

OPERATING MANUAL

DUSTER 3000 Downdraft

The mobile, ATEX-certified recirculation/exhaust air extraction unit — filters dust, solvents and paint mist right at your workstation.
No heat loss. No construction work.



AI-generated image

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Information required for service:

Please have the machine designation and machine number ready.

Translation of the original operating manual

Keep this operating manual for future reference!

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These documents must not be made accessible to third parties, in particular competitors, without our permission.

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Notes on using this operating manual

Operating Manual

This operating manual is intended for the persons responsible for commissioning, operating and maintaining the Duster 3000 Downdraft recirculation extraction unit. The documentation must therefore always be kept accessible to these persons.

All safety and warning notices on the Duster 3000 Downdraft must be legible at all times and replaced if necessary.

Target groups

This operating manual is intended for:

- Decision-makers / safety officers of the operator
- Operating personnel
- Maintenance and service personnel (technicians)

Copyright and property rights

This operating manual is to be treated confidentially. It may only be made accessible to authorised persons and may only be passed on to third parties with the written consent of cleanAIR GmbH.

All documents are protected by copyright. Passing on and reproducing documents, even in part, as well as using and communicating their content is not permitted unless expressly authorised in writing. Infringements are punishable and will result in liability for damages. All rights to exercise industrial property rights are reserved by cleanAIR GmbH.

Safety is important

The chapter "Safety" must be made accessible to operating, maintenance and service personnel before any work on the unit, or form part of an instruction session.

Remarks:

Information on repair work is supplied with the corresponding spare parts deliveries, unless this information is part of the usual qualification of maintenance specialists. Please direct any questions about repairs to our service team.

Symbols and terms used



Danger!

Safety notice to avoid a **danger** to persons. Failure to observe it can result in **life-threatening injuries**.



Attention!

Indicates impermissible modes of operation. Failure to observe it can result in damage to property.



Information!

The symbol shown indicates important tips and information about the unit.

1 Safety

1.1 Obligations and responsibility

Follow the operating manual!

The general accident prevention regulations and VDE guidelines apply. Always observe the safety and warning notices contained in this documentation!

Compliance with the operating manual is a prerequisite for trouble-free operation and for any warranty claims. For this reason, read this documentation, in particular the safety instructions, before working with the Duster 3000 Downdraft.

The operator must supplement the operating manual with operating instructions based on national regulations for accident prevention and environmental protection, including information on supervisory and reporting obligations and on company-specific conditions, e.g. regarding work organisation, workflows and personnel deployed.

In addition to the operating manual and the binding accident prevention regulations applicable in the country of use and at the place of use, the recognised technical rules for safe and professional work must also be observed.

Without the approval of cleanAIR GmbH, the operator must not make any changes, additions or conversions to the Duster 3000 Downdraft that could impair safety! This applies in particular to the installation and adjustment of safety devices.

Use original spare parts only.

Important: Use original filters only (ordering information is available at www.duster-3000.com/en).

Only use trained or instructed personnel to operate, maintain and transport the Duster 3000 Downdraft.

1.2 Intended use

The mobile recirculation/exhaust air extraction unit Duster 3000 Downdraft is intended for air purification in workshop areas in which potential ignition sources (e.g. sparks from welding or grinding) are excluded. It filters and conditions the ambient air, removing suspended particles, sanding dust and solvent-based paint vapours. The Duster 3000 Downdraft is intended for use in areas in which an explosive atmosphere caused by gases, vapours, mists or whirled-up dust is not expected to occur. Two operating modes are possible: 1. as a recirculation unit using the recirculation plenum included in the scope of delivery, or 2. as an exhaust air unit. This operating mode may only be used with the separately available accessories. Intended use includes compliance with the instructions in this operating manual regarding safety, operation and servicing/maintenance.

- The Duster 3000 Downdraft must not be used for any purpose other than that for which it was designed.
- The general safety regulations must be followed while the unit is in operation.
- The user must avoid overloads. In particular, the supply points must not be changed and the flow rate must not be increased.
- Protective devices such as covers or housing parts must not be removed during operation.

1.3 Prohibited actions

Disabling the integrated safety and protective devices is prohibited!

Cleaning the machine with a water jet is strictly prohibited! This also applies when the machine is disconnected from the power supply!

1.4 Qualification and authorisation

Instructed operating personnel are authorised to carry out the following tasks on this machine:

- activating and deactivating the machine for operation,
- checking the machine for safety and functionality,
- replacing the filters,
- eliminating malfunctions,
- cleaning, care and maintenance work.

The following tasks are reserved for authorised customer service personnel: servicing and repair work, such as:

- replacing complete functional units,
- servicing safety components,
- commissioning and setting up new components (parameterisation).



Danger!

Work on the electrical installation may only be carried out by qualified electricians!

Work on the motor, drive belt and fan wheel may only be carried out by technically qualified persons!

1.5 Transport and packaging

The packaging must be disposed of in accordance with regional regulations.

- The Duster 3000 Downdraft may only be transported and installed by specialist personnel instructed in these tasks.
- Carefully secure all loose parts to the assemblies.

1.6 Installation and commissioning

1.6.1 Preparations for initial commissioning

- Carefully remove the front panel of the shipping crate; you will need a size 3 Phillips screwdriver. Make sure to remove all screws from the top panel. (The top screws are located under the cardboard.)
- Keep all wood screws and washers.
- Remove the wooden spacers used for storage.
- Remove the two vertical supports (5 x 8 cm) and set them aside.
- Carefully roll the unit out of the box.
- Remove the plastic film and keep it.
- Insert the grey PVC support rod attached to the back of the unit into the holder at the front of the unit.
- Unwind the 15 m power cable and plug it into a 220 V socket rated for at least 6.5 A.
- Insert the three (3) intake filters located at the back of the crate into the unit and store the other three (3) in a safe place.
- Our recommendation: Put all packaging materials back into the crate. Keep it in case the unit has to be returned for service or repair.

1.6.2 Installation

- The Duster 3000 Downdraft is only suitable for operation in rooms protected from the weather.
- When installing the Duster 3000 Downdraft, make sure that access routes are kept clear. Allow at least 1 m of space all around for operation and maintenance work.

- Also make sure that walkways are not obstructed by tripping hazards such as cables or similar.
- Before installing the Duster 3000 Downdraft, check that the floor is level and has adequate load-bearing capacity.
- The room height must be at least 3.5 m.

1.6.3 Initial commissioning

Assembly and initial commissioning of this machine may only be carried out by operating personnel authorised and trained for operation and commissioning.



Attention!

Before initial commissioning, operating personnel must familiarise themselves with the correct handling and operation of the machine using this operating manual! If you have any questions about initial commissioning and operation of the Duster 3000 Downdraft, please contact cleanAIR GmbH service.



Recommendation to the operator:

This instruction and the names of the persons instructed should be recorded in writing! This instruction record is an important part of the machine documentation and must be presented to the relevant supervisory authorities if required.

If the group of persons authorised to operate this machine changes during the period of use, the operator must also properly instruct these “new persons” for this area of responsibility! Their names should also be entered in the instruction record!



Danger!

Do not operate the unit in areas where an explosive atmosphere may form.

1.7 Test run

The test run is a test of the Duster 3000 Downdraft in the working process.

The following tasks must be completed before the test run:

- assembly of the mechanical elements,
- assembly and inspection of the safety-related elements and devices, and
- connection to the power supply.

Procedure:

- remove aids and tools from the Duster 3000 Downdraft,
- switch on the power supply,
- check the following points:
 - direction of rotation of the fan motor,
 - displays and sensors,
 - listen for any unusual noises.

1.8 Safety instructions

1.8.1 Risk of injury!

- Disabling the integrated safety and protective devices is prohibited.
- Operating the machine with removed or defective protective covers or a defective Lexan filter housing is prohibited!
- The machine must remain shut down until the protective cover has been fully repaired.

The air intake openings of the Duster 3000 Downdraft must not be blocked!

Tripping hazard! Workstations and walkways must be freely accessible and must not be obstructed, e.g. by objects placed there.

1.9 Safety devices

The safety of users and of operating, maintenance and service personnel is only ensured if all safety devices are complete and functional.

Do not use the machine if safety devices are missing, damaged or not functional.

1.10 Pictograms / type plate

Pictograms

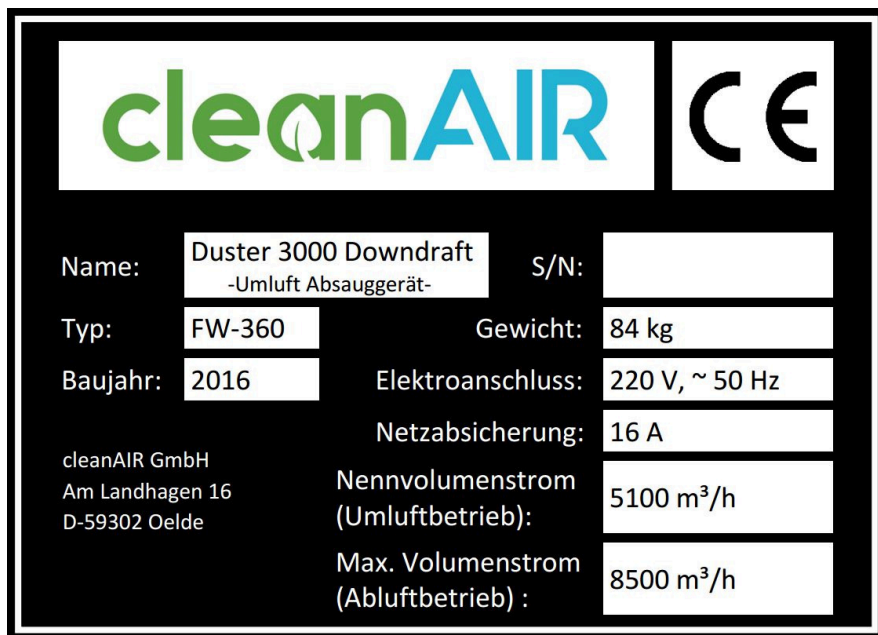
List of additional markings attached to the unit at points that cannot be mechanically secured.

No.	Pictogram	Title
1	 Only attached to the adapter for exhaust air mode.	Warning sign: 'Room air supply'
2		Warning sign: 'Electrical hazard'
3		Warning sign: 'Locking clamps'
4		Mandatory sign: Wear respiratory protection
5		Warning sign: 'Explosive atmosphere'

Type plate

The machine's type plate is located on the rear machine cover.

Fig. 1.10.1
Type plate



1.11 Safety measures by the operator

1.11.1 Procedure in case of fire

In the event of a fire caused by electricity, the unit must be disconnected from the power supply. This allows the fire to be fought effectively.



Attention!

Do not use water or foam fire extinguishers.

1.12 Residual risk

The basic prerequisite for safe handling of the Duster 3000 Downdraft during operation and later dismantling is compliance with the fundamental occupational safety regulations. However, certain residual risks cannot be avoided.

1. Possible crushing and abrasions.



Note!

The Duster 3000 Downdraft is intended for use in areas in which an explosive atmosphere caused by gases, vapours, mists or whirled-up dust is not expected to occur. If it does occur, it is in all likelihood only rarely and for a short period.

Due to its design and equipment, this unit ensures the required level of safety during normal operation, even in these situations.

2 Description of the machine

2.1 Components / assemblies (recirculation mode)

The Duster 3000 Downdraft essentially consists of the following components:

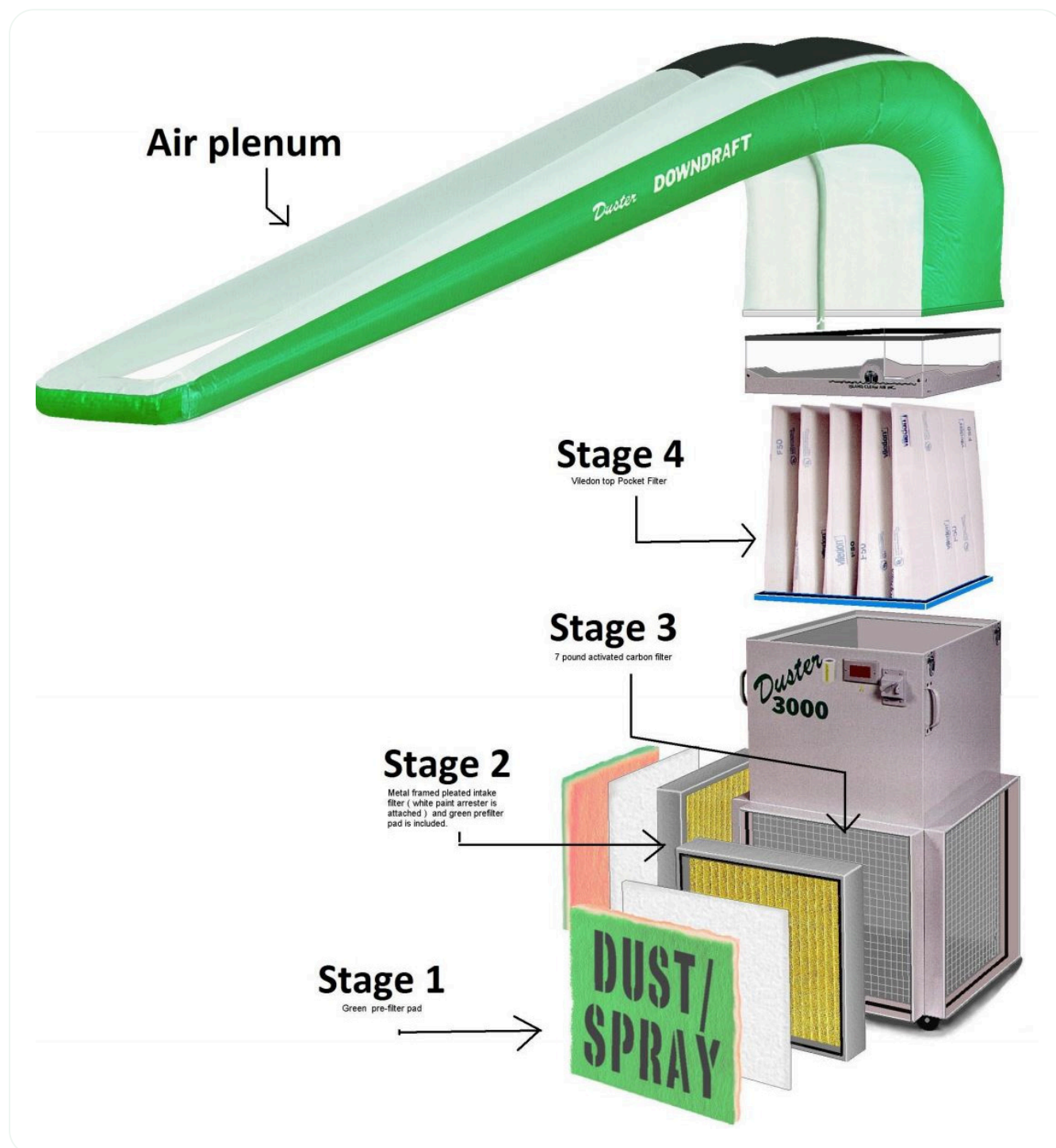


Fig. 2.1 Components / assemblies (recirculation mode)

2.2 Mode of operation

To carry out painting and sanding work on larger vehicles, the outlet duct (plenum) can be raised by 61 cm using an extension. This extension is attached using the Velcro connections on the outlet duct (plenum) and the Lexan filter housing. In addition, the support is brought to the correct height with an extension.

2.3 Function (recirculation mode)

The Duster 3000 Downdraft draws in the ambient air through three intake surfaces. The air is purified by four different filter types and returned to the working environment. 95% of the purified air exits upwards through the plenum. The remaining 5% is released downwards through the plenum (boom) and, during sanding work for example, blows the sanding dust towards the filter surfaces (see Fig. 2.3.1).

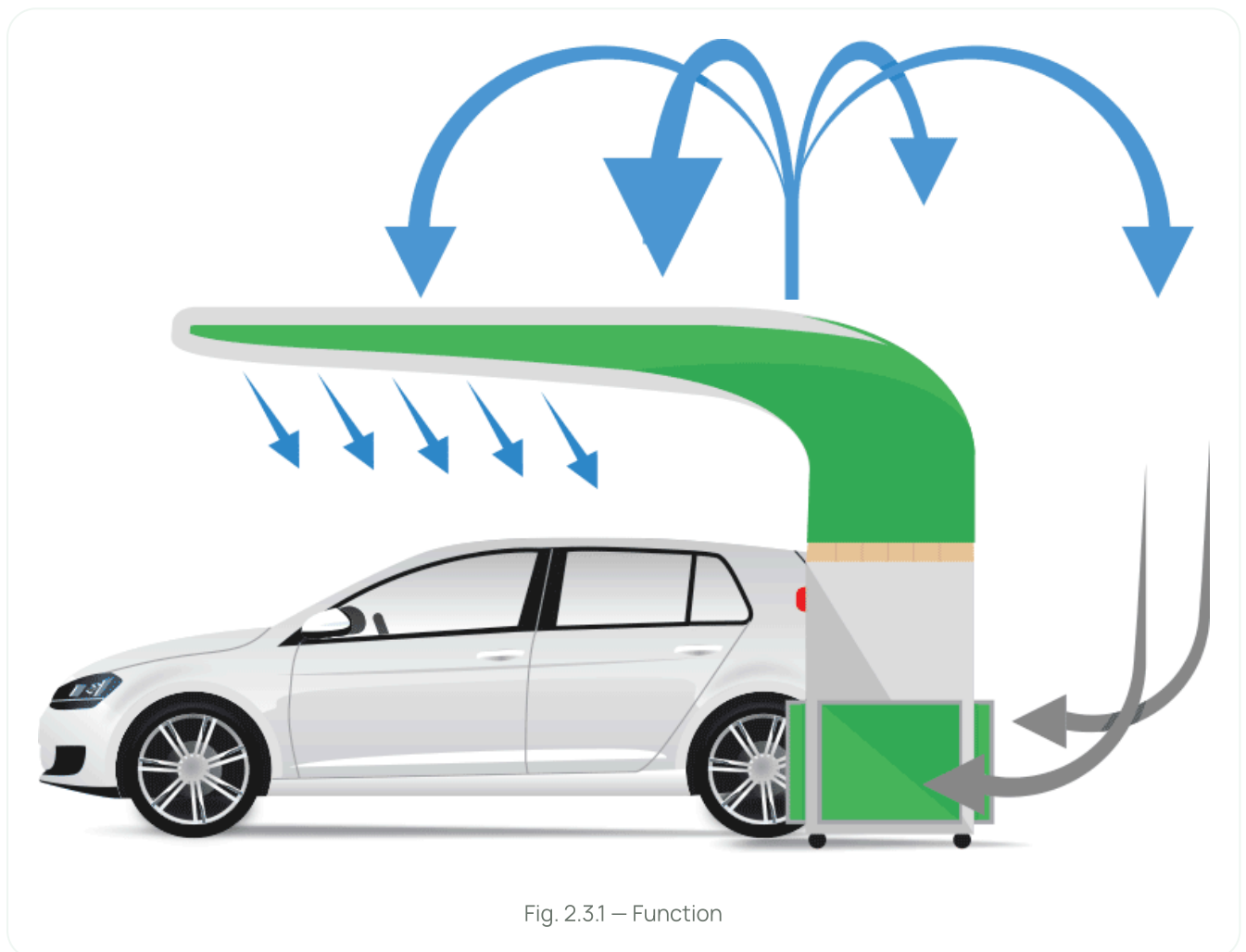


Fig. 2.3.1 – Function

The advantage of this principle is the continuous purification of the workshop air. The circulating, purified air effectively prevents the usual dust haze from forming. The activated carbon filters also remove solvents and isocyanates from the workplace air.

2.4 Function (exhaust air mode)

Alternatively, the Duster 3000 Downdraft can be operated as an exhaust air unit. In this case, the exhaust hood with optional slewing ring bearing, available as an accessory, is mounted instead of the Lexan filter housing. As with the Lexan filter housing, it is attached using the four locking clamps (see Fig. 2.4.1).



Locking clamps

Fig. 2.4.1
Function



Danger!

Due to the high volume flow of the Duster 3000 Downdraft, a sufficient supply of breathable air must be ensured in exhaust air mode.

Falling below the limit values for breathing air quality leads to **impaired perception and even unconsciousness**.

If a ventilation system is required to operate the workplace, it must be **functional at all times**.

The Duster 3000 Downdraft is delivered fully assembled. It is equipped with standard filters for the first year of operation and is therefore ready for immediate use. For painting limited areas, activated carbon filters of 1.4 kg to 3.2 kg are included, which absorb VOCs, toxic fumes and unpleasant odours. The standard intake filters can be cleaned and are designed for an operating time of up to 6 months. The intake filters capture suspended particles from 5 micrometres in size, including isocyanates released when sanding or painting door pillars, jambs, parts etc. The Viledon bag filter absorbs particles from 3 micrometres in size, below the visible range. It lasts up to one year.

The front panel of the unit has a digital LED airflow display that shows the airflow in CFM (cubic feet per minute) and also indicates when the intake filters need cleaning. This airflow monitoring is factory-set and has a yellow warning lamp that flashes when the unit is not operating within its tolerances and the filters need to be cleaned or replaced (see chapter 4.1.4, page 27 ff.).

2.5 Tasks of the operating personnel

- preparing the Duster 3000 Downdraft for use at the workplace according to chapter 1.6.2,
- switching the machine on and off,
- checking the safety devices,
- cleaning the machine,
- cleaning the filters and replacing them if necessary (observe replacement intervals),
- lubricating the slewing ring bearing when used as an exhaust air unit.

3 Machine operation

3.1 Switching the machine on

The Duster 3000 Downdraft is switched on exclusively using the main switch on the front of the unit (Fig. 3.1.1).



Fig. 3.1.1 Control panel on the front

The digital display on the front of the unit shows the airflow volume in cubic feet per minute (ft^3/min). When the unit is first started, the display should show approx. $3,500 \text{ ft}^3/\text{min}$. After about 15 minutes, the reading should stabilise at a value between $3,000$ and $3,300 \text{ ft}^3/\text{min}$.

3.2 Normal operation

In normal operation, the Duster 3000 Downdraft is positioned according to the task to be performed. Here are some examples of tasks typically carried out in a paint shop.

Sanding polyester filler or paint:

Position the Duster 3000 Downdraft so that the outlet duct (plenum) is directly above the work area; the end of the duct should be halfway behind the mechanic so that the dust generated is blown down into the intake filters (Fig. 3.2.1).

Note:

Try different positions of the unit to achieve the best possible result.

**Painting:**

Do not position the outlet duct directly above the painting area, as its airflow interferes with that of the spray gun. When painting a bonnet, for example, the outlet duct should be above the roof or to the side of the painting area. For the sides of the vehicle, it is best to position the outlet duct parallel to the vehicle at a distance of approx. 30 cm.

Note:

Try different positions of the unit to achieve the best possible result.

An additional tip for operation:

To ensure that the Duster 3000 Downdraft works with maximum efficiency, we recommend avoiding disruptive air currents, e.g. from open windows and doors. These impair the downward airflow of the Duster 3000 Downdraft.

3.3 Switching the machine off

The Duster 3000 Downdraft is switched off exclusively using the main switch on the front of the unit (Fig. 3.1.1).

4 Maintenance

4.1 Safety during inspection and maintenance

Work carefully! Always observe the maintenance information from the manufacturer of the filters used.

Only carry out the described tasks if you understand the procedure and the associated risks.

For questions about repairs, please contact the manufacturer's service department.

4.1.1 Before starting maintenance work

For all work on the machine, including the control unit:

**Danger!**

- Put up clearly visible, legible signs informing other persons that maintenance work is in progress!
- Pull the mains plug to prevent the machine from being switched on again by third parties.

4.1.2 Replacing the drive belt

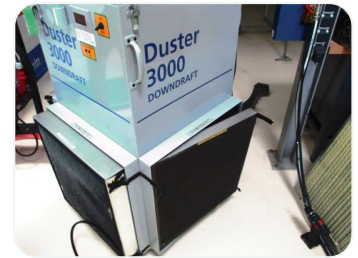
- Switch off the unit.
- Pull the mains plug and secure the machine against being switched on again by third parties.
- Access to the drive belt is on the right-hand side, as seen from the operator side.
- Remove the three filters located there (prefilter, cassette filter and activated carbon filter).
- The protective grille is now accessible and can be removed by loosening the six fastening screws.
- Remove the belt by pushing it over the edge of the large pulley.



Caution!

There is a risk of crushing your fingers.

- Turning the pulley lifts the belt out of its guide on the pulley.



Install the new belt in reverse order.

4.1.3 Tensioning the drive belt

Checking the belt tension:

After a belt replacement or during a routine belt check, the belt may need to be re-tensioned.

The correct belt tension is reached when, squeezing the belt by hand with normal force midway between the two pulleys, the distance is not less than 10 cm (see Fig. 4.1.3.1).

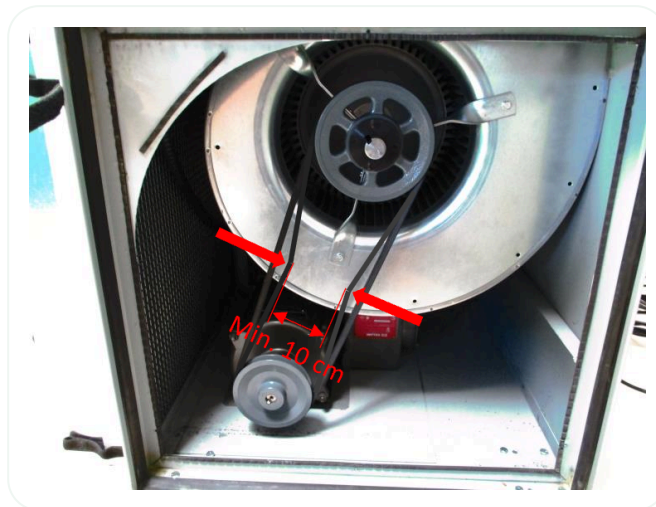
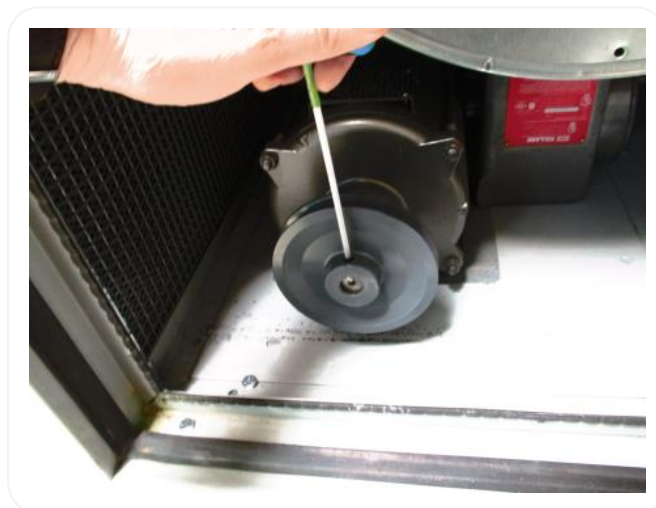


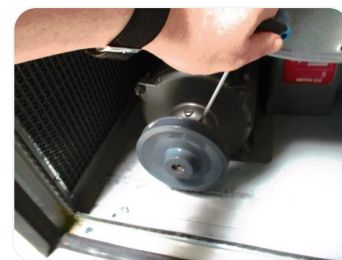
Fig. 4.1.3.1 Drive belt tension

Tension the belt as follows:

- Remove the belt as described in chapter 4.1.2.
- Remove the drive-side pulley by loosening the two set screws (on the front and rear pulley hub) using an Allen key.



- The pulley consists of two parts connected by a threaded hub. The distance between the two pulley flanks can be varied by screwing them together or apart, so that the belt is tightened or loosened.
- On delivery, the distance between the two pulley halves is set to approx. 2 mm.
- When fitting the pulley, make sure that the keyways of the two pulley segments are aligned and that the pulleys can be pushed onto the motor drive shaft up to the shoulder without great effort.
- Tighten the two set screws firmly and fit the drive belt.
- Check the belt tension again and correct it if necessary as described above.
- Once the belt tension is correct, refit the protective grilles and filters in reverse order and carry out a test run according to chapter 1.7.



4.1.4 Cleaning the intake filters

Depending on use, weekly cleaning is recommended. When the yellow warning lamp flashes, the intake filters must be cleaned. This is factory-set to 2,400–2,500 ft³/min. The yellow warning lamp only switches off once the filters have been cleaned (see Fig. 4.1.1).



Abb.: 4.1.1

Cleaning (green dust/paint mist filter inserts)

1. switch off the unit,
2. remove the inserts from the intake filter frames and from the unit,
3. vacuum them or
4. blow them out with compressed air,
5. reinsert them into the intake filters.

Cleaning (pleated intake filters)

1. switch off the unit,
2. remove the intake filters and dust filter inserts from the unit,
3. vacuum only the front side (the side facing away from the unit),
4. occasionally remove the intake filters and blow out the pleated filters to remove particles that could not be vacuumed. The filters can also be pressure-washed every 3 months (no more than 400 psi = 27 at).

Note: If the dust filter inserts have been washed, wait 24 hours before reinserting them.

5. reinsert the dust filter inserts into the clean intake filters,
6. reinsert the intake filters into the unit.

Viledon bag filter

This filter **CANNOT BE CLEANED!** – It is used for depth filtration and has a service life of 1 year.

1. Checking whether the Viledon bag filter needs replacing:
 - a. go to the front of the unit,
 - b. remove all filters on the left-hand side of the unit (looking at the front),
 - c. if the displayed value is lower than 4,500 ft³/min, the Viledon bag filter must be replaced. With a new filter, a value of approx. 6,000 ft³/min should be displayed.

Replacing the Viledon bag filter:

1. Switch off the machine and disconnect it from the mains.
2. Remove the outlet duct (plenum) attached to the Lexan housing with Velcro.
3. Leave the outlet duct hanging on the PVC support.
4. Release the four locking clamps and remove the Lexan housing and the used Viledon bag filter.
5. Insert the new Viledon filter. **IMPORTANT:** The Viledon bag filter can only be inserted in one direction while you are standing in front of or behind the unit; the 5 pleats must only be visible from this direction. If you cannot look through the 5 pleats from this position, rotate the filter by 90 degrees.
6. Refit the Lexan housing, making sure the filter pleats are not crushed.
7. Reattach the outlet duct (plenum) to the Lexan housing with the Velcro.
8. When attaching the outlet duct (plenum) to the Lexan housing, start at one corner, press the corner of the outlet duct in place, then move on to the next corner until the outlet duct is secured around its entire circumference.
9. Switch on the unit and check that all parts are correctly seated.

Activated carbon filter (DO NOT CLEAN)

1. Switch off the unit.
2. Remove the intake filters in order to lift the carbon filters out of the housing.
3. Shake the filters vigorously up and down to realign the carbon granules; this brings fresh granules to the surface. As the service life of the carbon filters is a maximum of 12 months, we recommend ordering 'fresh' filters in good time. The degree of wear can be recognised by the white/grey patina that forms.

If the carbon granules are still covered with a continuous white/grey patina after shaking, saturation has been reached and the filters must be replaced (see Fig. 4.1.2.1).



Fig. 4.1.2.1 Beginning patina formation. This filter does not yet need to be replaced.

Cleaning the outlet duct (plenum):

Once a year, blow out the top of the outlet duct (plenum), especially the black exhaust air diffuser at the bend of the duct, and clean the Lexan housing.

Attention: Never clean the Lexan housing with thinners. Use soapy water and a cloth.

Lubricating the slewing ring joint:

When used as an exhaust air unit, the fitted slewing ring must be lubricated every 200 operating hours with a push-type or lever grease gun. Use commercially available lithium soap multi-purpose grease.

Fig. 4.1.2.2
Slewing ring
grease nipple



4.1.5 After completing maintenance work

Check that all protective covers and filters have been correctly refitted.

Before switching on again, make sure that:

- all maintenance materials and aids (e.g. tools, cleaning materials, measuring and test equipment) have been removed from the machine!
- all safety devices are functional again!
- the locking clamps are properly closed.

5 Decommissioning

Legal basis

The Duster 3000 Downdraft and the filters used must be disposed of in accordance with national and local regulations.

5.1 Avoiding environmental damage



Attention!

Decommissioning and dismantling this machine may release substances that are harmful to the environment.

Avoid environmental damage through proper disposal! Have disposal carried out by an approved specialist company.

5.2 Potentially environmentally harmful components

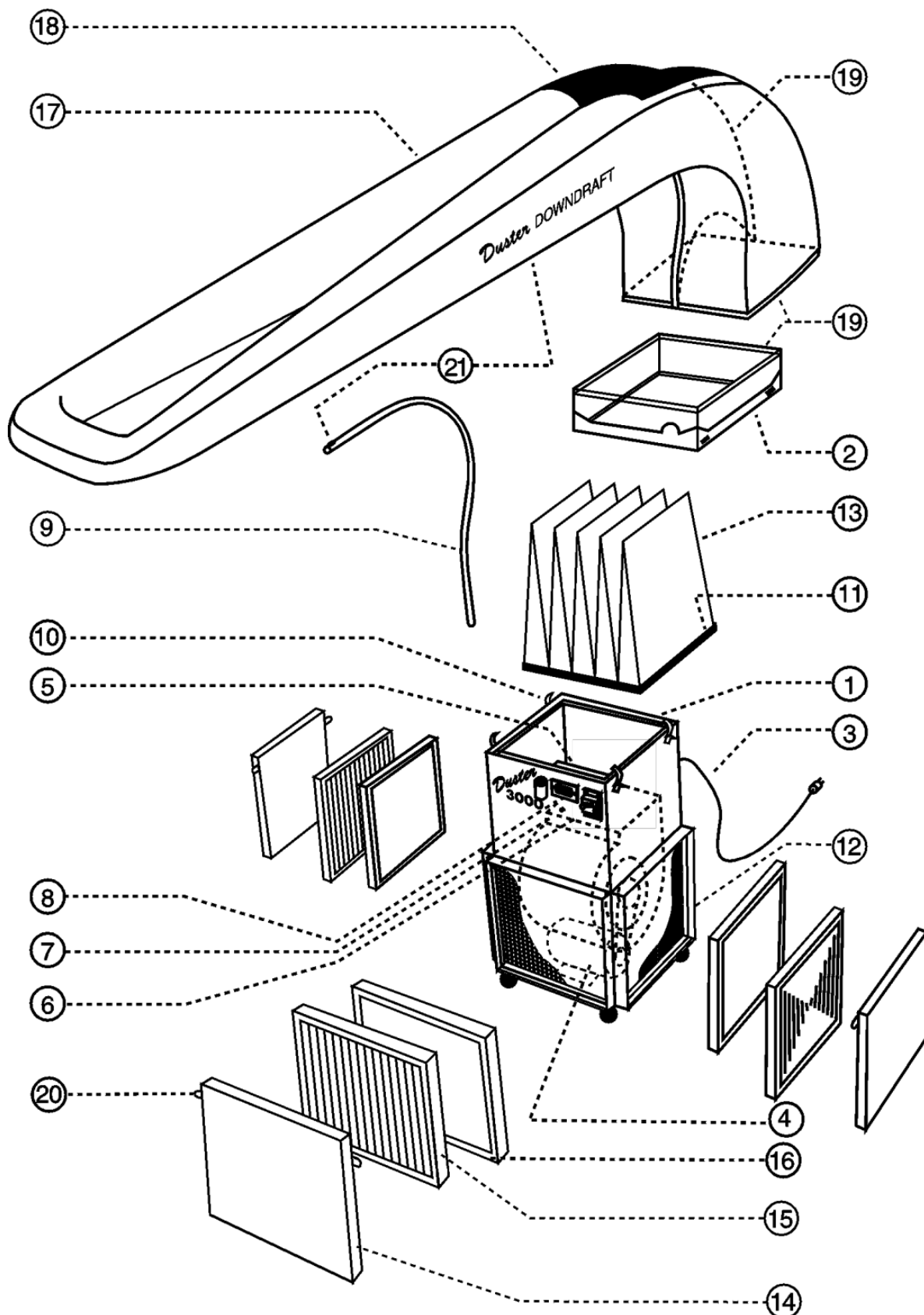
The following auxiliary materials of the unit can cause environmental damage:

Substance	Possible environmental damage
Lubricants	Groundwater contamination
Filter inserts	Hazardous waste containing solvents

6 Technical data

Parameter	Value
Model	Duster 3000 Downdraft
Type	Air filter system
Electrical connection	220 V, ~ 50 Hz
Max. power consumption	8 A, IP 44, 1.8 kW/h
On-site mains fuse	16 A
Weight	123.5 kg
Dimensions (W×H×D)	800 × 1800 × 900 mm (blower unit)
Sound pressure level L_{pA} (3 m; acc. to DIN 45635-01-KL3)	67 dB (A)

7 Technical overview drawing



Item numbers according to spare parts list, page 35

8 Spare parts list

Item	Description
1	Housing – galvanised sheet steel, powder-coated
2	Lexan filter housing
3	Power cable 15 m
4	Motor, 1-1/3 HP, 220 V ~50 Hz, 6.5 A
5	Squirrel-cage blower
6	Power switch cover
7	Yellow warning lamp
8	Digital airflow display
9	PVC support for the outlet duct (plenum)
10	Locking clamps
11	Filter seals: top, neoprene (bag filter seal)
12	Filter seals: bottom (intake filter seals)
13	Viledon bag filter
14	Intake filter insert with tackifier (66 × 66 × 5 cm)
15	Pleated 4" intake filters (61 × 61 × 5 cm)
16	Activated carbon filter (66 × 66 × 5 cm)
17	Outlet duct (plenum) with repair kit and instructions
18	Black exhaust air diffuser
19	Velcro connection (Lexan housing)
20	Velcro connection tabs (intake filter)
21	Velcro tab (PVC support)
22	Exhaust duct with slewing ring joint (not shown)
23	Mobile 24" outlet duct extension

9 Replacement filter inserts

Filter stage 1 - Prefilter

Prefilter (66 × 66 × 5 cm)

3-layer special pre-filter mat with an adhesive surface for paint mist, spray powder, and coarse dust.

- Service life 3-6 months
- 1 set = 3 pieces

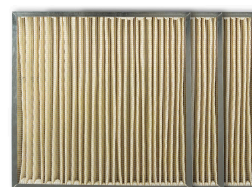


Filter stage 2 - Main filter

Main filter (61 × 61 × 10 cm)

Pleated fiber material in a metal frame; captures particles as small as 5-10 µm.

- Service life 3-6 months
- 1 set = 3 pieces

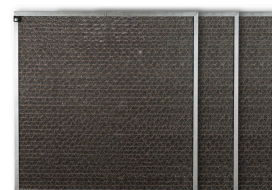


Filter stage 2B - Activated carbon filter

Activated carbon filter (61 × 61 × 5 cm)

Filter cartridge with activated carbon for absorbing toxins and harmful substances, such as solvents.

- Service life 9-18 months
- 1 set = 3 pieces



Filter stage 3 - Fine particle filter

Fine particle filter (61 × 61 × 66 cm)

Fine-particle bag filters with a large surface area for fine particles suspended in the air.

- Service life 12-24 months
- 1 piece





EG-Konformitätserklärung

im Sinne der EG-Maschinenrichtlinie 2006/42/EG vom 17. Mai 2006, Anhang II A

Hersteller:

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PLZ Stadt: 59302 Oelde

Telefon: +49 2522 8309 717
Telefax: +49 2522 8309 718
E-Mail: info@duster-3000.com

Beschreibung und Identifikation des Produktes:

Handelsname: Duster 3000 Downdraft
Typ: Luft Filtersystem
Projektnummer: 8160001

Serien Nr:
Baujahr: 2019

Beschreibung: Absauganlage zur Reinigung der Umgebungsluft.
 Das Gerät wird in die Gerätekategorie 3 der Gerätegruppe II eingestuft.

Es wird ausdrücklich erklärt, dass das Produkt allen einschlägigen Bestimmungen der folgenden EG- Richtlinien entspricht:

Nr.	Dokumentnummer	Titel der Richtlinie
1	2006/42/EG	Maschinenrichtlinie
2	2014/30/EU	elektromagnetische Verträglichkeit
3	2014/34/EU	ATEX-Richtlinie

Die folgenden harmonisierten Normen nach Artikel 7 (2) wurden angewandt:

Nr.	Dokumentnummer	Titel der Norm
1	EN 60335-1:2012	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke — Teil 1: Allgemeine Anforderungen IEC 60335-1:2010 (modifiziert)
2	EN 60335-2-65:2003/A11:2012	Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke — Teil 2-65: Besondere Anforderungen für Luftreinigungsgeräte
3	DIN EN 55014-1:2012-05; VDE 0875-14-1:2012-05	Elektromagnetische Verträglichkeit - Anforderungen an Haushaltsgeräte, Elektrowerkzeuge und ähnliche Elektrogeräte - Teil 1: Störaussendung
4	DIN EN 60079-0:2014-06	Explosionsgefährdete Bereiche - Teil 0: Betriebsmittel - Allgemeine Anforderungen (IEC 60079-0:2011, modifiziert + Cor.:2012 + Cor.:2013); Deutsche Fassung EN 60079-0:2012 + A11:2013
5	IN EN 60079-15:2016-07; VDE 0170-16:2016-07	Explosionsgefährdete Bereiche - Teil 15: Geräteschutz durch Zündschutzart "n" (IEC 31/1235/CD:2015)
6	EN ISO 12100:2010	Sicherheit von Maschinen — Allgemeine Gestaltungsgrundsätze — Risikobeurteilung und Risikominderung
7	EN 60204-1:2006/A1:2009 IEC 60204-1:2005/A1:2008	Sicherheit von Maschinen — Elektrische Ausrüstung von Maschinen — Teil 1: Allgemeine Anforderungen IEC 60204-1:2005 (modifiziert)

Die in der Gemeinschaft ansässige Person, die für die Zusammenstellung der technischen Unterlagen bevollmächtigt ist:

Name: en:plan
Straße: Porschestraße 25
PLZ Stadt: D-48529 Nordhorn

Telefon: +49 (0) 5921 – 8 50 44 66
Telefax: +49 (0) 5921 – 8 50 44 67
E Mail: info@en-plan.org

Oelde, 06.02.2019

Geschäftsführer cleanAIR GmbH
 Dirk Pöttker

Instruction and training aid

As the employer/operator, you are obliged to inform and instruct the operating personnel about existing legal and accident prevention regulations and about the safety devices of the Duster 3000 Downdraft. This obligation also extends to safety devices used or installed in connection with the use of the Duster 3000 Downdraft. The different professional qualifications of the employees must be taken into account.

The operating personnel must have understood the instruction, and it must be ensured that the instruction is followed.

This is the only way to ensure that your personnel work in a safety- and hazard-conscious manner. Compliance with the instruction should be checked regularly. As the employer/operator, you should therefore have each employee confirm their participation in an instruction session in writing.

The following pages contain examples of training topics and a form to copy for confirming participation in the training/instruction.

Examples of training topics

1. Safety

- Accident prevention regulations
 - General legal regulations
 - General safety instructions
 - Emergency measures
 - Safety instructions for operating the Duster 3000 Downdraft
 - Safety devices in the vicinity of the Duster 3000 Downdraft
 - Meaning of symbols and signs
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2. Handling the Duster 3000 Downdraft

- Using the controls
 - Correct set-up of the Duster 3000 Downdraft
 - Ergonomically correct lifting and carrying of loads
 - Explanation of the operating manual for the operating personnel
 - The operator's particular experience in handling the Duster 3000 Downdraft
 - Troubleshooting
 - Replacing the filters
-
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3. Servicing and maintenance regulations

- Proper handling of cleaning agents and lubricants
 - The operator's particular experience in maintenance, servicing, cleaning and care of the Duster 3000 Downdraft
-
-

Confirmation of instruction

By signing this record, the signatories confirm the accuracy of the following information and data.

Project: **Mobile recirculation/exhaust air extraction unit**

Trade name: **Duster 3000 Downdraft**

Project number: **8160001**

Type: Air filter system

I hereby confirm that I have understood the content of this instruction.

Instruction topic:		
Date:	Duration of instruction:	Trainer:
Trainer's signature:		
No.:	Surname, first name:	Signature
1		
2		
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