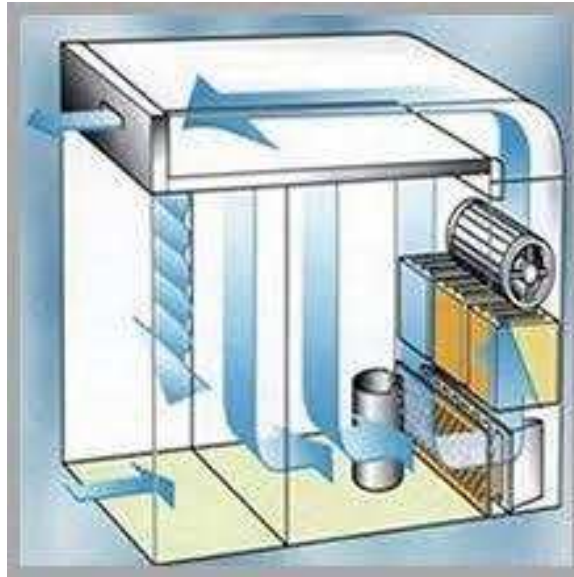
SAILENT FEATURES

- The cabinet is fabricated of MS duly powder coated / SS 304 / SS 316 / SS 316 L
- Double skin side panels (Optional - view windows or strip curtain)
- Internal coving for easy cleaning
- Removable bulkhead panels enable access to pre filter and intermediate filter for service.
- Flush mounted light fixtures
- Downflow Booths operates on re-circulatory airflow principle providing containment by air movement and a small percentage of air is discharged from the booth through the bleed exhaust HEPA filter to maintain the working space under negative pressure.
- The air is drawn through pre-filter mounted at base of the rear wall to offer scavenging effect and is made to pass through Intermediate filter and then to highly effective HEPA filters.
- Triple stage filtration system – Pre Filter, Intermediate Filter and HEPA filter
- Pre filter (non woven synthetic HDPE mesh) - efficiency 90% down to 10 microns grade EU 4
- Micro Vee Filter/Intermediate Filter (non woven synthetic HDPE mesh) - efficiency 95% down to 3 microns grade EU 7
- Minipleat HEPA Filter - efficiency 99.99 down to 0.3 microns grade EU 14
- Exhaust HEPA filter for 10% bleed air
- Easy HEPA Filter exchange from underneath unit
- The blower motor assembly is statically and dynamically balanced with ISI marked motor.
- Air flow velocity 90 fpm ± 20 fpm
- Overlapping PVC strip curtain 1.5 to 2mm thick on front side
- 2 to 4 no Multi point electric socket 5/15 Amp for external equipment
- Analog magnehelic gauge 0 – 50 mm WC to monitor pressure drop across HEPA filter, 0-25 mm WC gauge to monitor pressure drop across Intermediate filter and Pre filter
- UV Germicidal Light of 254 nm for disinfection (Optional)

- LED light for work space illumination
- ON/OFF Switches for LED Light, Blower and UV light
- Noise level less than 70 dB
- POA/DOP Test port at upstream of HEPA filter
- Machine qualifies Particle Count Test, Filter Integrity Test, Flow Velocity Test, DOP/POA Test, Flow Pattern Test
- Works on 230V 50 Hz AC supply

SPECIFICATIONS

Model	Internal Size W x D x H feet approx	External Size W x D x H feet approx
SAII-RLAF-33	3' x 3' x 6'	3.4' x 4.5' x 7'
SAII-RLAF-43	4' x 3' x 6'	4.4' x 4.5' x 7'
SAII-RLAF-53	5' x 3' x 6'	5.4' x 4.5' x 7'
SAII-RLAF-63	6' x 3' x 6'	6.4' x 4.5' x 7'
SAII-RLAF-73	7' x 3' x 6'	7.4' x 4.5' x 7'
SAII-RLAF-44	4' x 4' x 6'	4.4' x 5.5' x 7'
SAII-RLAF-54	5' x 4' x 6'	5.4' x 5.5' x 7'
SAII-RLAF-64	6' x 4' x 6'	6.4' x 5.5' x 7'
SAII-RLAF-74	7' x 4' x 6'	7.4' x 5.5' x 7'

OPTIONAL:

- Body made of SS 304 or SS 316
- SS grills for HEPA filters
- Side walls with view window OR PVC strip curtain
- Digital Magnehelic gauge with filter choke alarm
- Microprocessor LCD controller with digital display for status indication of ON/OFF - Blower, ON/OFF - UV Lamp & ON/OFF – LED Lamp
- Digital blower failure status indication
- Hour meter totalizer for U.V. light burning time
- UV light timer for automatic ON/OFF cycle of chamber sterilization
- Flow velocity sensor with display for measuring air flow velocity
- Cooling Unit - Cooling coils, utilizing Chilled water, Glycol or Direct Expansion can be fitted allowing automatic regulation of the booth internal temperature. A thermostat or digital controller can be used to set the temperature.
- IQ, OQ and PQ documentation and Onsite Validation

NOTE – Custom made sizes available on request