



Superpro go and Velo go risk assessment

Every business has its own challenges in ensuring the safety of its employees against workplace accidents.

Therefore, it's essential for management to identify risks, and subsequently implement and maintain high levels of health and safety precautions within the workplace.

This document was designed to help management identify risks, potential injury or harm to health associated with tasks requiring a backpack vacuum cleaner.

Note: Location specific risks are excluded in this analysis.

Hazard identification

The following potential hazards have been identified while using battery operated backpack vacuum cleaners and are applicable to the Superpro go and Velo go backpack vacuum cleaners.

Task or Action	Potential Hazard
Handling battery pack and charger with wet hands	Electric shock or electrocution
Exposing the battery pack and charger to high temperature (i.e. direct sunlight or heater) or extreme cold (i.e. contact with snow or wintery outdoors)	Leaked or damaged cells can cause electrical shock, skin irritation, burns, breathing or ingestion problems. If any of these symptoms occur, seek medical advice.
Damaging the battery packs (i.e. dropping or crushing the pack)	Leakage or damaged cells
Charging the battery packs with unauthorised or non-genuine Pacvac charger	Leakage or damaged cells
Carrying the charger by the cord	Electric shock or electrocution

Leaving the batteries charging during the whole night or prolonged period of time	Leakage or damaged cells
Blocking the charger ventilation	Electric shock or electrocution
Charging damaged battery packs	Electric shock or electrocution
Using the charger if the power cord is compromised or damaged	Electric shock or electrocution, burns, tripping
Lifting the vacuum off the floor preparing for use	Back strain
Stretching to put the backpack on	Pulling muscles
Wearing backpack incorrectly	Back or shoulder strain
Contact with the charger power cord and/or plugging into a power socket	Electric shock or electrocution
Pushing and pulling motion whilst vacuuming	Shoulder or arm strain
Persistent overhead use with wand and floor tool	Shoulder or arm strain
Use whilst bending over	Back strain
Use whilst crouching	Pulling muscles
Vacuuming stairs	Tripping, falling over, losing balance
Vacuuming liquids	Electric shock or electrocution
Repetitive body twisting	Pulling muscles
Not removing of dust from dust bag for prolonged periods of time	Air quality
Unfamiliar noise or high pitch noise while machine is turned on or in operation	Noise pollution

Risk rating table

Consequences of any injury or harm to health

Likelihood of Injury or harm to health	Insignificant (eg no injuries)	Moderate (eg first aid / medical treatment)	Major (eg extensive injuries)	Catastrophic (eg fatalities)
Very Likely	High	Extreme	Extreme	Extreme
Likely	Moderate	High	Extreme	Extreme
Moderate	Low	High	Extreme	Extreme
Unlikely	Low	Moderate	High	Extreme
Highly unlikely (rare)	Low	Moderate	High	High

Risk assessment

We've put together the following guide to help organisations identify the risks associated with their profession whilst using a Pacvac battery operated backpack vacuum cleaner.

This Risk Assessment brochure can be used for the following applications:

- Tendering
- WH&S Compliance
- Staff and employee training

Please contact support@pacvac.com for further questions.

Hazard	Low Frequency	Medium Frequency	High Frequency	Rating
Handling battery pack and charger with wet hands	X			Extreme
Exposing the battery pack and charger to high temperature (i.e. direct sunlight or heater) or extreme cold (i.e. contact with snow or wintery outdoors)	X			Extreme
Damaging the battery packs (i.e.		X		Extreme

dropping or crushing the pack)				
Charging the battery packs with unauthorised or non-genuine Pacvac charger	X			Extreme
Carrying the charger by its cords	X			Extreme
Leaving the batteries charging during the whole night or prolonged period of time			X	Extreme
Blocking the charger ventilation	X			Extreme
Charging damaged battery packs	X			Extreme
Using the charger if the power cord is compromised or damaged			X	Extreme
Lifting the vacuum off the floor to prepare for use	X			Low
Stretching to put the backpack on			X	Low
Wearing backpack incorrectly			X	High
Contact with the power cord and / or plugging into a power socket	X			Extreme
Pushing and pulling motion whilst vacuuming			X	Low
Persistent overhead use with wand and floor tool	X			Low
Use whilst bending over		X		High
Use whilst crouching	X			Low
Vacuuming stairs			X	High
Vacuuming liquids	X			Extreme
Repetitive body twisting			X	Low
Not removing of dust from dust bag for prolonged periods of time.		X		Medium
Unfamiliar noise or high pitch noise while machine is turned on or in operation	X			High

Risk control measures

The following risk control measures should be taken to eliminate and minimise the potential for injury or harm to health.

Pacvac have a free online training portal, Pacvac Academy, where users can gain training and certification in the correct use and maintenance of their machines including Superpro go and Velo go.

Task or Action	Potential Hazard	Risk Control Measures
Handling battery pack and charger with wet hands	Electric shock or electrocution	<ul style="list-style-type: none">● Read the Product and Training Manual of the machine.● Dry hands before using the machine, battery packs, or charger.
Exposing the battery pack and charger to high temperature (i.e. direct sunlight or heater) or extreme cold (i.e. contact with snow or wintery outdoors)	Leaked or damaged cells can cause electrical shock, skin irritation, burns, breathing or ingestion problems	<ul style="list-style-type: none">● Read the Product and Training Manual of the machine.● Store or place the machine, battery pack, and charger in a shaded area or room.
Damaging the battery packs (i.e. dropping or crushing the pack)	Leakage or damaged cells	<ul style="list-style-type: none">● Read the Product and Training Manual of the machine.● Check battery packs for damage or leakage before every use.● Do not use, charge or vacuum if there is any sign of leakage.● Remove damaged battery packs and contact an Authorised Pacvac Service Centre for disposal.
Charging the battery with unauthorised or non-genuine Pacvac charger	Leakage or damaged cells	<ul style="list-style-type: none">● Only use Pacvac authorised chargers.
Carrying the charger by its cord	Electric shock or electrocution	<ul style="list-style-type: none">● Never carry the charger by their cords.

		<ul style="list-style-type: none"> ● Check for damage to the charger cord, plug, and socket. ● Check the charger plug is properly connected before use. ● Read the Product and Training Manual of the machine. ● Follow the “Safety and Maintenance” label on the machine.
Leaving the batteries charging during the whole night or prolonged period of time	Leakage or damaged cells	<ul style="list-style-type: none"> ● Implement charging timers or create a charging schedule that ensures batteries are not left charging beyond their required time. ● Train employees in the risks of overcharging and the importance of adhering to charging guidelines. ● Conduct regular inspections of the charging equipment and batteries to identify signs of wear, damage, or malfunction. Replace any faulty components immediately.
Blocking the charger ventilation	Electric shock or electrocution	<ul style="list-style-type: none"> ● Read the Product and Training Manual of the machine. ● Ensure charger ventilation is not obstructed before use.
Charging damaged battery packs	Electric shock or electrocution	<ul style="list-style-type: none"> ● Read the Product and Training Manual of the machine. ● Check battery packs for damage or leakage before every use. ● Do not use or charge if there is a sign of leakage. ● Remove damaged battery packs and contact an Authorised Pacvac Service Centre for disposal.
Using the charger if the power cord is compromised or damaged	Severe burns, fire, electric shock or electrocution	<ul style="list-style-type: none"> ● Inspect the power cord for any signs of damage before each use. ● Do not use the charger if the power cord is compromised or damaged.
Lifting the vacuum off the	Back strain	<ul style="list-style-type: none"> ● Ensure familiarity with the Code

floor preparing for use		<p>of Practice - Hazardous manual tasks as issued by the Commission of Occupational Safety and Health</p> <ul style="list-style-type: none"> • Always bend at the knees to lift or lower.
Stretching to put the backpack on	Pulling muscles	<ul style="list-style-type: none"> • Always stretch the body thoroughly before machine use.
Wearing backpack incorrectly	Back or shoulder strain	<ul style="list-style-type: none"> • Read the Product and Training Manual of the machine. • Complete Superpro go or Velo go training online at academy.pacvac.com.
Contact with the power cord and / or plugging into power socket	Electric shock or Electrocutation	<ul style="list-style-type: none"> • Check all cords and machines have a current 'Test and Tag' before every use. • Check the power cord for damage before every use. • Ensure plugs and sockets are properly connected before every use. • Ensure either the building or the machine has an RCD. • If the charger is fitted with an RCD, check the RCD has a current 'Test and Tag'. Test the RCD with its 'test' button before each use. • Read the Product and Training Manual of the machine. • Complete Superpro go or Velo go training at academy.pacvac.com. • Follow the 'Safety and Maintenance' label on the backpack vacuum cleaner.
Pushing and pulling motion whilst vacuuming	Shoulder or arm strain	<ul style="list-style-type: none"> • Use the manufacturer's recommended floor tool. • Follow the "fishbone method" of vacuuming found online at academy.pacvac.com. • Read the Product and Training Manual of the machine. • Take appropriate breaks from this task.

Persistent overhead use with wand and floor tool	Shoulder or arm strain	<ul style="list-style-type: none"> ● Use extendable metal wands to further your reach and eliminate the need to stretch above shoulder height. ● Take appropriate breaks from this task.
Use whilst bending over	Back strain	<ul style="list-style-type: none"> ● Do not use the vacuum whilst bending over. ● Follow “Operate Right” instructions in the Product and Training Manual of the machine
Use whilst crouching	Pulling muscles	<ul style="list-style-type: none"> ● Do not crouch whilst using the machine. ● Follow “Operate Right” instructions in the Product and Training Manual of the machine. ● Complete Superpro go or Velo go training at academy.pacvac.com.
Vacuuming stairs	Tripping, falling over, losing balance	<ul style="list-style-type: none"> ● Always vacuum while climbing up stairs.
Repetitive body twisting	Pulling muscles	<ul style="list-style-type: none"> ● Do not twist your body, instead, turn your whole body to face the direction you’re cleaning in. ● Read the Product and Training Manual of the machine. ● Complete Superpro go or Velo go training at academy.pacvac.com.
Not removing of dust from dust bag for prolonged periods of time.	Poor air quality	<ul style="list-style-type: none"> ● Wear mask to avoid dust inhalation and gloves to avoid cuts and abrasions for the following measures: <ul style="list-style-type: none"> ○ Always ensure the dust bag is properly disposed of in a lined rubbish bin to contain dust. ○ Ensure dustbags and filters are free from damage after removing them. ○ Clean the vacuum unit and replace the dust bag once full to prevent dust

		buildup and ensure proper operation.
Unfamiliar noise or high pitch noise while machine is turned on or in operation	Noise pollution	<ul style="list-style-type: none"> • Never use a vacuum that makes unfamiliar sounds or doesn't work as expected. • Attach an "Out of Service" tag and report any faulty vacuum cleaners for inspection or repair.

Conclusion

Free additional training can be found at academy.pacvac.com; Pacvac's free online training portal created to support organisations in training their staff in the correct use and maintenance of backpack vacuum cleaners.

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