# MANN-FILTER Partnership that pays off

### **Hi-tech made in Germany**

## » Matching OE quality



Modern vacuum pumps for maximum process reliability require mature filter technology in OE quality. For MANN-FILTER, OE quality is not just a buzz word, but tried and tested filter know-how.

That is why leading vacuum pump manufacturers put their trust in the top-quality products of MANN+HUMMEL.

# » Innovation leader



MANN+HUMMEL have been active in the development and manufacturing of filters for vacuum pumps for more than 60 years. Every year, around 4 percent of the total revenue flows back into research and development.

700 employees worldwide work in this sector, designing innovative, economic and individual product concepts.

## » Comprehensive product range



Nowadays, fast delivery and a wide market coverage count more than ever before. This is why MANN-FILTER offers its partners a comprehensive product range and high availability.

Our customers value the excellent support on everything that has to do with filters and also the well designed MANN-FILTER product catalogues. See for yourself.

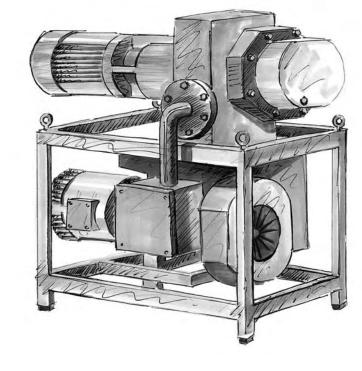




Air-oil separator element

Air filter





# Strong filtration chain: Energy efficiency and cost effectiveness are what count

Air-oil separator elements: Minimum pressure losses guarantee long service life and high energy efficiency. Low residual

oil content protects man and the environment.

Air filters: Prevent dirt from being sucked into the vacuum pump, and hence unnecessary wear. They

ensure the long service life of all filter systems in the vacuum pump. Minimum pressure losses

guarantee energy efficiency and long service life.

Oil filters: Clean oil prevents wear in the vacuum pump and extends the service life of the air-oil

separator element.

### Cheap filters can cost the user dear:

The service lives of the filters used show a premature rise in pressure and lead to increased power consumption of the vacuum pump. Non-OE quality filters compromise downstream filters in such a way that these fail and need to be serviced prematurely.

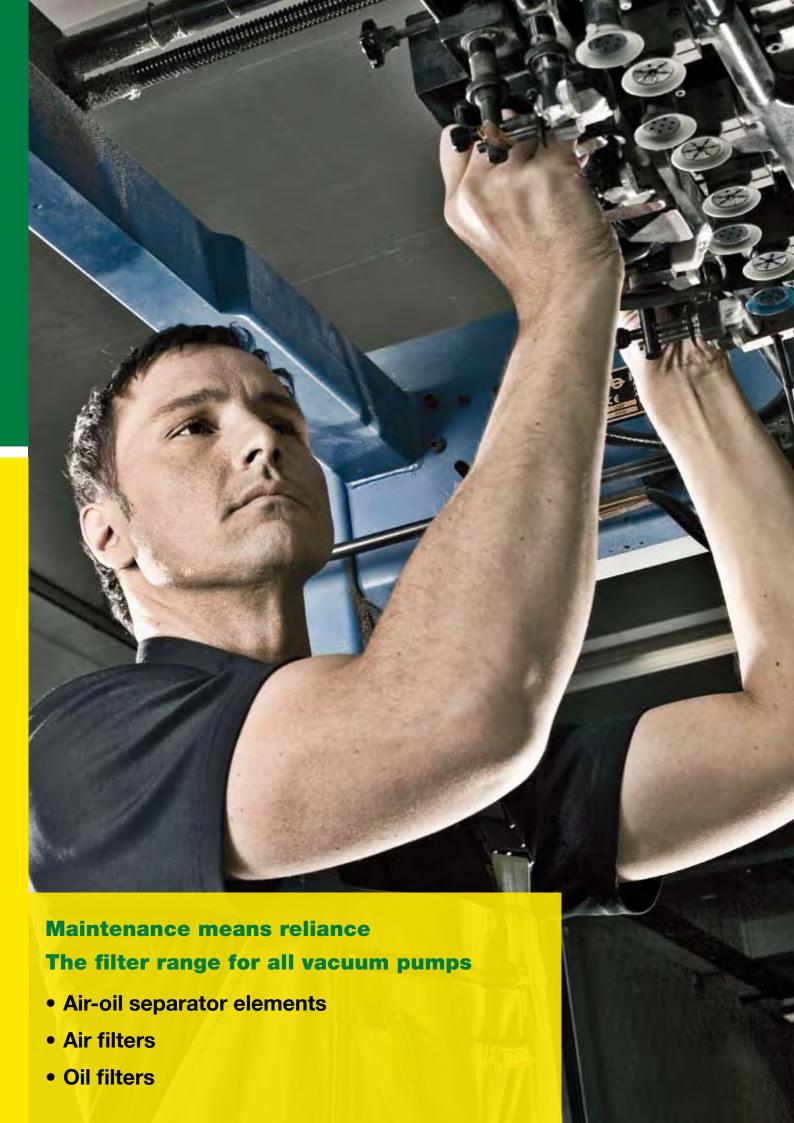




# **Green and Yellow is Reliable**

Filters for vacuum pumps



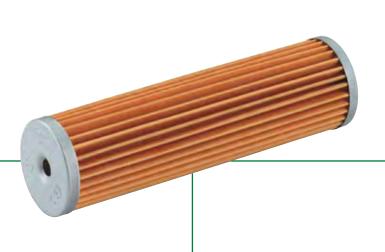


# Good maintenance guarantees proc Mature filter range for vacuum pum

### Economic, energy-efficient and quick to exchange

For a supplier of complete filter systems process and application reliability has the highest priority. With products from MANN-FILTER, your vacuum pumps operate reliably and economically. Together with the leading manufacturers in this sector, we are continually developing new solutions – and it is no coincidence that well-known vacuum pump manufacturers put their trust in MANN-FILTER as their development partner.





#### **Air-oil separator elements**

#### - efficient

#### • Service life

High-performance filter media for long service life.

#### • Energy efficiency

Minimum pressure losses are synonymous with low power consumption.

#### Custom-made

The right solution for every application.

#### **Air filters**

#### - clean

#### • Service life

Minimum pressure losses for long service life.

#### • Top quality

High-quality components achieve exactly what the vacuum pump needs.

#### • Economic

Provide top performance and energy efficiency.

# ess reliability: ps



#### Oil filters

#### - no problems

#### • Reliable processes

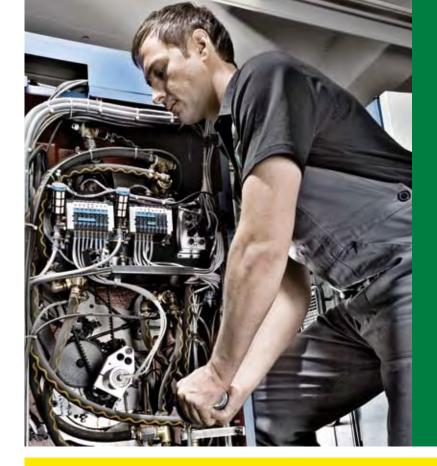
All components are designed to meet the requirements of vacuum pumps.

#### • High-performance

Provides optimum wear protection thanks to high dust capacity.

#### Cooperative

Clean oil benefits the service life of the air-oil separator element.



# Regular maintenance for all-round reliability

After a defined period of operation, MANN-FILTERs too need to be serviced. We recommend that you follow the maintenance instructions provided by your machine manufacturer, because timely maintenance ensures economic operation of the vacuum pump.

Manufacturers' instructions on service intervals are as a matter of principle based on the use of quality filters and should be respected accordingly.

#### Typical consequences of delayed maintenance:

#### With the air filter:

- Higher energy consumption.
- Lower vacuum pump performance.

#### With the air-oil separator element:

- Higher energy consumption.
- The vacuum pump loses suction capacity.

#### With the oil filter:

- Inadequately filtered oil shortens the service life of the air-oil separator.
- Leads to greater wear on the vacuum pump components.