

# TECHNEWS HYDAC Optimicron<sup>®</sup>

Innovative Filter Element Technology for Sustainable Filtration

#### Description

The new Optimicron<sup>®</sup> filter elements by HYDAC were optimised in terms of filtration efficiency and energy efficiency: They offer the best combination of filtration efficiency AND pressure drop:

The innovative features of the new technology in total show a highly positive impact on differential pressure of the elements. The new filter mesh pack geometry **HELIOS** for example contributes to a stabilisation of the pleats and an increased free flow surface. Significant advantage is a better flow behaviour and hence a lower differential pressure.

The high-performance micro glass media as the core of the filter element offer a first-class separation efficiency and a lower differential pressure over the entire element service life. From now they are also available in 1 and 15  $\mu$ m.

The new structure of the filter mesh pack and the interaction of the up to seven exclusive filter layers leads to a strong decrease of the differential pressure. The upstream drainage layer for example with asymmetric fibre strength as first layer causes a straightened fluid transport and in the same time a laminar and soft support of the other media. Also the next-to-last filter layer, the so-called integrated drainage layer, brings a straightened flow duct and prohibits impact loss, dead spots and swirls, how they usually turn up when a single wire mesh builds the last layer.

The innovative outer wrap in multi-colour design and its improved diffusor-effect contribute to an optimised circulation of the pleats.

#### Advantages

- Depending on the element size up to 30% lower differential pressure (compared to Betamicron<sup>®</sup>4) through the interaction of the integrated innovations:
  - HELIOS-pleat geometry
  - Optimised filter media
  - Drainage layer on dirt side
  - Integrated drainage layer
- Enormous energy and cost savings through the lower differential pressure over a long element service life
- First-class filtration efficiency thanks to qualitatively high-grade Micro glass media
- Expanding the micron rating spectrum by 1 and 15 μm
- Innovative outer wrap with increased robustness and improved diffusor effect and hence homogeneous upstream flow of the filter mesh pack

## Applications

Optimicron<sup>®</sup> filter elements should be installed in all industries where, first-class filtration efficiency, high cleanliness levels as well as significant energy cost savings and a sustainable filtration play an important role.

### Information

For more information, please contact the technical sales department of HYDAC Filtertechnik or a HYDAC sales office in your region.

