Laminar flow cabinets are used as local clean rooms for the production, assembly and testing of sophisticated products with high quality standards. The directed, turbulence-free air flow reduces the suspension of existing particles and removes them with the downwardly directed air flow.

A clean working environment has a decisive effect on the stability of processes and the quality of the components produced and therefore contributes to increased efficiency and reduction of costs. According to ambient conditions, cleanliness classes ISO 5 or better can be achieved.

In the first stage, room air is blown through the top of the housing via a preliminary filter with 20% efficiency. This filters out larger particles and increases the service life of the main filter. Usually, this preliminary filter is a cheap solution and can have a service life of about six months depending on its load.

In the second stage the pre-filtered air is evenly blown through a HEPA filter with an efficiency of >99.9%. The resulting even and cleaned air flow is vertically distributed across the working area.

In the final stage, the cleaned air escapes through the open front side of the cabinet.

The nominal filter surface air speed of 0.45 m/s (90 fpm) ensures a continuous change of air in the enclosed area and therefore ensures the required purity of the air.

The speed is often set to a range of 0.15 m/s to 0.5 m/s. The EE66 is therefore the ideal device for laminar flow control in the basis of air flow.