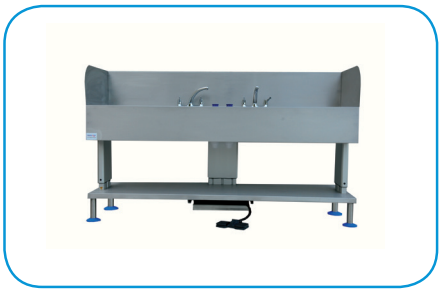
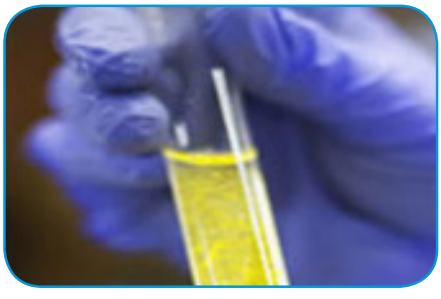
Product Catalogue

Neocare was formed to deliver innovative products that address niche markets in the health care industry, having in house research and development capabilities to create products that can notbe obtained from other sources, and expert manufacturing partners that allow a diverse range of specialities to be addressed.





Contents

Endo Chemstore™

Protecting the Staff who Protect the Patients

Height: 1800mm
Width: 950mm
Depth: 450mm

Spills happen in the confined areas where PAA is used, EndoChemStore prevents the spill and the resulting PAA vapour from entering the air and contains the acid in a safe area, alerting staff, so that correct PPE can be adorned before clean up.

Construction:
- Constructed to ensure high chemical resistance
- Designed to prevent rust
- Withstand solvent attack
- Withstand mechanical and thermal shock

Safety Carbon Filter:
- Endo ChemStore can be operated safely should the main filter breach
- Facilitates uninterrupted use until a replacement primary filter is acquired

Internal:
- Features perforated shelving to allow spills to be rapidly directed to the bunded floor
- Door interlock to prevent inadvertent opening during normal use or alarm conditions
- Bunded floor to retain any spill

Alarms:
- Both visual and audible
- 'Door open alarm' can be reset by 'closing the door'
- Spill alarm locks the door, alerting the operator to adorn PPE

Safe storage of Peracetic Acid and reprocessing chemicals in the clinical environment has now arrived.
In the HSE document : An evaluation of chemical disinfecting agents used in endoscopy suites in the NHS (2007), "Peracetic acid is rated as C in the COSHH Essentials hazard group" (medium hazard) and recommends containment in the COSHH Essentials Control Approach.

The properties of PAA that make it an efficient sterilant and environmentally friendly make it potentially dangerous to any employees exposed to it in the workplace. Unfortunately the health risks to workers from PAA exposure are not known by many employers. Hospitals, food handling and processing industries commonly use PAA, in concentrations that can be harmful to workers if they are exposed.

Health Risks of PAA Exposure

As an antimicrobial agent, PAA is broadly effective against a wide range of microorganisms; it disrupts bonds in proteins and enzymes and interferes with cell membrane transportation through the rupture of cell walls, oxidizing essential enzymes and impairing vital biochemical pathways.

The National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances identifies PAA as a primary irritant, known tumorigen and mutagen.

The New Jersey Department of Health and Senior Services Occupational Health Service released a study on the the health effects of PAA exposure. The study also found that PAA is very irritating to the skin, eyes, nose, throat, and lungs, with the potential for causing permanent scarring of the skin, cornea, and throat. Higher exposures in the short term can also cause pulmonary oedema as well as liver and kidney effects.

PAA Workplace Guidelines

While there are no Occupational Safety and Health Administration (OSHA) regulations specifically for PAA - most OSHA PELS have not been updated since their initial adoption in 1972 - the Environmental Protection Agency (EPA) has issued Acute Exposure Guideline Levels (AEGLs) for PAA, specifically:

- AEGL-3 (death/permanent incapacity) 1.3 ppm: the threshold above which mortality and/or irreversible effects could be observed for an exposure of up to 60 minutes. AEGL-3 is analogous to the NIOSH Immediately Dangerous to Life or Health (IDLH) chemical listing concentrations and documentation values, which are 75 ppm for hydrogen peroxide and 800 ppm for ethylene oxide.
- AEGL-2 (disability) 0.51 ppm: the threshold level above which intense lacrimation, extreme nose discomfort and transient incapacitation (inability of self protection but without residual consequences) could be observed for an exposure of up to 60 minutes.

- AEGL-1 (discomfort) 0.17 ppm: the level above which discomfort could be observed for an exposure of up to 8 hours per day. AEGL is analogous to the OSHA PEL (1 ppm for both hydrogen and ethylene oxide, calculated as an 8 hour time weighted average. See OSHA Standard 1910.1000, Table Z1 Limits for Hydrogen Air Contaminants and OSHA Standard 1910.1047 for Ethylene Air Contaminants.

Mail us for additional information on ecs@neocare.org.uk

PAA Health Risks

Peracetic Acid or Peroxyacetic Acid is a strong oxidizer useful for high level disinfection and sterilization. Hospitals and Food Handling / Food Processing industries commonly use Peracetic or Peroxyacetic acid, in concentrations that can be harmful to workers if they are exposed.

Peracetic Acid is a primary irritant[6], known tumorigen[7] and possible animal carcinogen[8]. Risks of exposure include:

- Severe irritation and burning of the skin and eyes leading to eye damage, irritation of the nose and throat, irritation of the lungs causing coughing, and / or shortness of breath.[9]
- Higher exposures can cause pulmonary edema, liver and kidney affects.[10]
- Epigastric pain which may be associated with nausea and vomiting, gastric hemorrhage, ulceration of membranes and tissues, circulatory collapse with clammy skin, weak and rapid pulse, shallow respiration, and scanty urine.[11]
- Late esophageal, gastric, and pyloric strictures and stenoses which may not appear until months or years later.[12]
- Permanent scarring of the cornea, skin, and oropharynx.[13]
- Uncorrected circulatory collapse could lead to renal failure and ischemic lesions in liver and heart.[14]

The Environmental Protection Agency (EPA) has issued Acute Exposure Guidelines (AEGL) for Peractetic Acid.

According to the EPA, AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. The three levels; AEGL-1, AEGL-2 and AEGL-3; are distinguished by varying degrees of the severity of toxic effects. The three AEGLs are defined as follows:

- AEGL-1 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.
- AEGL-2 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.
- AEGL-3 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

Health Risks of PAA Exposure

As of June 2008, Proposed AEGL Values for Peracetic acid [mg/m3 (ppm)]

	10m	30m	60m	4hrs	8hrs	End Point/ Reference
AEGL 1 (Non Disabling)	0.52 mg m3 (0.17 ppm)	0.52 mg m3 (0.17 ppm)	0.52 mg/m3 (0.17 ppm)	0.52 mg/m3 (0.17 ppm)	0.52 mg/m3 (0.17 ppm)	Threshold for irritation (Fraser & Thorbinson 1986; McDonagh 1997)
AEGL 2 (Disabling)	1.6 mg/m3 (0.5 ppm)	1.6 mg/m3 (0.5 ppm)	1.6 mg/m3 (0.5 ppm)	1.6 mg/m3 (0.5 ppm)	1.6 mg/m3 (0.5 ppm)	Mild Irritation (Fraser & Thorbinson 1986)
AEGL 3 (Lethal)	60 mg/m3	30 mg/m3	15 mg/m3	6.3 mg/m3	4.1 mg/m3	Highest concentration causing no deaths (Janssen 1989)

OSHA and ACGIH regulate the exposure limits for Hydrogen Peroxide and Acetic Acid, the main ingredients of Peracetic Acid.
For Hydrogen Peroxide, the OSHA exposure limit is a PEL of 1 ppm and ACGIH has established a TWA of 1 ppm

For Acetic Acid, the OSHA exposure limit is a PEL of 10 ppm and ACGIH has established an 8 hr TWA TLV of 10 ppm and a STEL of 15 ppm.

The health affects from exposure to Peracetic Acid are known. The EPA has established exposure limits based on the toxicity to humans and the OSHA / ACGIH have established exposure limits for the 2 main ingredients (Hydrogen Peroxide3 and Acetic Acid4,5).

A dedicated storage cabinet for Peracetic / Peroxyacetic Acid can help protect employees from the acute and chronic health effects by providing a bunded area to contain any spills and by removing the airborne PAA, emitted from the vented containers or a spill, before the air is circulated into the working environment. In addition any spill is communicated to the staff by visual and audible alarms, alerting them to adorn PPE before opening the cabinet providing proactive protection. Many employers whose workers have experienced symptoms of exposure and expressed concern are looking for solutions. Correct storage along with a comprehensive education program and safe work practices are the best ways to assure worker safety and maximise productivity.

References:
[1] Environmental Protection Agency: http://www.epa.gov/oppt/aegl/pubs/results80.htm
[2] EPA: http://www.epa.gov/oppt/aegl/pubs/peraceticacid_interim_ornl_jun2008%20_c.pdf
[3] OSHA: http://www.osha.gov/SLTC/healthguidelines/hydrogenperoxide/recognition.html
[4] OSHA: http://www.osha.gov/dts/chemicalsampling/data/CH_216400.html#exposure
[5] NIOSH: http://www.cdc.gov/niosh/docs/81-123/pdfs/0002-REV.pdf
[6,7] NIOSH: http://www.skcgulfcoast.com/nioshdbs/rtecs/sd8583b0.htm
[8,9,10] New Jersey Dept.of Health & Senior Svcs:http://nj.gov/health/eoh/rtkweb/documents/fs/1482.pdf
[11,12,13,14] United States National Library of Medicine: Toxicology Data Network: http://toxnet.nlm.nih.gov/cgi- bin/sis/htmlgen?HSDB (search for “Peracetic Acid” then click Peracetic Acid search result #1).

Peracetic Acid (Peroxyacetic Acid)

OSHA and ACGIH regulate the exposure limits for Hydrogen Peroxide and Acetic Acid, the main ingredients of Peracetic Acid.
For Hydrogen Peroxide, the OSHA exposure limit is a PEL of 1 ppm and ACGIH has established a TWA of 1 ppm

For Acetic Acid, the OSHA exposure limit is a PEL of 10 ppm and ACGIH has established an 8 hr TWA TLV of 10 ppm and a STEL of 15 ppm.

Steri-Trac® PAA Monitor

Availability: Available1

Specifications:

Sensor Type: Electrochemical

Range: 0 – 3 ppm

Resolution: 0.01 ppm

Temp Range: -20 to +50oC
Specifications are subject to change

Properties and Applications:

Peracetic Acid is a strong oxidizing agent, stronger than hydrogen peroxide, and PAA is usually used as an equilibrium mixture with acetic acid and hydrogen peroxide in aqueous solution. It is widely used in healthcare, food processing and water treatment as a disinfectant and sterilant wash.

As an antimicrobial agent, PAA is broadly effective against microorganisms and is not deactivated by catalase and peroxidase, the enzymes that break down hydrogen peroxide. This along with its stronger oxidizing properties makes PAA more effective as an antimicrobial than hydrogen peroxide. Conversely, peroxyacetic acid is potentially more dangerious to anyone exposed to it.

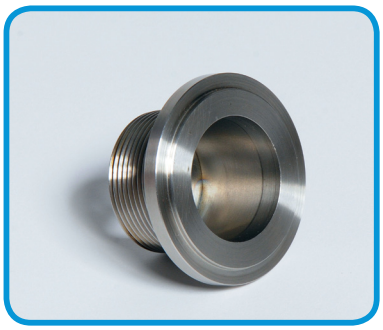
Highly reactive compounds are often environmentally friendly since they react quickly and do not persist, PAA is no exception. Similarly, peracetic acid breaks down in food to produce only mild residues (acetic acid, oxygen and water). Therefore PAA can be used in non-rinse applications for food preparation.

Physical Properties:

Chemical Formula: CH_3CO_3H
Physical form: Liquid. Forms colorless solution in water.
LEL: Explodes on heating to 110°C
Odour : Acrid Odor
MW: 76.05 g/mol
Rel. Gas Density: 2.64 (Air = 1)
MP: 0.1°C
BP: 105°C

Manual Decontamination Station

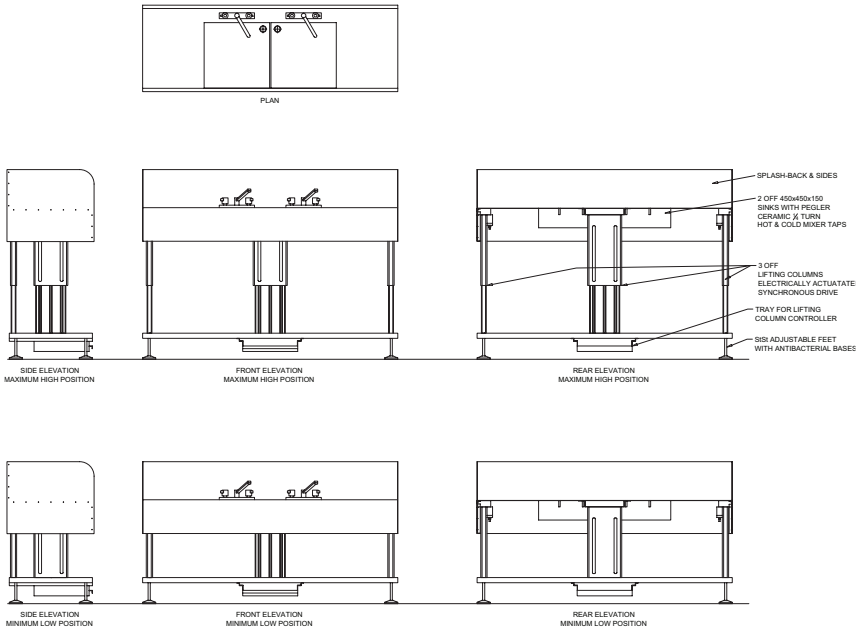
Electrically height adjustable manual decontamination sink



- Compliant with ISO14544 part 5:2004.
- Designed with health ergonomics advice to minimise the risk of strain and pain to the wrists, elbows, shoulders, neck and back
- MDS are custom made to suit the space available for all situations where manual pre cleaning is essential. Make the unit fit the space you have rather than expensive remodelling
- Custom fabricated in the UK from 2mm stainless steel. All fittings are of industrial quality
- All flexible water pipes are WRAS approved to reduce the risk of legionella contamination
- The MDS has 300mm high rear and side splash panels as standard, helping to prevent contaminated water or detritus from being accidently splashed onto the surrounding walls, making clean up of the immediate area simple and reducing the risk of secondary contamination

Manual Decontamination Station [MDS]

Technical Drawings



Extract from ISO14544 part 5:2004.

E.2 Criteria for selection

E.2.1 Characteristics

To protect a cleanroom from contamination, materials should have the following characteristics:

surfaces and moving parts that shed or generate as little contamination as possible;

unbroken, impervious and clean surfaces, although there are necessary exceptions, such as cleanroom wipers;

properties that minimize generation of contamination by shedding and cutting;

suitable cleanroom packaging;

compatibility with the cleanroom environment.

The MDS will be custom made in the UK to your exact requirements, as we start with stainless sheet all dimensions can be accommodated, the only standards are reliability and durability!

The MDS is a free standing, self supporting unit. It does not require fixation to the floor or walls and can be positioned to suit your floor plan

3 high quality low maintenance actuators to allow trouble free long lasting height adjustment

Features lower storage shelf as standard

Fully sealed waste outlets to prevent contaminated waste water droplets or vapour from entering the decontamination suite

Antibacterial feet

The 40mm waste plumbing pipe is supported by stainless steel bar and saddle clamps limiting the possibility of outlet disconnect due to vertical height adjustment

Anti Microbial Water Hose

The NeuVend SITM Lined Flexible Hose

In order to meet the stringent demands for delivering potable water, we have combined our market leading, WRAS approved, NeuVend flexible hose with Biomaster Antimicrobial Protection.
NeuVend SI™ has been designed for the critical applications where there is an enhanced risk to human health from microbial organisms within the potable water supply system. There have been increasing concerns in recent years regarding the potential for leaching of chemicals into water supplies when using certain types of flexible hose. Where this occurs there is a greater risk of bacteri forming biofilms which can harbour various harmful organisms including Legionella and Pseudomonas.

What is Biomaster Antimicrobial Protection?

Biomaster Protection is an antimicrobial silver based additive added directly into NeuVend SI™. Biomaster Protection is dispersed throughout the NeuVend SI™ polymer, will not wash off and provides effective protection from the growth of unwanted bacteria.

How does Biomaster work?

Biomaster deactivates a cell with three different actions:

1. Silver Ions bind to the cell surface, disrupting the cell wall and preventing cell growth
2. The Silver Ions are attracted to thiol groups in cell enzymes, preventing the bacterium producing energy.
3. Silver Ions interrupt the cell DNA, preventing DNA replication and new cell formation.

This three stage mode of action does not allow bacteria cells to develop resistance, making it future proof and particularly effective against antibiotic resistant species such as MRSA.

Anti Microbial Water Hose

Temperature

Temperature range –20°C to +85°C

Construction

The standard hose has a natural liner, a black inner layer, which acts as an effective light barrier, and a white cover. Other colours can be made to customer requirements.

NeuVend SITM Lined Flexible Tap Tails
Our flexible Tap Tails are made from our NeuVend SI™ Liner which is then overbraided with stainless steel and fixed on both ends with your required fitting.

The NeuVend SI™ liner itself is manufactured from a blend of polyolefin based materials lined with smooth polyethylene internal surface all containing a Biomaster antimicrobial additive. The NeuVend SI™ liner and stainless steel overbraiding combination results in a Tap Tail that has excellent flexural and working pressure properties.

Available in a wide variety of lengths with a number of different fittings, including all the standard length and fitting options, we can make these Tap Tails to exactly suit your requirement.

Testing and Applications

NeuVend SI™ Liner has been tested in accordance with BS6920 and has achieved WRAS approval for the conveyance of cold and hot potable water up to 85°C. WRAS approval number 1202505 for the NeuVend SI™ liner applies.

It is suitable for use in all potable water supply applications but is especially recommended in areas such as hospitals, dental clinics, nursing and care homes, HVAC, aviation & leisure where infection control is critical. In these cases the additional Biomaster Antimicrobial Protection properties offer a massive benefit when compared to standard products.

In independent tests NeuVend SI™ with Biomaster Protection has been proven to be effective against Pseudomonas, E.coli, Legionella and MRSA among many other harmful organisms and is especially effective where there is infrequent use of the water supply in warm conditions.

Environmentally Friendly

NeuVend SI™ Tap Tails are 100% manufactured in the UK, reducing your carbon footprint compared to some imported products. In addition to this, unlike PEX and EPDM Liners, NeuVend SI™ liner is 100% recyclable therefore meeting the needs of any environmentally conscious end users.

Custom Manufacture Options

We can also offer a Tap Tail with a wipe clean anti-microbial PVC sleeve for use in hospital and other environments with more rigorous cleaning requirements, offering the benefit of a flexible product without some of the cleaning problems associated with open mesh.

Scopevault™

A unique product for the high level decontamination of instruments with non immersible components using a washer disinfector. Will accommodate TOE, TEE probes, rectal probes, vaginal probes, apnea catheters and other instruments withinsertion tubes of diameters between 2mm and 16mm.

Applying the latest reprocessing technology to TOE probes
The innovative new product; Scopevault® from Neocare™ Now allows for TOE probes to be reprocessed in an automatic endoscope washer disinfector.

Scopevault® has been designed in response to the requirement for a method of
reprocessing instruments with non-immersible components that require high level
non-thermal disinfection.

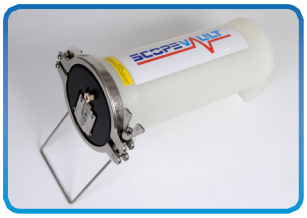
Scopevault®

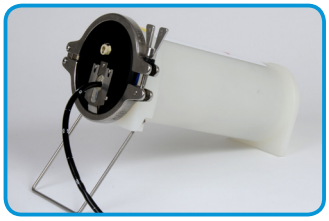
CFPP 01 06 Decontamination of flexible endoscopes. Version 1 Page 51, 52

“Decontamination of transoesophageal echocardiography, transvaginal and trans-rectal ultrasound probes.
The use of an endoscope Washer Disinfector (EWD) to decontaminate the immersible parts of these probes is to be preferred.
Manual decontamination of the non submersible parts and selective immersion of the insertion tube in an Endoscope Washer Disinfector (EWD) or by immersion of the whole device with non- immersible components parts sealed in a water tight case.

Manual cleaning of the non-immersible components whilst disinfecting the non-immersible components in a Washer Disinfector would represent progress towards best practice. “

Scopevault®, the water tight case that also leak tests the insertion tube, protecting against electric shock, and cross contamination due to colonization of insertion tubes that are damaged..





- Optimum Decontamination of TOE probes for reliable patient protection when used with validated washer disinfectors or Automated Endoscope Reprocessors. (AER)
- Validated and compliant reprocessing of TOE /TEE probes in line with UK Decontamination Standards.
- Scopevault® is being used with a range of TOE probes including GE and Philips 2D and 3D probes.
- Leak testing TOE probes since 2008 protecting equipment and enhancing patient safety.
- Over 14,000 successful reprocessing cycles with perfect results.
- Reduction of cross infection risk in line with Trust Risk Reduction programmes.

Height Adjustable Packing Table

- Suitable for all applications where staff need to manually pack instruments ie Theatre, CSSD, Endoscopy.
- 350mm vertical travel. Industry leading height adjustment to provide maximum comfort for all staff.
- Designed with health ergonomic advice, complementing the height adjustment to reduce strain and pain to wrist, elbows, shoulders, neck and lower back.
- Custom made in the UK to fit the space available.. You retain control of the design, size and configuration. No expensive room remodelling required.
- Fabricated from Fuly Welded 2mm stainless steel. Grades 304 or 316. Providing robust construction for longer life.
- 2 high quality lifting actuators. Providing unparalleled operational reliability.
- Foot operated height adjustment reduces contamination possibilities.
- Easy to relocate should service needs change.
- Standard size 500 x 1500 table or custom size on request.
- Supplied with Antibacterial feet.

Medilube Aerosol

MEDI-LUBE Aerosol is a premium quality, perfluorinated multi-purpose lubricant developed for applications in the medical industry requiring low friction, non-flammability, wide temperature range, and extremely long lubricating intervals.

Method of Application: -

For best results apply a thin film of **Ultra Aerosol.** This film may appear dry or evaporate however **MEDI-LUBE** remains as an invisible coating to protect against friction & wear.

Part Number: NC-11504

Medilube Aerosol

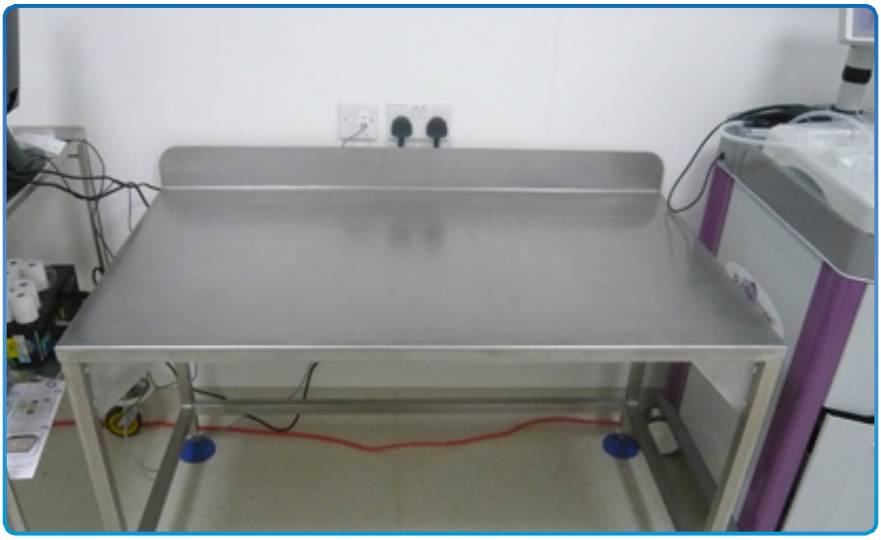
- Oxygen safe – will not react with oxygen and can be used to lubricate oxygen connectors, regulators & fittings.
- Wide Operating Temperature Range: -40°C to +200°C
- Clean – Leaves an odourless, colourless thin lubricating film
- Protects against friction and wear saving on component costs.
- Biologically inert – will not support biological growth or bacteria
- Low surface energy – will not attract dust & dirt etc. like conventional oils & greases
- Non Toxic
- Inert. Safe to use with metals, plastics, rubber and seal materials.
- Lasts many times longer than conventional oil lubricants.
- Protects seals and O rings.
- Totally non flammable
- Non migratory – will not migrate like Silicone based materials
- Non conductive – can be used on electrical equipment and has excellent di-electric properties
- Chemically inert – is totally resistant to all common solvents, chemicals and radiation

Custom Fabrication

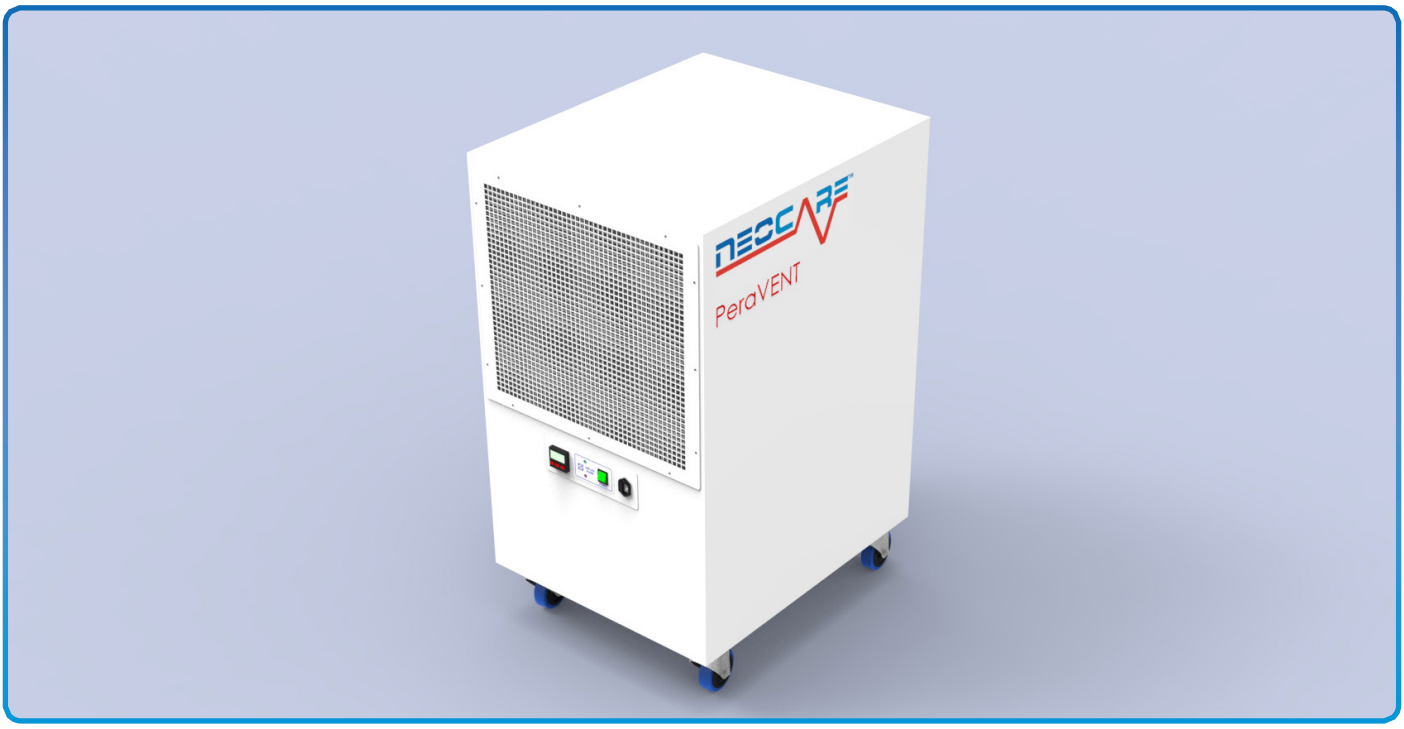
- Storage and transport trolleys for Cassette Endoscopy Decontamination systems as specialty.
- Made in the UK from 2mm stainless steel gives robust construction for long life.
- Ideal for storage and transport of clean and dirty endoscopes.
- Standard model stores 6 endoscope cassettes.
- Supplied with Antibacterial feet or Antistatic wheels.
- Easily cleaned as part of Infection Control protocols.
- Any shape and size of stainless steel fabrication can be accommodated.

Stainless steel
Gown Dispensor

Stainless items for Endoscopy



Perovent



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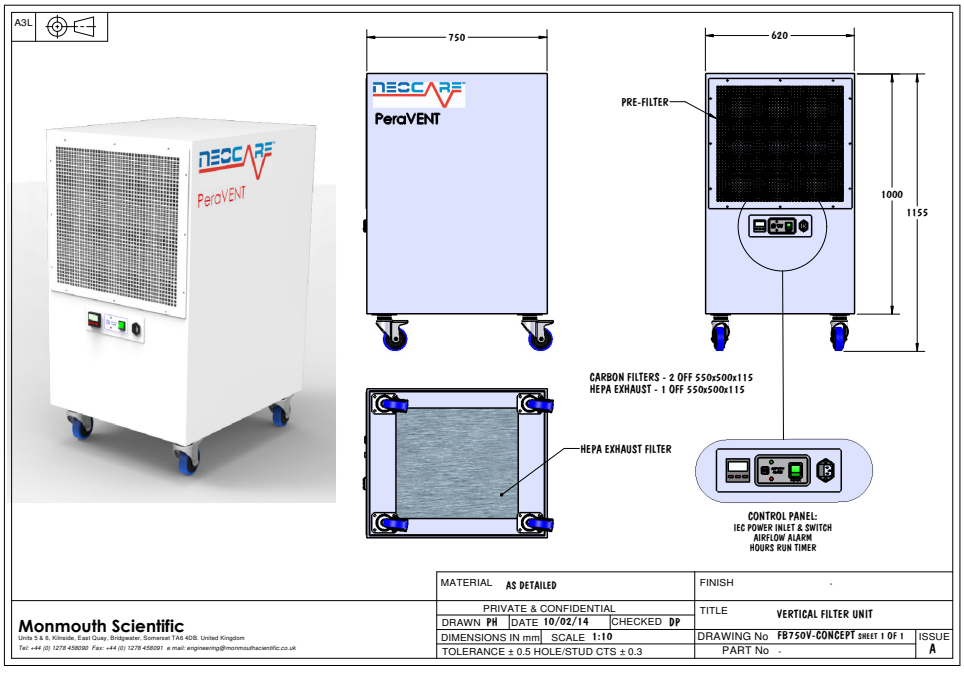


Compact 100 Mechanical Shoe Cover Machine

- It is a very useful machine that can cover up the plastic shoe cover or non woven shoe cover automatically on the shoes, also on the barefoot.
- It is silent and without any consuming of electricity. Cause of its simplicity of usage and higher safety hygiene material,
- COMPACT100 can be used in environments where demands a high level of sterility or with contamination risk.
- Can be used in the exhibition to avoid damage and soiling by normal shoes. The stainless handle provides an easy movement with a safety support for the person with less ability. It also suitable for barefoot too.
- The HM COMPACT does not require any type of power supply, routine and extraordinary maintenance.
- Can be placed in a very narrow environment thank to its small size and absence of electric current.

A range of accessories is available including:

- Automatic Dustblin
- Mini Clamp
- Shoecovers

Image Gallery

Image Gallery













Image Gallery

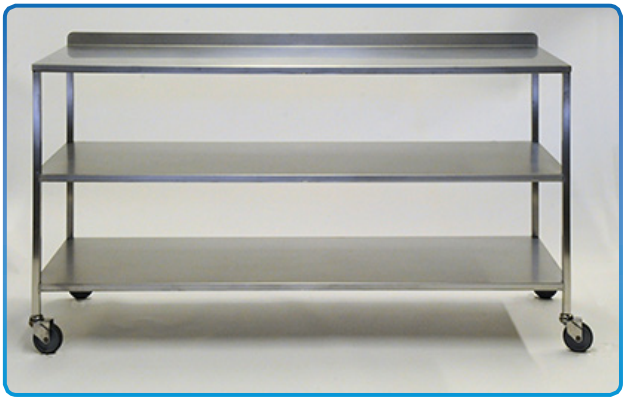
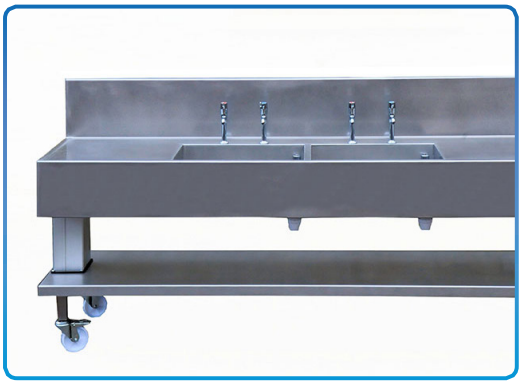
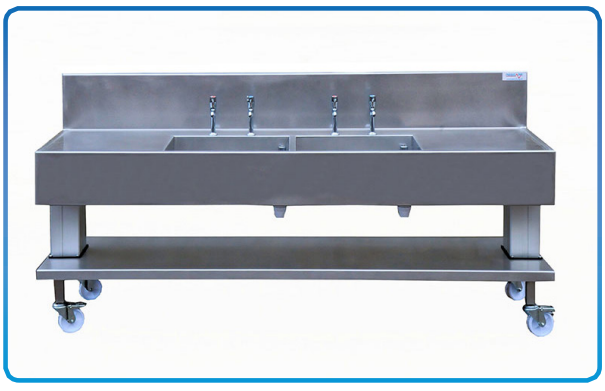


Image Gallery





Notes

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