

APPLICATION

The FPV 202 filter cartridge pre-separator was specially designed to significantly extend the service life of a downstream extraction and filter system of the LN/GL series. The system is equipped with cleanable filter cartridges which allow dust build-up to be removed from the filter using bursts of compressed air. The device is therefore particularly suitable for applications in which large amounts of dry dust are extracted. Compared to solutions with pure saturation filters, the FPV 202 system and downstream extraction and filter system have very long service lives. The optionally available cleaning control unit also allows the system to be flexibly integrated into the overall system.

A precoating of the filter cartridges with Precofix 200 allows even glutinous substances to be extracted, such as those produced during laser processing of plastics, wood and rubber.

AREAS OF APPLICATION:

- Laser processing (in some cases combined with precoating)
- Mechanical processing (grinding, deburring, milling, drilling, cutting)
- Transferring materials, packaging processes, transporting/conveying processes
- Decentralised set-up for multiple workstations

THE SYSTEM INCLUDES NUMEROUS FEATURES:

- Designed for larger amounts of dust
- Cleanable filter cartridge
- Simple dust removal
- Automatic cleaning



Similar to image

FUNCTIONAL PRINCIPLE

The contaminated air is collected by the collection unit (extractor hood, suction arm, hose, etc.) and transported into the filter cartridge pre-separator directly or through a pipe or flexible hose. The dust particles are filtered out by cleanable filter cartridges in the filter cartridge pre-separator. The filter cartridges are cleaned by bursts of compressed air which are directed into the filter cartridges by the automatic cleaning system. The filtered-out dust particles are collected in a dust collector for easy disposal. If necessary, a dust bag can also be inserted for low-contamination disposal. The pretreated air is then transported into an appropriately dimensioned extraction and filter system from the LN or GL series.

PRODUCT FEATURES

DESIGNED FOR LARGER AMOUNTS OF DUST

This device acts solely as a passive pre-filter and is operated in combination with a downstream extraction system. It prevents larger amounts of coarser dust from reaching the downstream extraction system and collects them in a separate dust collector, reducing the strain on the downstream filter and increasing the filter service life of the entire filter system.

CLEANABLE FILTER CARTRIDGES

The FPV 202 is equipped with six cleanable filter cartridges of dust class M. The filter cartridges are made of BGIA (Institute for Occupational Safety and Health of the German Social Accident Insurance)/USGC tested filter material with a special fold that allows optimal cleaning.

Depending on the application, special coated versions can be used. Please contact the TBH sales team for more information.



new filter cartridge



filter cartridge in use



filter cartridge after cleaning

SIMPLE DUST REMOVAL

The dust collected in the process can be disposed of using the removable dust collector. If necessary, an anti-static dust bag can also be inserted for low-contamination disposal.



AUTOMATIC CLEANING

STANDARD:

The FPV 202 comes equipped with an automatic cleaning system. This allows you to remove the filtrate from the dust-laden filter cartridges. This helps the system to have a very long service life. The device has a switch that you use to switch cleaning on or off.

OPTIONAL:

The cleaning control unit allows you to program various cleaning modes, operate a Precotech 200 automatic precoat system and integrate the unit into the TBH extraction system.

- Automatic cleaning control unit with various operating modes (*interval cleaning, coastdown cleaning, differential pressure-controlled cleaning depending on filter saturation, cleaning via the interface by the customer*)
- Differential pressure filter monitoring with indicator for filter cartridge change
- Interface for integration into the TBH extraction system
- Controls connected slide valves

Please see the separate cleaning control unit catalogue for more information.

THE PRECOATING PROCESS

The FPV 202 can be manually precoated with Precofix 200 precoat powder. The precoat powder creates a thin layer separating the filter medium from the extracted particles of dirt. This protects the surface of the filter cartridge and makes it easier to filter out even sticky and moist particles (Figure 1), significantly expanding the range of applications for cartridge filter systems of the FPV and FP series and greatly increasing filter service life under difficult conditions. When combined with the optionally available cleaning control unit, you can also operate the system with a Precotech 200 automatic precoat system.



Figure 1

TECHNICAL DATA FPV 202



Similar to image

AREAS OF APPLICATION:

- Laser processing (in some cases combined with precoating)
- Mechanical processing (grinding, deburring, milling, drilling, cutting)
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- Decentralised set-up for multiple workstations

INCLUDES:

- Fully assembled (incl. the filter configuration of your choice)
- Wheels for mobile use
- Lifting eyes (optional)
- Power cable

| TECHNICAL SPECIFICATIONS | UNIT | FPV 202 |
|-----------------------------------|-------|--------------|
| Max. permissible air flow rate* | m³/h | 2000 |
| Voltage | V | 230 |
| Frequency | Hz | 50/60 |
| Weight | kg | 170 |
| Dimensions (HxWxD) | mm | 1925x660x660 |
| Ceiling height for filter removal | mm | 2335 |
| DN intake socket** | mm | 80 - 250 |
| DN outlet socket*** | mm | 100 - 250 |
| Filter area | m² | 16.2 |
| Dust collector | liter | 30 |
| Automatic cleaning | - | ✓ |
| Cleaning control unit | - | optional |
| Colour | RAL | 7035 |

* application-dependent

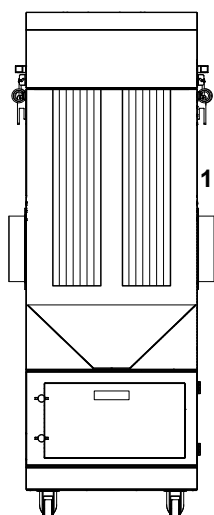
** rear/right

*** selectable

FILTER CONFIGURATION

| | |
|--|----------------------|
| Cleanable BGIA C filter cartridge standard (dust class M) | 6 x 2.7m² |
| Cleanable BGIA C filter cartridge anti-static (dust class M) | optional (6 x 2.7m²) |

ORDER DATA FPV 202



FPV 202

| DESCRIPTION | ART.-NO. |
|-----------------------------|----------|
| FPV 202 230V 50/60Hz | 90211 |
| ATEX version* | 15391 |
| FILTER CARTRIDGE | |
| 6 x BGIA C standard | standard |
| 6 x BGIA C anti-static** | 14736 |

* includes anti-static filter cartridges

** already included in the ATEX version

| INTAKE SOCKET | ART.-NO. |
|---------------|----------|
| Left* | 13171 |
| Rear* | 13172 |
| DN 80** | 14458 |
| DN 100** | 14459 |
| DN 125** | 14460 |
| DN 160** | 14461 |
| DN 200** | 14462 |
| DN 250** | 14463 |

* only indicates position ** socket size

| PRECOATING CONNECTION PIECE | |
|-----------------------------|-------|
| DN 80 | 14481 |
| DN 100 | 14482 |
| DN 125 | 14484 |
| DN 160 | 14483 |
| DN 200 | 13714 |
| DN 250 | 15410 |

| REPLACEMENT FILTER CARTRIDGES SET | |
|-----------------------------------|-------|
| 6 x BGIA C standard | 14737 |
| 6 x BGIA C anti-static | 14624 |

| OUTLET SOCKET | |
|---------------|----------|
| Right | standard |
| DN 100 | 10566 |
| DN 125 | 10569 |
| DN 160 | 10577 |
| DN 200 | 10094 |
| DN 250 | 10567 |

| CLEANING | |
|-------------------------|----------|
| Interval cleaning* | standard |
| Cleaning control unit** | optional |

* cleaning is activated using a switch on the device

** For information on which functions are available, check the cleaning control unit catalogue (required when using a Precotech 200)

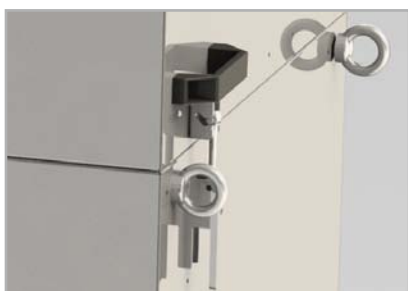
ACCESSORIES



CLEANING CONTROL UNIT*

| DESCRIPTION | USE | ART.-NO. |
|-------------------|---------|----------|
| Factory equipment | FPV 202 | 15350 |
| Retrofit | FPV 202 | 15279 |

* required for use with a Precotech 200 automatic precoat system



| DESCRIPTION | USE | ART.-NO. |
|---------------------|---------|------------|
| Lifting eye set | FPV 202 | 14408 |
| Precoating adapter* | FPV 202 | on request |

* adapter for lowering the left precoating connection piece



PRECOATING CONNECTION PIECE

| DN (mm) | USE | ART.-NO. |
|---------|---------|----------|
| DN 80 | FPV 202 | 14481 |
| DN 100 | FPV 202 | 14482 |
| DN 125 | FPV 202 | 14484 |
| DN 160 | FPV 202 | 14483 |
| DN 200 | FPV 202 | 13714 |
| DN 250 | FPV 202 | 15410 |



PRECOATING ACCESSORIES

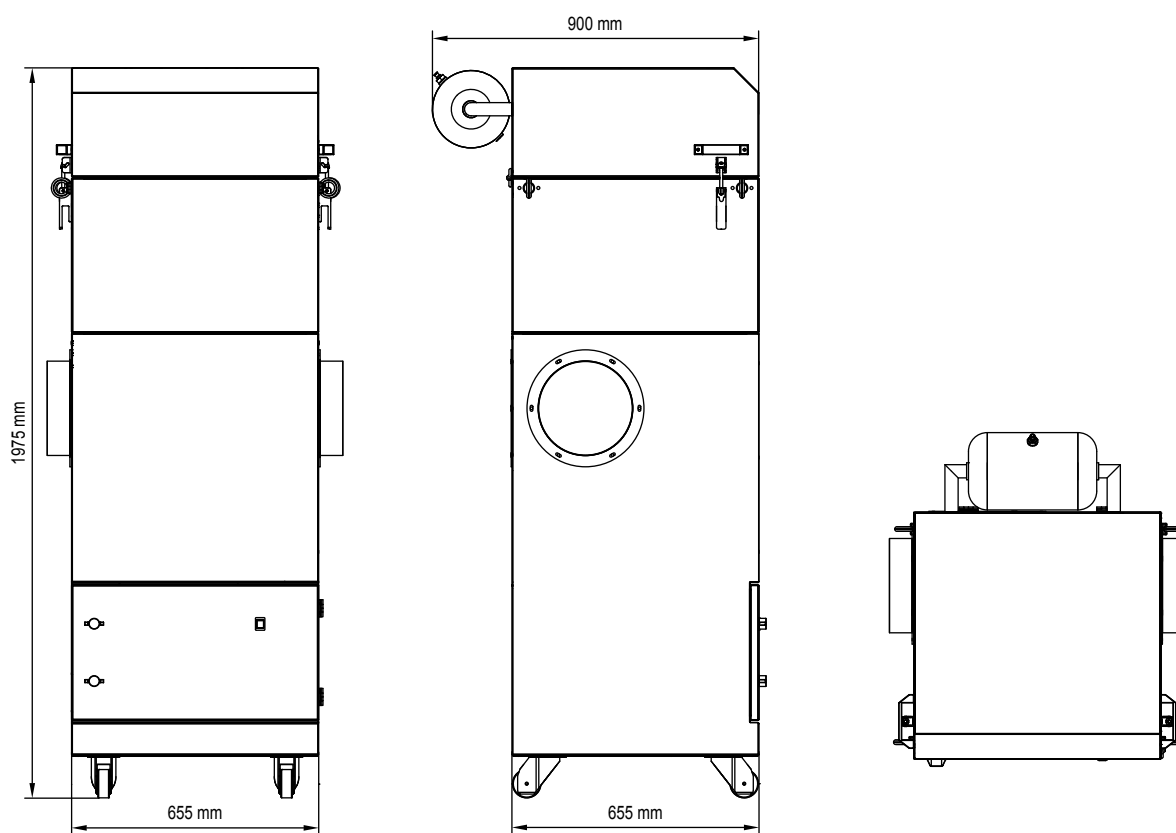
| DESCRIPTION | USE | ART.-NO. |
|-----------------------|---------|----------|
| Precofix 200 15 liter | FPV 202 | 14389 |
| Precofix 200 60 liter | FPV 202 | 14417 |



DUST BAG

| DESCRIPTION | USE | ART.-NO. |
|-------------------|---------|----------|
| 1 x dust bag set | FPV 202 | 13993 |
| 10 x dust bag set | FPV 202 | 14367 |

TECHNICAL DRAWINGS



FPV 202



TBH GmbH

EXHAUST- AND FILTRATION TECHNOLOGY

GERMANY

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