

## ***LTG UpflowDrum FILTER Type UDF***

### ***The Drum Filter System with Upflow***

The LTG UpflowDrum FILTER Type UDF is a regenerative fine filter unit with air passing through vertically, including continuous cleaning and gravity-type pre-separation for dust and fibers. The filter is patent pending.

#### **Special Air Guidance**

Airflow from the bottom to the top: Contrary to traditional drum filters, the dust-polluted air passes the UDF vertically through the filter drums. This allows keeping the floor space required for the unit very small.

Airflow from the inside to the outside: The dusty air passes through the filter drums from the inside, dust particles are collected on the inside where they are continuously removed. The discharged air is clean, i.e. the filter may be operated directly on the production floor. The outside of the filter and any drive and control components are located on the clean air side and, thus, are protected against any dirt.

#### **Continuous Cleaning**

Cleaning is realized through continuously rotating nozzles allowing to recycle or dispose of 100 % of the collected material. Continuous regeneration also provides a steady pressure drop within the system. Dust concentrations inside the filter are minimized with a positive effect on the zone division in explosion hazard areas. Usually, there is no need for additional explosion hazard areas outside the filter.

#### **Modular Construction**

One fine filter module comprises of filter drums continuously cleaned by rotating nozzles. Multiple modules may be put together so that any output requirement can be met. „Splitting“ of large filter units in smaller modules significantly eases handling and transport, also on site.

If multi stage filtering is required, the UpflowDrum Filter may be supplemented by a coarse filter and/or micro filter. It can also be supplied as a complete filter system including fan and control unit.

The LTG UpflowDrum FILTER Type UDF is part of a complete system, which includes components for collecting, conveying, filtering, separating, compacting, compressing, and air conditioning and may be used for e.g. dusts, fibers, shavings, paper, and granules.

Dedusting the room air and machine exhaust air is essential in many industries to ensure trouble free production processes, a high product quality, maintain a good health of the staff, and to comply with local regulations. Dusty and fiber-type abrasions such as the ones created during formed parts production in the automobile industry or when processing wood and paper have to be removed before they settle on production machines and in the room. Separation of these dusts and fibers from the air flow is exactly what these filters are for. However, modern filters must not only ensure high capacity but meet requirements such as constant availability, compact design, and low-maintenance operation.



Figure1: UpflowDrum FILTER Type UDF



Figure 2: Filter drums