OPERATING INSTRUCTIONS

FLEXTOOL DUST COLLECTOR FDC-1A1, FDC-1A2

Version 1.0 (October 2025)

FOR MORE INFORMATION VISIT flextool.com.au

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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 FDC-1A1 and FDC-1A2 are high-performance H-Class dust collectors, 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 industries and applications, these dust collectors are ideal for professionals requiring a highly manoeuvrable, quality dust collection solution. Their professional-grade filtration make it particularly suited for tasks where mobility, safety, and air quality are critical.

The Flextool FDC-1A1 and FDC-1A2 dust collectors are 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.

Equipment compatibility: Designed for use with concrete grinders, drills, and a wide variety of equipment to provide efficient point-of-origin dust extraction.

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

The Flextool FDC-1A1 and FDC-1A2 dust collectors offer 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 FDC-1A1 and FDC-1A2 dust collectors are 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 FDC-1A1 (single motor 1 x 1800 w) and FDC-1A2 (dual motor 2 x 1200 w) operate from a standard 240 volt, 10 amp power outlet. Featuring powerful motors for increased airflow, high-quality H-Class HEPA filtration systems and efficient continuous bagging systems, they provide reliable and high-performing air filtration for a wide range of projects.

Dust-laden air is sucked through the inlet valve at high speed via the suction hose. The air is slowed down by a cyclone effect inside the tank and coarse dust particles are separated out, partly by centrifugal force and partly by gravity. Separation is made when air and finer particles pass through the dual filter system. The separated dust accumulates in the cyclone tank until the machine is switched off, it then drops into the continuous bag system.

Designed to capture the finest concrete and silica dust particles, the Flextool Dust Collector FDC-1A1 and FDC-1A2 are auto-pulsing dust collectors, using patented auto-pulsing technology for 100% uninterrupted working and no manual filter cleaning. These dust collectors are also equipped with a 20 metre continuous bagging system for the safe capture and disposal of dust. The continuous bagging system can be divided and sealed shut using the supplied zip ties.

FDC-1A1

FDC-1A2

Auto-pulsing technology

- Provides reliable and efficient continuous filter cleaning during operation and ensures 100% uninterrupted working
- No manual cleaning

Dust inlet port

Integrated closing mechanism prevents dust escape when hose is disconnected, ensuring a cleaner and safer work environment

Continuous bagging system

Clean and efficient management, storage and disposal of captured material

Solid and smooth wheels

Quality wheels with brake system for easy and safe manoeuvrability

HEPA filtration system

- Compliant with H-Class standards for optimum air filtration and capture of the finest concrete and silica dust particles
- Captures 99.99% of particles ≥ 0.3 microns

Dual Ametek motor

- Continuous high-performance operation
- Ideal for use with grinders with a working width of up to 600 mm

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

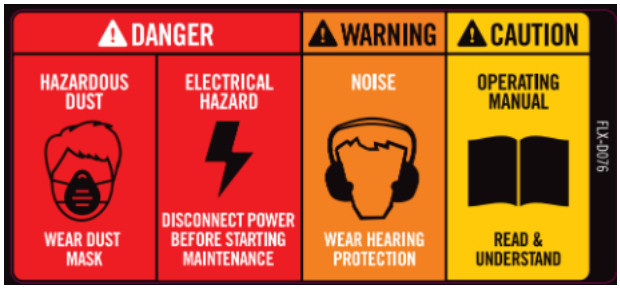
Flextool uses a colour coding system with four colours to alert you to potential hazards that could cause harm to you or others.
The safety messages are tailored to the operator's level of exposure and are introduced by one of three signal words: DANGER, WARNING, or CAUTION or general feature identification.

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.

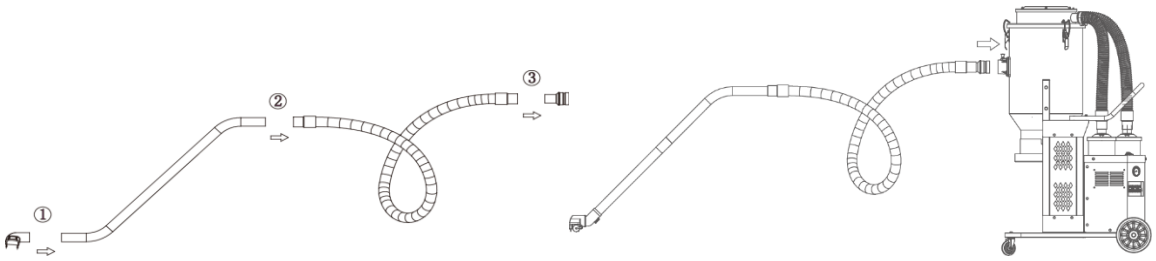
FEATURE IDENTIFICATION (GREEN)
Addresses product features and practices not related to personal injury.

	**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 earing 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 each machine works, even if you have previously used similar equipment. Carefully inspect each machine before use, and familiarize yourself with its capabilities, limitations, potential hazards, and how it operates and stops.

ASSEMBLING THE ACCESSORIES



1. Connect the floor brush and wand
2. Connect the wand and the hose
3. Connect the hose and the adaptor
4. Connect to the dust collector ensuring the adaptor locks into the inlet

STARTING AND STOPPING

- 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.
- Ensure the continuous bagging systems is installed correctly and the bag is tied close with zip ties.
- Plug the power lead on the dust collector into a suitable power outlet.
- Turn the switches positioned at the rear of the dust collector to the ON position to start operation.
    - **FDC-1A1** – Single ON / OFF Switch
    - **FDC-1A2** – Dual ON / OFF Switch (Turning one switch on allows operation with a single motor, turning both switches on allows operation with two motors)
- To turn the dust collector OFF, turn all switch to the OFF position.

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.

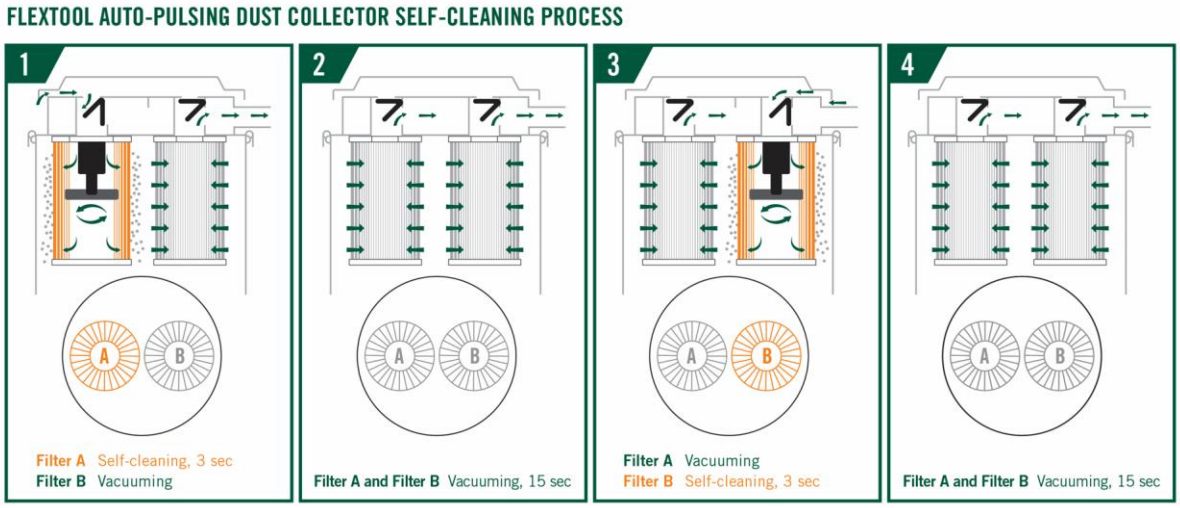
IMPORTANT: Do not open the collection tank for at least 15 seconds after switching off the dust collector. This pause allows any airborne dust within the system to settle into the bottom of the tank.

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.

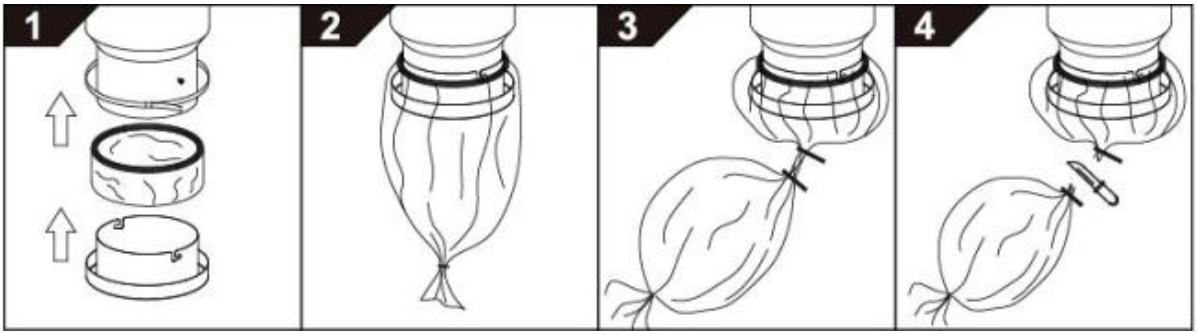
IMPORTANT: Before inspecting or replacing filters:

- 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.



FITTING NEW COLLECTION BAG

- Release the belt holding the last section of the continuous bagging system.
- Remove the bag holder ring by pushing upwards and turning to disengage from its locking position. Once disengaged, pull downward to remove the bag holder ring from the tank.
- Slide the new bag onto the bag holding ring, pull out from the inner section of the bag approx. 100-150 mm.
- Refit the bag holder ring on to the tank ensuring it locks into position.
- Strap the section of bag previously pulled out to the tank with the belt.
- Pull down on the outside of the bag and tie off with a zip tie.



THERMAL PROTECTION

The dust collector is equipped with a thermal protection system to prevent the motor/s from overheating. Should the thermal protection system activate, turn the machine off, unplug the power cord and check for full dust bag, clogged vacuum hose or blocked filters. It may take up to 45 minutes for unit to cool down and for the thermal protection system to reset.

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.

CHANGING FILTERS

Pre-filters

- Unlatch the clamps at the top of the tank and remove the top assembly.
- Turn the used pre-filters counter-clockwise to loosen and gently place in a plastic bag to contain dust.
- Insert new filters, lock filters into place by turning clockwise.
- Refit top assembly and latch clamps into position.

Note: Pre-Filters can be cleaned and reused using clean, non-pressurised water only. Forcefully knocking or hitting the filter or the use of air compressor or high-pressure water **MUST NOT** be used as it will cause damage to the filter. The filters **MUST BE** completely dry before refitting.

HEPA filters

- Locate the filter caps at the rear of the dust collector and loosen to the two retaining nuts.
- CAREFULLY lift the filter out and gently place in a plastic bag to contain dust.
- Insert a new filter in reverse order.

Note: The HEPA filter is not designed to be cleaned and reused, when filter has reached the end of its operating life it must be replaced with a new HEPA filter.

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	Y				
Switches	Inspect for signs of wear, damage or loose connections of the controls.	Y				
Accessories	Inspect for signs of wear, deformity, or cracks on accessories such as hose, wand, flooring cleaning head, nozzles etc	Y				
Bagging System	Ensure the dust bagging system is correctly fitted	Y				
Tank Seals	Inspect for signs of wear or damage		Y			
Filters	Replace filters if suction power reduces			Y		

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:
  - 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 m^3/h (ft^3/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-1A1	39.5 (87.1)	240 50/60	1 x 1800	7.2	220 (7769)	320	50 (2)	2 x H-Class H13	1 x H-Class H13	Auto-pulsing (automatic)	Continuous dropdown bagging system	8 (26.25)	FT101804-UNIT
FDC-1A2	53 (116.8)	240 50/60	2 x 1200	9.6	400 (14,126)	240	50 (2)	2 x H-Class H11	2 x H-Class H13	Auto-pulsing (automatic)	Continuous drop-down bagging system	8 (26.25)	FT100463-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**
Does not start	• Check that the machine is plugged in correctly and that there is power at the wall outlet. • Check power cable for damage. • Check if operation switch is turned on and is functioning.
Stops immediately after starting	• Check fuse board in the building. • Electrical short circuit with the motor or cable. Send for repair by a licenced electrician.
Motor stops after extended operation	• Thermal protection system has activated • Inspect the unit for overfilled dust bag, clogged filters or blocked hose. • Remove any obstructions that could be restricting airflow and causing overheating • Allow to cool down and for thermal protection system to reset (This can take up to 45 mins)
Motor runs but there is poor or no suction	• Check that the hose and accessories are fitted and installed correctly. • Clogged or blocked hose. Clean hose to remove obstruction. • Ensure the dust collector bagging system and filters are fitted correctly. • Ensure the top cover is fitted correctly and both latches are closed. • Damaged or missing tank seal. Refit or replace the tank seal.
Dust blowing from motor	• Filters are fitted incorrectly. Adjust or replace filters.

Flextool

1956 Dandenong Road, Clayton VIC 3168, Australia
Phone (AUS): 1300 353 986
flextool.com.au
ABN 80 069 961 968

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.