

# **OPERATING INSTRUCTIONS**

# FLEXTOOL PORTAVAC FDC-1A1P



Version 1.0 (July 2025)

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# INTRODUCTION

Thank you for your selection of Flextool equipment.

Flextool has specialised in the design and manufacture of quality products since 1951 and have taken care in the assembly and testing of this product. Should service or spare parts be required, prompt and efficient service is available from our extensive dealer network.

The goal of Flextool is to provide power equipment that helps the operator works safely and efficiently. The operator is the most crucial safety component for this equipment and using caution and sound judgement is the best way to prevent injury. While we cannot cover all potential hazards, we have highlighted some key points. Operators should pay attention to and follow Caution, Warning, and Danger signs on equipment and in the workplace, as well as reading and following the safety instructions for each product in the operating instructions manual.

It is important to understand how each machine operates. Even if you have had experience with similar equipment previously, inspect each machine carefully before use. Get the "feel" of it and familiarise yourself with its capabilities, limitations, potential hazards, how it operates, and how it stops.

# APPLICATIONS

The Flextool PortaVac FDC-1A1P is a compact, high-performance H-Class dust collector, purpose-built for the safe capture of fine concrete dust particles, including crystalline silica, generated during construction and renovation processes such as crushing, cutting, drilling, grinding, sawing, or polishing of stone, concrete, and other silica-containing materials.

Designed to complement a wide range of handheld power tools, the Flextool PortaVac is ideal for professionals requiring a portable, lightweight dust collection solution. Its compact design and professional-grade filtration make it particularly suited for tasks where mobility, safety, and air quality are critical.

The Flextool PortaVac FDC-1A1P is commonly used across various construction, repair, and renovation projects, ensuring a cleaner, safer work environment and compliance with silica dust exposure regulations.

**Key Application Areas:** 

Silica dust control: Essential for capturing respirable crystalline silica at the source during common dust-generating tasks.

Handheld tool compatibility: Designed for use with grinders, drills, and other handheld equipment to provide efficient point-of-origin dust extraction.

Confined space operation: Compact and manoeuvrable, making it ideal for work in tight areas where larger dust collectors cannot be used.

Workshop and jobsite air quality: Contributes to maintaining cleaner air and reducing airborne hazards in professional environments.

The Flextool PortaVac FDC-1A1P offers a reliable and portable solution for dust collection, helping professionals meet health and safety standards while maintaining productivity in demanding workspaces.

#### **IMPORTANT NOTE**

The Flextool PortaVac FDC-1A1P is designed exclusively for dry, non-combustible dust and is not suitable for the collection of liquids or combustible materials.

# **FUNCTIONS AND KEY FEATURES**

The Flextool PortaVac FDC-1A1P is a lightweight, highly portable dust collector engineered for smaller surface preparation tasks and edge grinding. Featuring a powerful 1200 W motor for increased airflow and a high-quality H-Class HEPA filtration system for reliable and high-performing air filtration for a wide range of projects.

Designed to capture the finest concrete and silica dust particles, the Flextool PortaVac FDC-1A1P is an auto-pulsing dust collector, using patented auto-pulsing technology for 100% uninterrupted working and no manual filter cleaning. It comes standard with a range of accessories and filters.

Ideal for edge grinding, tight workspaces, continuous tool operation, and safe onsite dust management.



<sup>\*</sup> For dry use only, must not be used wet. If used wet, filters will need to be replaced.

# GENERAL SAFETY AND HAZARD INSTRUCTIONS

Always follow the safety instructions outlined in this manual and review the associated product Risk Assessment prior to operating this equipment. Ensure that safety information and equipment decals are always well-maintained and legible. Compliance with safety instructions is mandatory.

For additional safety information relating to engines, motors and batteries, please refer to the manufacturer's Operating Instructions.

#### **RISKS AND HAZARDS**

- NEVER allow an untrained person to operate equipment without adequate instruction.
- ENSURE all users read, understand, and follow the operating instructions.
- SERIOUS INJURY may result from improper or careless use of this equipment.
- NEVER operate this equipment without personal protective equipment.
- NEVER operate this equipment when feeling unwell due to illness, fatigue, or medication.
- ALWAYS keep a first aid kit and appropriate fire extinguishers in accessible location.
- ALWAYS follow appropriate lifting and site handling procedures.

#### **MECHANICAL HAZARDS**

- DO NOT operate the equipment unless all protective guards are in place.
- ENSURE where applicable to remove spark plugs, disconnect battery from motor and isolate power cable from power outlet prior to undertaking any maintenance and repair.
- AVOID contact with hot surfaces such as engines, batteries and motors, as this can lead to severe burns.
- ONLY trained and competent personnel should perform equipment repairs and maintenance.
- ONLY licenced personnel should perform electrical repairs and maintenance.

#### FIRE AND EXPLOSION HAZARDS

- DO NOT operate this equipment in combustible environments.
- DO NOT operate this equipment in the vicinity of sparks, naked flames or other sources of ignition.
- DO NOT smoke near equipment.
- IMMEDIATELY discontinue operation if damage to wiring or other electrical components is identified.

# **ELECTRICAL HAZARDS**

- INSPECT electrical leads, plugs and sockets regularly for damage, if any damage is found isolate equipment and seek immediate repair.
- DO NOT operate the equipment using coiled or tangled extension leads.
- DO NOT operate the equipment where moisture or water is present.
- ENSURE that all electrical repairs are carried out by QUALIFIED and LICENCED personnel.
- DO NOT pull or carry by power cord, or pull cord around sharp edges or corners.
- DO NOT clean or service machine when plugged in.

# **NOISE HAZARDS**

- EXCESSIVE NOISE can lead to temporary or permanent loss of hearing.
- ALWAYS wear approved hearing protection to limit noise exposure.

# PERSONAL PROTECTIVE EQUIPMENT

ALWAYS wear appropriate personal protective equipment as outlined in the safety decal section of this manual.

#### **ENVIRONMENTAL SAFETY**

- ENSURE correct and safe disposal of waste, fuel or oil in accordance with local authority guidelines.
- ONLY operate equipment within prescribed times as determined by local noise control laws.

#### SILICOSIS AND RESPIRATORY HAZARDS

Flextool Dust Collectors are designed for the safe capture of fine concrete dust particles including crystalline silica that is generated in workplace processes such as crushing, cutting, drilling, grinding, sawing or polishing of stone, concrete and other man-made products that contain silica. Exposure to crystalline silica can be extremely harmful to your health and cause a wide range of respiratory illnesses. Flextool recommends that all operators of equipment used in the above listed activities familiarise themselves with the "Working with silica and silica containing products" safety handbook available on the Safe Work Australia website: www.safeworkaustralia.gov.au

#### **ADDITIONAL HAZARDS**

- ALWAYS maintain a clean and safe work environment, free from obstacles and tripping hazards as slips, trips and falls are major causes of serious injury or death.
- ENSURE if an extension cord is used, it is suitable for outdoor use and is in good working condition. Never connect multiple extension cords and limit the extension cord length to 20 metres. Do not operate the equipment using coiled or tangled extension leads.
- AVOID cleaning the machine with a high-pressure cleaner, this can damage filters and electronics.
- DO NOT use on wet surfaces this machine is for dry use only.
- DO NOT use without dust bag and/or filters in place. Replace collection system and/or filters as described in manual.

For further information on hazards, please refer to the risk assessment document available on Flextool.com.au.

# SAFETY DECAL AND LABELS

Before operating this equipment, it is essential to read this entire manual and follow all safety precautions outlined in the manual and the product risk assessment, which can be found on the Flextool website (www.flextool.com.au).

Failure to understand and follow these safety warnings may result in injury. The safety decals on the machine play a crucial role in ensuring the operator's safety. If any decal is damaged or illegible, it must be replaced immediately.

The decals associated with the operation of this equipment are detailed in the manual.

#### **SAFETY COLOUR CODING**

Flextool uses a colour coding system with four colours to alert you to potential hazards that could cause harm to you or others.

The safety messages are tailored to the operator's level of exposure and are introduced by one of three signal words: DANGER, WARNING, or CAUTION or general feature identification.

# **DANGER (RED)**

Indicates a hazardous situation which, if not avoided, WILL result in DEATH or SERIOUS INJURY.

#### **WARNING (ORANGE)**

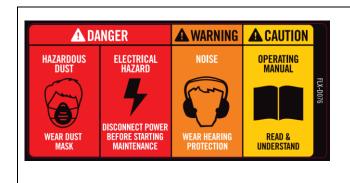
Indicates a hazardous situation which, if not avoided, COULD result in DEATH or SERIOUS INJURY.

# **CAUTION (YELLOW)**

Indicates a hazardous situation which, if not avoided, COULD result in MINOR or MODERATE INJURY.

# **FEATURE IDENTIFICATION (GREEN)**

Addresses product features and practices not related to personal injury.



Hazardous Dust – Always wear dust mask while using and undertaking maintenance on this equipment. Use of this equipment without the use of dust mask can lead to sever respiratory illness.

Electrical Hazard – Always disconnect power when undertaking maintenance.

Noise – Always wear hearing protection while using equipment. Use of this equipment without the use of hearing protection can lead to hearing loss.

Operating Manual – Read and understand the operating manual in full prior to operating equipment.



**H-Class** – Maintenance of the filtration system must only be carried out by an authorised person wearing suitable PPE.

# **OPERATION**

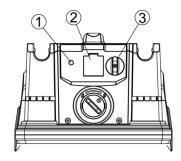
It is essential to operate the equipment and its components strictly in accordance with the provided operating instructions. Take the time to learn how this machine works, even if you have previously used similar equipment. Carefully inspect this machine before use, and familiarize yourself with its capabilities, limitations, potential hazards, and how it operates and stops.

# **BEFORE STARTING**

- ENSURE there is a clear and safe working environment that is free from hazards prior to commencing operation.
- Move the dust collector to the operating position and lock the caster wheels to prevent unwanted movement.
- Check all the dust collector parts and accessories are assembled and installed correctly.

#### STARTING THE PORTAVAC

- 1. **Pressure indicator** Light will be illuminated when the filters are blocked and require cleaning or replacing
- 2. Power socket Power supply for power tools
- 3. **Power switch** On / Off / Auto



# Method 1 - Use with a power tool (e.g., handheld concrete grinder)

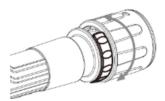
- Plug the dust collector into a suitable wall outlet.
- Plug the power tool into the dust collector power outlet (2).
- Connect the dust collector hose between the dust collector and the power tool.
- Set the control switch (3) on the dust collector to 'Auto'.
- Start the power tool the dust collector will start automatically.
- When the power tool stops, the dust collector will continue operation to remove all residual airborne dust for an additional 7 seconds before shutting down.

# Method 2 - Use without a power tool

- Plug the power tool into a suitable wall outlet.
- Connect the required dust collector accessories (hose, wand and floor tools)
- To start operation, turn the control switch (3) on the dust collector to 'On'.
- To stop operation, turn the control switch (3) on the dust collector to 'Off'.

#### **AIRFLOW ADJUSTMENT**

There is an airflow adjustment ring fitted to the handle. Airflow can be adjusted by rotating the adjustment ring to meet different work site and secondary power tool requirements.



#### **OPERATION**

Dust-laden air is drawn into the unit, through the inlet valve via the suction hose, at high speed. As the air enters the cyclone system, it slows down, allowing coarse dust particles to separate through a combination of centrifugal force and gravity. The remaining air, containing finer particles, then passes through the filter system for further separation.

Separated dust accumulates within the cyclone chamber during operation. Once the machine is switched off, this accumulated dust drops into the collection tank.

**IMPORTANT**: Do not open the collection tank for at least 15 seconds after switching off the dust collector. This pause allows any airborne dust within the system to settle into the bottom of the tank.

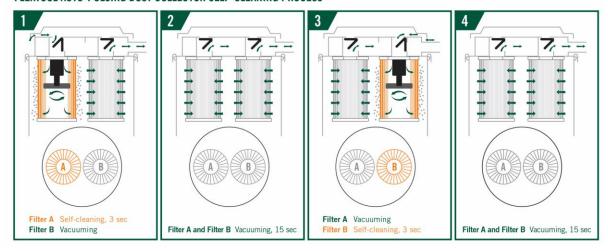
# **AUTO-PULSING SELF-CLEANING FILTERS**

- The automatic filter cleaning system alternates between filters as they become loaded with dust and their suction performance decreases.
- If suction remains insufficient, the air filters may need to be replaced.

**IMPORTANT**: Before inspecting or replacing filters:

- Switch off the unit at the power outlet.
- Disconnect the power lead from the wall outlet.
- Wear appropriate personal protective equipment (PPE) to minimise exposure to harmful dust.

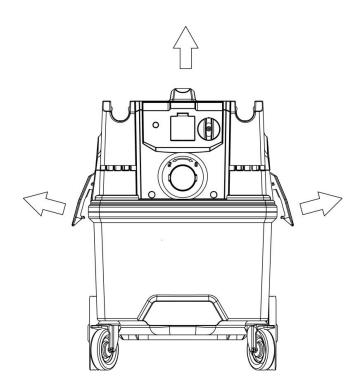
#### FLEXTOOL AUTO-PULSING DUST COLLECTOR SELF-CLEANING PROCESS

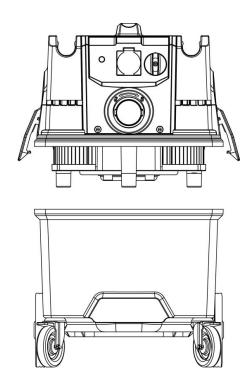


#### **EMPTYING THE DUST COLLECTOR TANK**

To maintain optimal performance and prevent overfilling, regularly inspect the dust collection tank. The inspection frequency will vary depending on the application and the amount of material being collected.

- Shut down the device and secure it using the parking brakes at the casters.
- Release both side latches to separate the upper and lower sections of the dust collector. Gather the sides of the plastic collection bag and securely close it using a cable tie.
- Insert a new plastic bag into the tank, ensuring the vent holes are positioned inside the tank. Refit the upper section and secure the side latches.





# SERVICE AND PREVENTIVE MAINTENANCE

Qualified personnel should be assigned the task of performing service and maintenance on this equipment. To ensure safe operation and optimal performance, thorough inspection and on time maintenance is imperative.

Consistently monitor the machine's condition and proactively maintain it in its optimal state.

- ONLY licenced personnel should perform electrical repairs and maintenance.
- ENSURE mechanical repairs and maintenance of the equipment is performed only by trained and competent personnel.
- ONLY use genuine parts and accessories to ensure compatibility and safe operation of equipment.
- ENSURE where applicable to remove spark plugs, disconnect battery from motor and isolate power cable from power outlet prior to undertaking any maintenance and repair.
- ALWAYS wear PPE when servicing and repairing equipment (gloves, glasses, dust mask and steel cap boots) to reduce risk of cuts, burns, crushing, eye injuries, skin exposure to fuel or oils, dust inhalation, etc.
- NEVER work underneath equipment suspended by lifting device or on ramps.

#### **SERVICE MAINTENANCE SCHEDULE**

All parts and components should be replaced if signs of deterioration, cracks, damage or wear have been identified to maintain equipment safety and performance.

FDC Dust Collector Maintenance Schedule								
		Daily	Weekly or every 20 hrs	Monthly or every 50 hrs	Quarterly or every 100 hrs	Yearly or every 200 hrs		
Electrical Leads	Inspect for signs of wear or damage	Υ						
Switches	Inspect for signs of wear, damage or loose connections							
Switches	of the controls.	Υ						
Accessories	Inspect for signs of wear, deformity, or cracks on accessories such as hose, wand, flooring cleaning head,							
	nozzles etc	Υ						
Bagging System	Ensure the dust bagging system is correctly fitted	Υ						
Tank Seals	Inspect for signs of wear or damage	·	Υ					
Filters	Replace filters if suction power reduces			Υ				

# STORAGE, LIFTING AND TRANSPORT

It is essential to prioritise safety and proper handling when it comes to the storage, lifting, and transportation of equipment. Following safe storage practices ensures the longevity and operational reliability of the equipment. During transportation and lifting it is important to exercise caution to avoid any potential harm and to adhere to the following guidelines.

- NEVER drag or pull the equipment by the hose or power cord.
- ALWAYS follow correct manual handling techniques.
- NEVER allow any person to stand underneath equipment while lifting.
- NEVER lift equipment while connected to power outlet or when engine / motor is running.
- ALWAYS secure equipment during transport by using suitable tie down points on both equipment and vehicle.
- ENSURE all equipment is restrained according to the NVHR load restraint guidelines.
- ALWAYS inspect straps, hooks, chains, ropes, and crane/lifting points for damage prior to use.
- ENSURE where applicable to lock castor wheels or lay equipment flat during transport and storage to prevent unwanted movement.
- ENSURE all electrical equipment, power supply leads and accessories are stored in a dry environment away from moisture.

# PRODUCT DECOMMISSIONING

Decommissioning is a controlled process used to safely retire a piece of equipment that is no longer serviceable. If the equipment poses an unacceptable and unrepairable safety risk due to wear or damage or is no longer cost effective to maintain (beyond life-cycle reliability) and is to be decommissioned or dismantled, please adhere to the following guidelines.

- ALWAYS contact your local council or recycling agency in your area to arrange for proper disposal of:
  - o Electrical components and batteries. Exercise caution when handling and transporting batteries.
  - Oil and other waste associated with this equipment. DO NOT pour waste or oil directly onto the ground, down a drain or into any water source.
- CONSIDER recycling all recyclable materials in line with local council or recycling agency capabilities in your area. This can include steel, aluminium, copper, plastics, etc.

# **TECHNICAL DATA**

Model	Operating Weight kg (lb)	Voltage V/Hz	Motor W	Current A	Air Flow m³/h (ft³/h)	Vacuum mbar	Vacuum Hose Diameter mm (in)	Pre Filter Type	Filtration Type	Filter Cleaning	Dust Collection	Power Cord Length m (ft)	Product Code
FDC-1A1P	13.5 (29.8)	240 50/60	1200	5.2	262 (9252)	250	35 (1.4)	N/A	2 x H-Class H13	Auto-pulsing (automatic)	Bagging system (Non-continuous)	8 (26.25)	FT100500-UNIT

# **TROUBLE SHOOTING**

Efficient troubleshooting is vital for the optimal functioning of this equipment. In addressing issues, a systematic approach is key. This section provides guidance on identifying, analysing, and resolving potential challenges to maintain the equipment's performance and longevity.

Symptom	Possible causes and correction
PortaVac does not start	<ul> <li>Check that the machine is plugged in correctly and that there is power at the wall outlet.</li> <li>Check power cable for damage.</li> <li>Check if PortaVac operation switch is turned on and is functioning.</li> </ul>
PortaVac stops immediately after starting	<ul> <li>Check fuse board in the building.</li> <li>Electrical short circuit with the motor or cable. Send for repair by a licenced electrician.</li> </ul>
Motor runs but there is poor or no suction	<ul> <li>Check that the hose and accessories are fitted and installed correctly.</li> <li>Clogged or blocked hose. Clean hose to remove obstruction.</li> <li>Ensure the PortaVac bagging system and filters are fitted correctly.</li> <li>Ensure the top cover is fitted correctly and both latches are closed.</li> <li>Damaged or missing tank seal. Refit or replace the tank seal.</li> </ul>
Dust blowing from motor	Filters are fitted incorrectly. Adjust or replace filters.



# **Flextool**

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This manual summarises our best knowledge of the product based on the information available at the time of publication. You should read this manual carefully and consider the information in the context of how the product will be used. Our responsibility for products sold is subject to our standard terms and conditions of sale.

# DISCLAIMER:

Any advice, recommendation, information, assistance or service provided by us in this manual is given in good faith and is believed by us to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by us is provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon us by any condition or warranty implied by Commonwealth, State or Territory Act or ordinance void or prohibiting such exclusion limitation or modification. The product can be expected to perform as indicated in this manual so long as operation and operational procedures of the individual products are followed as recommended in this manual.

Design and technical specifications may be subject to changes.

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