We all know that a warm animal recovers from anaesthesia more quickly and easily. Judicious use of the heated circuits and warm air blanket system found in this section helps promote this.

We list a range of standard circuits and replacement circuit tubing.
Modified Ayres ‘T’ Piece

- The Standard Circuit for patients weighing less than 10kg
- Low resistance
- No valves
- An open circuit

Complete with scavenge connector 025534.

MODIFIED AYRES ‘T’ PIECE
025105 Modified Ayres ‘T’ Piece Circuit Complete

Modified Ayres ‘T’ Piece Semi Disposable

As above but lighter in construction.

MODIFIED AYRES ‘T’ PIECE - SEMI DISPOSABLE
025105SD Semi Disposable ‘T’ Circuit

‘T’ Piece Scavenge Connector & Rebreathing Bags

Pollution is a problem with all open circuits. This Connector fits into the tail of the rebreathing bag and connects to standard scavenging systems. Also fits Mini Bain.

‘T’ PIECE SCAVENGE CONNECTOR
025534 ‘T’ Piece Scavenge Connector
025051 0.5 Litre Rebreathing Bag
025104 4 Litre Rebreathing Bag
025106 2 Litre Rebreathing Bag

Bain Circuit

Fresh gas passes down the inner tube. Exhaust gas returns via the outer tube. Good heat and moisture exchange. Use 2.0 to 2.5 times respiratory minute volume. The adapter is re-usable but the circuits are semi-disposable. Use in patients 10kg plus.

BAIN CIRCUIT
025080 Bain Circuit Mount (required initially)
025081 Bain Circuits Tube Set only

Bain Circuit Semi-Disposable

As above but supplied as a complete circuit which can be reused many times. 1.6 m length.

BAIN CIRCUIT SEMI-DISPOSABLE
025083 Bain Circuit Semi Disposable Complete

LACK Parallel Circuit

This is a safer system than co-axial circuits. Both tubes are visible and can be checked for leaks, damage and security. Use in patients 10kg plus.

LACK PARALLEL CIRCUIT
LACK1 LACK Parallel Circuit Complete
LACK4 LACK Replacement Tubes Set

LACK Parallel Circuit Semi-Disposable

As above but supplied complete with head unit and 2 litre bag 1.6m length.

LACK PARALLEL CIRCUIT SEMI DISPOSABLE
LACKSD LACK Circuit Semi Disposable

Mini LACK Parallel Circuit

An economical Circuit for 10kg or more. There is a degree of rebreathing but the CO2 is removed by the in-circuit soda lime. Minimum flow replenishes patients metabolic oxygen. Rubber bung allows Soda Lime to be replenished.

MINI LACK PARALLEL CIRCUIT
LACKMINC Mini LACK Parallel Circuit Complete
LACKMINIRTS Mini LACK Replacement Tubes Set
LACKMINIRMAN Mini LACK Replacement Manifold

Circle Circuits Semi-Disposable

Circle Circuits Semi-Disposable

As above but supplied as a complete circuit which can be reused many times. 1.6 m length.

CIRCLE CIRCUITS SEMI-DISPOSABLE
025085 Circle Circuit
Small Furry/ Exotic Mask and Non-Rebreathing Circuit

These Very Small Masks were designed specifically for use on small exotics, small furries and birds. The fresh gas supply hooks up to the standard GA machine outlet. The Soft Conforming Mask may be trimmed for maximum fit. The fresh gas feed may be re-positioned within the mask. Exhaust gases are fed into the scavenging system. Tape the circuit onto the table.

**SMALL FURRY/EXOTIC MASK SYSTEM**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>025091</td>
<td>Mask 9.0mm Opening 25cm 10” Tubing</td>
<td>£30.39</td>
</tr>
<tr>
<td>025092</td>
<td>Mask 12.5mm Opening 25cm 10” Tubing</td>
<td>£30.39</td>
</tr>
<tr>
<td>025093</td>
<td>Mask 14.0mm Opening 25cm 10” Tubing</td>
<td>£30.39</td>
</tr>
<tr>
<td>025095</td>
<td>Masks Set of 3 (as above)</td>
<td>£82.40</td>
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</table>

**Connectors Semi Disposable**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>025536SDF</td>
<td>22mm Male to 30mm Scavenge Female</td>
<td></td>
</tr>
<tr>
<td>025536SDM</td>
<td>22mm Male to 30mm Scavenge Male</td>
<td></td>
</tr>
<tr>
<td>025088</td>
<td>15mm Elbow 1.5m - 22mm/15f + 7.6mm Port</td>
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</tbody>
</table>

**Anaesthetic Circuit Consumables**

Use Soda Lime to replenish to and fro circle systems. Turns pink to white.

**CONSUMABLES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>025052</td>
<td>Soda Lime 5Kg *</td>
<td></td>
</tr>
<tr>
<td>025104</td>
<td>4 Litre Rebreathing Bag Anti-static Rubber</td>
<td></td>
</tr>
<tr>
<td>025106</td>
<td>2 Litre Rebreathing Bag Anti-static Rubber</td>
<td></td>
</tr>
<tr>
<td>025051</td>
<td>0.5 Litre Rebreathing Bag Anti-static Rubber</td>
<td></td>
</tr>
<tr>
<td>TUBING</td>
<td>Oxygen Feed Tubing (per metre)</td>
<td></td>
</tr>
<tr>
<td>025535</td>
<td>Scavenge Tubing 22mm Diameter (per metre)</td>
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</tr>
<tr>
<td>025545</td>
<td>Corrugated Plastic Hose Set with Y Mount</td>
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</tr>
</tbody>
</table>

*Carriage is extra for all items marked *

**VI Common Gas to Male Luer Connector**

Taping components together for small patient anaesthesia is not ideal. Gas leakage has health and safety connotations, IPPV is difficult to achieve and capnography becomes unreliable. Our common gas to male luer adapter provides an answer. Developed with help from Alan Humphries of Village Vets in Liverpool and Kevin Eatwell of R(D)SVS, Edinburgh, our common gas to male luer device connects between the 15mm female end of an anaesthetic circuit and any standard male luer lock device – such as a cut-down urinary catheter. An easily accessible female luer lock port on the top of the device allows for connection of a capnography probe. The device has been designed to contribute minimally to respiratory dead space.

**VI COMMON GAS TO MALE LUER CONNECTOR**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>025617</td>
<td>VI Common Gas to Male Luer Connector</td>
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**Connectors**

30mm is the international diameter for scavenging systems.

**CONNECTORS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>025534</td>
<td>30mm Scavenge to 500ml Bag Tail (for ‘T Piece or Mini Bain)</td>
<td></td>
</tr>
<tr>
<td>PORTEX</td>
<td>Portex Swivel with Port</td>
<td></td>
</tr>
</tbody>
</table>
Anaesthesia Pre-Warming™: a Darvall Solution for hypothermia

Peri-Anaesthesia Hypothermia

Hypothermia (body temperature below 36°C) occurs in up to 80% of anaesthetized cats and dogs. Causes include small body size relative to body surface area, vasodilation, inhaling cold, dry anaesthetic gases, loss of heat from open body cavities in surgery and lack of shivering during anaesthesia. All of these combine to create the complex and difficult to manage syndrome: peri-anaesthesia hypothermia.

The Pre-Warming Solution

The AAHA Guidelines for Anesthesia include monitoring body temperature and providing thermal support from pre-anaesthetic through to recovery. Providing thermal support before anaesthesia may seem counter-intuitive, but recent research shows that regardless of the premedication drugs used, smaller dogs and cats lose over 1°C before anaesthesia and then rapidly lose twice that fifteen to thirty minutes after induction (Graph 1). Fortunately studies also show that effectively warming patients from the time of premedication to the time of induction (for at least 30 minutes) can prevent that initial drop in body temperature and may slow the early stage rapid heat loss immediately following induction. Heating hypothermic animals during anaesthesia is difficult and time consuming.

Pre-warming small animals is highly beneficial and can easily be done by placing the premedicated patient in a warmed cage. Cage heating devices not specifically designed for sedated or anaesthetized animals such as jugs of warm water or heated wheat bags, can cause burns. The margin of safety for causing significant thermal injury is surprisingly narrow. Forced warm air blanket systems are ideal for use in pre-warming cages because they deliver a large flow of warm air at constant, thermostatically controlled temperatures. However forced warm air systems designed for use in humans are not designed with appropriate blankets or to duct warm air into a cage. Darvall has solved this problem with an innovative Cage Door Adapter™ that lets the door open/shut properly with 2 sizes of blankets to fit cages. In addition One Cocoon® heater can warm up to 3 cage blankets simultaneously and blankets can be re-used between animals.

Warmed Inspired Anaesthetic Gas

There are many ways to reduce patient heat loss during anaesthesia including minimizing surgical prep. time, insulating an animal’s feet, warming IV fluids and use of electric, hot water or forced warm air blankets. However none of these methods adequately address the rapid heat loss occurring in the first fifteen to thirty minutes after induction. Darvall’s innovative Heated Smooth Wall Anaesthesia Breathing Circuits® target this critical heat loss from inspiring cold, dry air by warming the inspired gases immediately from the time of intubation (Graph 2).

Next Generation Forced Warm Air Blanket System

Forced warm air blanket systems for humans are most effective during recovery, when the patient’s vasomotor function, increased cardiac function and shivering have returned. Studies show these systems don’t prevent hypothermia in anaesthesia in cats and small dogs (Graph 1).

The Darvall Vet Cocoon® warm air blanket system is designed for cats or dogs either during surgery or in cages before and after anaesthesia. The contact surface is porous, rather than punched with small holes, resulting in low surface air flow. When positioned over or underneath animals, warm air diffuses across the blanket’s surface and the patient’s hair-coat traps the warmth close to the animal. A recent study in dogs anaesthetised for surgery showed that the Darvall Vet Cocoon® system consistently increased body temperature during surgery but there is a lag period of 30-45 min. before the animal’s body temperature starts to rise (Graph 3).


© 2014 Anaesthesia Pre-Warming, Colin Dunlop & Ken Crump, Advanced Anaesthesia Specialists www.aasmedical.com

Peri-Anaesthesia Thermal Support Selector™

Chart for selecting effective warming treatment options by type and length of procedure.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>OHE - Young Animal</th>
<th>Long Orthopaedic Surgery</th>
<th>Dental Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of Anaesthesia</td>
<td>30 to 60 min</td>
<td>90 to 150 min</td>
<td>60 to 180 min</td>
</tr>
<tr>
<td>Premedication - Start Pre-Warming</td>
<td>Darvall Cocoon®</td>
<td>Darvall Cocoon®</td>
<td>Darvall Cocoon®</td>
</tr>
<tr>
<td>(&gt;30 min)</td>
<td>CAGE Over-blanket*</td>
<td>CAGE Over-blanket*</td>
<td>CAGE Over-blanket*</td>
</tr>
<tr>
<td>Patient Clip, Catheter Placement,</td>
<td>Circulating warm</td>
<td>Circulating warm</td>
<td>Circulating warm</td>
</tr>
<tr>
<td>Induction</td>
<td>water or insulated electric blanket</td>
<td>water or insulated electric blanket</td>
<td>warm water or insulated electric blanket</td>
</tr>
<tr>
<td>Intubation - Start Heating</td>
<td>Darvall Heated</td>
<td>Darvall Heated</td>
<td>Darvall Heated</td>
</tr>
<tr>
<td>Inspired Gas</td>
<td>Smooth-Wall Circuits*</td>
<td>Smooth-Wall Circuits*</td>
<td>Smooth-Wall Circuits*</td>
</tr>
<tr>
<td>OR/Procedure Table</td>
<td>Circulating warm water or insulated electric blanket</td>
<td>Circulating warm water or insulated electric blanket</td>
<td>Darvall Cocoon SURGERY Under-blanket*</td>
</tr>
<tr>
<td>Recovery - Warming to &lt; 37°C</td>
<td>Darvall Cocoon®</td>
<td>Darvall Cocoon®</td>
<td>Darvall Cocoon®</td>
</tr>
<tr>
<td></td>
<td>CAGE Over-blanket*</td>
<td>CAGE Over-blanket*</td>
<td>CAGE Over-blanket*</td>
</tr>
</tbody>
</table>

Graph 1. Body Temperature of anesthetised cats using Bair Hugger™ warm air blankets compared to no heating. Trial A (Heat off/off); Trial B (on/off); Trial C (on/off) and Trial D (off/on). Machon R et al Vet Surg 28:301-310;1999

Graph 2. Inspired Gas Temperature with Darvall Heated Circuit, Darvall Forced Warm Air Blanket or no heating. 9 dogs/treatment, 6.2±3.1(Mean±SD)kg, 20±17 months, surgery time 96±27 min. Lee S. Honours Thesis, University of Sydney, 2013.

Graph 3. Darvall warm air blankets compared to electric heat mat for prevention of hypothermia in dogs 17.3±11(Mean±SD)kg. Lau A. et al Honours Thesis, University of Sydney, 2008

Darvall Heated Smooth-Wall Circuits

Insuring cold, dry air can be a cause of heat loss for animals under anaesthesia. The Darvall heated smooth wall breathing circuit solves this longstanding problem in small animal anaesthesia. Recent research demonstrates that most temperature loss occurs after induction, during the patient’s clip and prep for a procedure. Darvall heated smooth wall breathing circuits provide warm inspired gas to the patient from the moment of intubation. Darvall’s heated smooth wall tubing (SWT) begins to warm patients from the inside, from their very first breath after induction, reducing loss of body temperature prior to surgery.

Warm animals recover better. Our small diameter, low resistance smooth wall circuits are so efficient they allow you to use a circle system on animals as small as 2kg*. The totally new Darvall heated circuits with thermostatic control warm inspired gas which can minimize heat loss in anaesthesia:

- Warms inspired gas: 38.5°C-40°C
- Efficient: internal warming
- Immediate: from the first breath
- Prevents heat loss*
- Airway temperature sensor
- Animal temperature monitoring
- Heats without Harm

Provide immediate and effective warmth from the start of anaesthesia.

Our totally new Darvall heated, smooth-wall anaesthetic circuits and heated ZDS Qubes have a microprocessor with temperature sensor and warm up to 45°C, resulting in inspired air between 38.5°C and 40°C. Optional Separated animal esophageal/rectal temperature probe provides safe warming with close-loop control.

• Available both heated and unheated the smooth inner wall of the Y hose sets makes them easier to clean and decreases circuit resistance. End connectors are moulded on, for additional security. The inner hose diameter is reduced from the standard 22mm down to 12mm on the small and 16mm on the larger set. This significant reduction in circuit volume improves responses to changes in anaesthetic setting. Suggested flow rate is 30ml/kg/min, 60ml/kg for the first 5 minutes. Minimum flow rate with Tec vapourisers is 300ml.

*Animals 2-7kg use Darvall low-volume Circle absorber
### Darvall Heated Circle System Anaesthetic Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS8347</td>
<td>12mm Heated Circle System 2-20kg (contains 12mm Tubing &amp; 0.5l &amp; 1l Rebreathing Bag only - Circle Canister required)</td>
<td>£97.85</td>
</tr>
<tr>
<td>AASCIR-0016</td>
<td>Circle Absorber Canister Funnel Filler (Hamster Wheel Fill CO₂)</td>
<td>£12.88</td>
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### Darvall Heated Mini Lack Anaesthetic Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>AAS8689</td>
<td>Heated Mini Lack Circuit 2-20kg (contains Tubing &amp; Rebreathing Bag only - Manifold required)</td>
<td>£97.85</td>
</tr>
<tr>
<td>LACKMINIRMAN</td>
<td>Mini Lack Manifold</td>
<td>£154.50</td>
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</table>

### Darvall Unheated Smooth Wall Circuits & Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS8305</td>
<td>Smooth Wall Mini Lack 2-20kg (contains Tubing &amp; Rebreathing Bag only - Manifold required)</td>
<td>£180.25</td>
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<tr>
<td>AASCIR-0007</td>
<td>GA Smooth Wall 12mm Inner Diameter 1.6m + Y 0.5L &amp; 1.0L Bags for Animals 2-20kg</td>
<td>£30.39</td>
</tr>
<tr>
<td>AASCIR-0009</td>
<td>GA Smooth Wall 16mm Inner Diameter 1.6m + Y 0.3L Bags for Animals over 20kg</td>
<td>£30.39</td>
</tr>
<tr>
<td>AASCIR-0015</td>
<td>Circle Mounting Adaptor for Circle Canister</td>
<td>£56.65</td>
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</tbody>
</table>

### Darvall Heated Mini Lack Anaesthetic Accessories

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS8348</td>
<td>16mm Heated Circle System 20-80kg (contains 16mm Tubing &amp; 0.5l &amp; 1l Rebreathing Bag only - Circle Canister required)</td>
<td>£97.85</td>
</tr>
<tr>
<td>AASCIR-0015</td>
<td>Circle Mounting Adaptor for Circle Canister</td>
<td>£56.65</td>
</tr>
</tbody>
</table>

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Want more information on Patient Warming? E-mail info@vetinst.com
Darvall Heated ZDS Qube

The Darvall Qube is a zero dead space anaesthesia non-rebreathing mask system for exotics, available heated to take all the advantages of inspired gas warming down to the smallest of patients. The exotics mask kit includes small rodent/reptile mask, larger bird/rabbit mask and endotracheal tube connector. Patients can be induced using the sealed masks, reducing the environmental contamination involved in transferring patients from induction chambers. Inspired gas warming is then available throughout the anaesthetic, with the concomitant benefits for the patient.

As a specialist referral centre we have procedures that require the patient to be under General Anesthesia for several hours, and this inherently cause issues with keeping the patient’s temperature normothermic.

Using The darvall heated circuit has added to our ability to maintain the patients temperature. the heated tubing has made a positive impact on reducing the time it takes to warm them post surgery.

The AAS Darvall ZDS Starter Kit contains the Heated Controller Unit, 1 x Heated ZDS Qube, 2 x Face Masks, 1 x ET Adaptor, 1 x Fresh Gas Tube & 1 x Exhalation Tube.

**AAS DARVALL ZDS QUBE & MASKS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS8556</td>
<td>Starter Kit for Heated ZDS Qube</td>
<td>£921.85</td>
</tr>
<tr>
<td>AAS8457</td>
<td>Heated ZDS Qube with Mask Set B407 Controller Unit required</td>
<td>£458.35</td>
</tr>
<tr>
<td>AASCIR-0028</td>
<td>ZDS Mask Set for Rodents 3 Masks &amp; Diaphragms</td>
<td>£139.05</td>
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<tr>
<td>AASCIR-0027</td>
<td>ZDS Mask Set for Exotics 2 Masks, Diaphragms &amp; ET Adaptor</td>
<td>£135.00</td>
</tr>
<tr>
<td>AAS0835</td>
<td>ZDS Mask Circuit</td>
<td>£66.95</td>
</tr>
</tbody>
</table>

Images & testimonial courtesy of David White RVN, Senior Veterinary Nurse, Southern Counties Veterinary Specialists
AAS Darvall Warm Air System

The benefits of preventing hypothermia both during and after surgery are well documented, both in terms of improved patient care and more efficient use of resources.

Use of warm air blankets to pre-warm patients, heated anaesthetic circuits for all procedures plus blankets under anaesthetised animals during longer procedures, over 60 minutes, followed by post-op cage blanket use will help optimise patient recovery from anaesthesia. Spend a moment reading the informative article at the start of this section for more information.

AAS Darvall Warm Air Blankets

What makes them different from the rest?

The Darvall series of warm air blankets are specifically designed for veterinary use. The unique blanket surface design is porous polyester which provides low uniformly distributed air flow, providing efficient warming, reducing the ‘wind chill’ factor and minimising hair contamination. Traditional warm air blankets have a punched out surface allowing a higher rate of air flow out of the blanket. OK for humans, as we are on a very different scale, but much less suitable for veterinary patients.

Blankets are available in a range of standard under and over blankets with a special design for dentistry and oral surgery which leaves the head area free of hoses etc. Recovery blankets have dual hose inlets positioned for right or left recumbency patients improving access for connection in a kennel. Standard under and over blankets have two hose inlets, allowing easy positioning of the hose. Tube blankets are also available.

Starter Pack of Darvall Warm Air Blankets

Not sure what you will use?

Get a starter pack to try all sizes.

Pack includes 2 each of both sizes of surgery under-blanket, 2 of both sizes of recovery over-blanket, and 2 dentistry blankets. A total of 10 blankets which covers the most commonly used varieties.

AAS Darvall Cocoon Warm Air Unit

The Darvall Cocoon Heating Unit is easy and straightforward to use. Running quietly, it produces minimal noise pollution in theatres and recovery areas. Features include auto step-down heating 46°C, 43°C, 40°C with cooling also available at 34°C, all under micro-processor control. A 0.2 micron replaceable filter helps prevent microbial contamination of the warm air. A Mobile Base is included with the Unit. Routine use of the base with the unit will help extend the period between filter replacements, which are typically every 2 years.

The Starter Kit contains the Cocoon Warm Air Unit, Stand, Starter pack of Blankets and Cage Door Adaptor.

AASCOCOONSTART Darvall Cocoon Starter Set
AAS02038 Darvall Cocoon Warm Air Unit

Recovery Overblanket

Recovery Overblankets are available in 2 sizes, Cats and Small Dogs (pictured) code AAS05360 and for Medium/Large Dogs code AAS05359

Dual inlets allow maximum flexibility.

Overblanket

2 additional sizes are available with single air inlets.

Overblanket for Medium/Large Dogs, code AAS05310

And for those very large patients, Overblanket for Extra-Large Dogs and Foals code AAS01958
Underblankets

Usually used during procedures, underblankets again have 2 inlets allowing hose positioning flexibility. Can also be used in-cage.

2 sizes AAS02979 for Cats and Small Dogs, AAS02275 for Medium/Large dogs.

Dentistry Underblanket

This useful blanket has the air inlet at the opposite end to the standard underblanket, allowing easy access to the patient’s head without hose complications. Order code AAS07898

AAS Darvall Warm Air System Blankets

AAS DARVALL WARM AIR SYSTEM BLANKETS

AAS05359  Darvall Warm Air Recovery Blanket for ML Dogs
Pack of 10
AAS05359S  Darvall Warm Air Recovery Blanket for ML Dogs
Single
AAS05360  Darvall Warm Air Recovery Blanket for Cats & Small Dogs Pack of 10
AAS05360S  Darvall Warm Air Recovery Blanket for Cats & Small Dogs Single
AAS05310  Darvall Warm Air Over Blanket for ML Dogs Pack of 10
AAS05310S  Darvall Warm Air Over Blanket for ML Dogs Single
AAS01958  Darvall Warm Air Over Blanket for XL Dogs & Foals Pack of 10
AAS01958S  Darvall Warm Air Over Blanket for XL Dogs & Foals Single
AAS02275  Darvall Warm Air Under Blanket for ML Dogs
Pack of 10
AAS02275S  Darvall Warm Air Under Blanket for ML Dogs Single
AAS02979  Darvall Warm Air Under Blanket for Cats & Small Dogs Pack of 10
AAS02979S  Darvall Warm Air Under Blanket for Cats & Small Dogs Single
AAS07898  Darvall Warm Air Dental Blanket for Cats & Dogs Pack of 10
AAS07898S  Darvall Warm Air Dental Blanket for Cats & Dogs Single
AAS05362  Warm Air Tube Blanket for Cats & Small Dogs
10 Pack
AAS05362S  Warm Air Tube Blanket for Cats & Small Dogs Single
AAS05364  Warm Air Tube Blanket for ML Dogs 10 Pack
AAS05364S  Warm Air Tube Blanket for ML Dogs Single
AAS8460  Darvall Warm Air Sample Pack of Assorted Blankets

Tube Blankets

Available for cats and small dogs (AAS05362) and Medium/Large Dogs (AAS05364) these useful tubes can be positioned closely around the patient as required.
AAS Darvall Accessories

Cage Door Adaptor

Additional accessories are available for the Darvall system include a cage door adaptor allowing the main hose to attach to the adaptor which is firmly fixed to the cage bars.

Bair Hugger Convertor

Connects Bair Hugger® Heater Hose to Darvall Cage Door Adapter.

Attaches to Darvall Cage Door Adapter (AAS7882).

BAIR HUGGER CONVERTER

AAS08430  Bear Hugger Heater Hose Adapter

Washable Warm Air Blanket

The Blankets are re-usable being made of a silky polyester fabric with an inlay of nylon waterproof material to keep the airflow circulating upwards towards the patient.

The Blankets are machine washable (hang to dry, do not tumble dry). The opening is 5” (12.5cm) with a cord tie making these Blankets suitable for all brands of warm air convection units.

WASHABLE  WARM AIR BLANKET

C9B7550  Washable Warm Air Blanket (75cm x 50cm)
C9B9060  Washable Warm Air Blanket (90cm x 60cm)
C9B12060  Washable Warm Air Blanket (120cm x 60cm)
C9SET  Washable Warm Air Blanket Set of 3 (as above)

A second short hose connects the blanket to the cage door, making disconnection of the unit quick and easy without disturbing the patient.

Two Cage Adaptor

A useful Y adaptor allowing 2 blankets in adjoining cages to run from 1 heater unit.

AAS DARVALL WARM AIR SYSTEM ACCESSORIES

AAS7882  Darvall Warm Air Heater Cage Door Adaptor
AAS07888  Darvall Warm Air Heater Hose Cover
AAS8100  Darvall Warm Air Heater Crocodile Clip Hose Holder
AAS02347  Darvall Warm Air Heater Hose Complete
AAS1959  Darvall Two Cage Y Adaptor (requires 2 x Cage Door Adaptors - not included)
iM3 Masks are designed for rapid induction of anaesthesia with a minimum of fuss and minimum pollution. They all have the following features.
• Very low dead space, important when masking down using circle systems
• Removeable rubber diaphragm which minimises gas leaks and permits cleaning.
• Made from virtually indestructable pvc which will not degrade like the latex rubber type.
• Clear plastic allows visualisation of patient’s muzzle.
• Buy a full set (5) and get a Free Resuscitation Bag - Small.

<table>
<thead>
<tr>
<th>Code</th>
<th>Inner Diameter</th>
<th>Outer Diameter</th>
<th>Length</th>
</tr>
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<tr>
<td>025538CBR</td>
<td>25mm</td>
<td>65mm</td>
<td>60mm</td>
</tr>
<tr>
<td>025538CVS</td>
<td>35mm</td>
<td>60mm</td>
<td>60mm</td>
</tr>
<tr>
<td>025539C</td>
<td>80mm</td>
<td>130mm</td>
<td>140mm</td>
</tr>
<tr>
<td>025547V</td>
<td>60mm</td>
<td>100mm</td>
<td>170mm</td>
</tr>
</tbody>
</table>

Eldridge Anaesthesia Mask

New mask designed to minimise roll and slipping. 3 sizes available.

ELDRIDGE ANAESTHESIA MASK
025553  Feline/ Small Canine  OD 90mm
025554  Canine up to 50lbs  OD 125mm
025555  X Large Canine  OD 150mm

Resuscitation Bag
For emergency artificial respiration. The device is ideal for administering either pure oxygen or room air to oxygen deprived patients. A special valve allows lung inflation on compression of the bag and passive exhalation of CO₂ whilst fresh air refills the bag. Can be used with a standard endotracheal tube or an airtight mask.

RESUSCITATION BAG
025557  Small Resuscitator Bag (Volume 550ml)
025558  Large Resuscitator Bag (Volume 1800ml)

Anaesthetic Chamber
Most very small patients may be induced using a chamber. The Kit contains the chromed inlet and outlet fittings.

• Relatively stress free
• Patient remains visible
• Standard 15mm inlet, standard scavenge tube outlet
• 300mm x 300mm x 180mm (12” x 12” x 7”)
• 3m of scavenge tubing included.

ANAESTHETIC CHAMBER
025540  Anaesthetic Chamber
025540C  Chamber Kit to Convert Plastic Containers

Feline Inhalant Delivery System
Feline asthma is increasingly recognised in small animal practice. Existing treatments include oral corticosteroids and bronchodilators. These regimes are far from ideal due to side effects or poor owner compliance.

Metered Dose Inhalers (MDI) have been the treatment of choice for human asthmatics for many years. Inhaled medication has been shown to be more effective with fewer side effects. It is now possible to use these agents in cats with our unique aerosol chamber designed for cats. The chamber works with standard human MDIs and works well with the small tidal volume of feline patients. Patients quickly accept the system.
The Kit comes complete with two masks. Chamber is 11cm x 4.5cm, (4.5” x 1.75”)
• Reusable and easy to clean
• Designed to be dispensed for client home use.
• Includes two different sized masks
• Directions included with suggested treatment regimes

FELINE INHALANT DELIVERY SYSTEM
025700  Feline Inhalant Delivery System
Intubation Accessories

Endotracheal Tube Brushes

Endotracheal tubes require cleaning to prevent cross contamination between patients. Thorough cleaning also ensures that there is no mucous obstructing the tube which could be fatal. Appropriately small endo tube brushes are hard to find.

**ENDOTRACHEAL TUBE BRUSHES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENDO2</td>
<td>Endotracheal Tube Brush 12 inch 2mm</td>
</tr>
<tr>
<td>ENDO3</td>
<td>Endotracheal Tube Brush 12 inch 3mm</td>
</tr>
<tr>
<td>ENDO4</td>
<td>Endotracheal Tube Brush 12 inch 4mm</td>
</tr>
<tr>
<td>ENDO5</td>
<td>Endotracheal Tube Brush 12 inch 5mm</td>
</tr>
<tr>
<td>ENDO6</td>
<td>Endotracheal Tube Brush 12 inch 6mm</td>
</tr>
<tr>
<td>ENDO7</td>
<td>Endotracheal Tube Brush 16 inch 7mm</td>
</tr>
<tr>
<td>ENDO10</td>
<td>Endotracheal Tube Brush 12 inch 10mm</td>
</tr>
<tr>
<td>ENDO12</td>
<td>Endotracheal Tube Brush 12 inch 12mm</td>
</tr>
<tr>
<td>ENDOSET</td>
<td>Endotracheal Tube Brush Set (as above)</td>
</tr>
</tbody>
</table>

Endotracheal Tube Stylet

Intubation is much easier using a malleable stylet. These plastic coated stylets may be bent to the desired shape. Each Stylet has an adjustable rubber stopper to ensure that the stylet tip is not exposed at the endo tube tip. The Stylets work especially well with silicone tubes which tend to be soft.

**ENDOTRACHEAL TUBE STYLET**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>025605</td>
<td>Stylet Tube Sizes 2.0-3.5mm</td>
</tr>
<tr>
<td>025606</td>
<td>Stylet Tube Sizes 4.0-6.5mm</td>
</tr>
<tr>
<td>025607</td>
<td>Stylet Tube Sizes 7.0-10mm</td>
</tr>
</tbody>
</table>

Endotracheal Tube Light

This small Penlight has attached a flexible metal rod with a light at the tip. A 5mm tube easily slides over the light tube. Offers both rigidity and light, especially useful in cats and small dogs. Operates with ‘AA’ batteries which are included.

**ENDOTUBE LIGHT**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>025600</td>
<td>Endotrube Light</td>
</tr>
<tr>
<td>025601</td>
<td>Spare Endotrube Light Bulb</td>
</tr>
</tbody>
</table>

Safe-Seal Endotracheal Tubes

Almost all ET Tubes used today depend upon an inflation cuff to seal the tube in the trachea, not so the Safe-Seal™ ET Tube featuring the Blaine Bafflex System.

This new technology uses a series of 6 silicone baffles with carefully engineered pattern and spacing to seal the trachea without pressure points. The flexible baffles allow an “o-ring effect”.

The Safe-Seal ET tube lies in the trachea and the sealing baffles touch the tracheal wall leaning towards the larynx. Thus, when the patient inspires the silicone baffles are sucked against the trachea forming a tight seal.

The special design allows passage of pressure exceeding 20-30 centimeters of water in the patient’s lungs. If the pop-off valve is accidentally left closed, the excess pressure is released and no harm will come to the patient.

These soft, flexible baffles are atraumatic to the tracheal surface due to the limited contact of the baffles.

There is minimal contact with the tracheal wall when using the Safe-Seal Tube as opposed to the large area of contact of inflation cuff tubes. This means the tube can be left in the same position for extended periods of time.

Another advantage is the “squeegee” effect when extubating, by scraping the trachea clean of any fluids present.

The Safe-Seal ET Tube with the Blaine Bafflex System eliminates dangers of deflation or over inflation.

The Safe-Seal Tube’s baffles keep the tip of the tube centered in the trachea.

Although the Safe-Seal ET Tube has a different ‘feel’ to regular tubes, new users quickly adjust and rarely switch back.

SAFE: Baffles prevent over insufflation - no pressure points
EASY: Faster insertion and removal - less training needed
ECONOMICAL: Only three sizes needed for dogs ranging 5 - 100kgs

The new Safe – Seal Endo Tube utilizes a series of silicone baffles to replace the inflation cuff. It eliminates the risks of over inflation, under inflation and leaky tubes. The soft, flexible baffles seal the trachea without pressure and cleanses the trachea of all fluids upon extubation.

Only 3 sizes of tubes are necessary for dogs weighing 5 to 100kgs. The ET tube's one piece construction of medical grade silicone is autoclavable.

Advantages & benefits

- Solid one piece construction of medical grade silicone.
- No moving parts to fail.
- Can be left in the same position in the trachea for extended periods.
- The tube will rotate in the trachea during surgery without injury.
- Transparent, so blood or fluids can be visualized in the tube.
- Autoclavable

SAFE-SEAL ENDTWARGE TUBES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET18L</td>
<td>Safe-Seal ET Large 30 - 100 kg</td>
</tr>
<tr>
<td>ET14M</td>
<td>Safe-Seal ET Medium 11 - 35 kg</td>
</tr>
<tr>
<td>ET12S</td>
<td>Safe-Seal ET Small 5 - 15kg</td>
</tr>
<tr>
<td>ETSET</td>
<td>Safe-Seal ET Set of 3 (S, M, L)</td>
</tr>
<tr>
<td>02545-553</td>
<td>Cleaning Brush for Safe-Seal ET - Large</td>
</tr>
<tr>
<td>02545-540</td>
<td>Cleaning Brush for Safe-Seal ET - Medium</td>
</tr>
<tr>
<td>02545-544-2</td>
<td>Cleaning Brush for Safe-Seal ET - Small</td>
</tr>
<tr>
<td>02545SET</td>
<td>Cleaning Brush Set for Safe-Seal ET</td>
</tr>
</tbody>
</table>

Cleaning Brush Set for Safe-Seal ET

Cleaning Brush for Safe-Seal ET - Small
Cleaning Brush for Safe-Seal ET - Medium
Cleaning Brush for Safe-Seal ET - Large
Cleaning Brush Set for Safe-Seal ET
Large Diameter Silicone Endotracheal Tube

Features:
- Connector included.
- Lateral Murphy eye at distal tip allows ventilation in the event of obstruction of the main opening at the tip.
- 10 to 14mm diameter.
- Transparent: blood and mucus visible
- Comfortable c.f. rubber and PVC.
- Durable c.f. rubber and PVC.
- NOT autoclavable (use cold sterilants e.g. perasafe page ????).
- Sensible pricing.

LARGE DIAMETER ENDOTRACHEAL TUBE

<table>
<thead>
<tr>
<th>Inner Diameter (mm)</th>
<th>Length (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>025620</td>
<td>10</td>
</tr>
<tr>
<td>025621</td>
<td>11</td>
</tr>
<tr>
<td>025622</td>
<td>12</td>
</tr>
<tr>
<td>025623</td>
<td>14</td>
</tr>
<tr>
<td>025625</td>
<td>Set of 4 tubes</td>
</tr>
</tbody>
</table>

Laryngoscopes

Intubation of certain breeds of certain species can be very difficult without the appropriate laryngoscope. Deflection of soft tissues and a light source makes life very much easier. In a crisis e.g. a blue brachycephalic, the appropriate laryngoscope will be a life saver. Veterinary Instrumentation recommends Miller Blades. Our Fibre Optic System uses a remote single bulb producing a cold light at the blade tip.

LARYNGOSCOPES

- 025118FO: Laryngoscope Set with 0, 1, 2, 3 & 4 Blades Fibre Optic
- 025118FOBULB: Spare Bulb for Fibre Optic Laryngoscopes
- 025127: Wall Bracket for Laryngoscope Sets
- 025120: Laryngoscope for Rabbit Fibre Optic includes Miller No 0 Blade and 00 Blade
- 025125/L: Spare Bulb Non FO laryngoscopes Large
- 025125: Spare Bulb Non FO Laryngoscopes Small

LED Laryngoscopes & Handles

Powered by a high output LED Laryngoscope Handle that provides superb illumination. The unique Vmag range of Blades includes 3x swivelling lens that provides excellent magnification.

Please note further larger sizes of the Laryngoscope Blade are available but these do not have a magnification loupe.

LED LARYNGOSCOPES & HANDLES

- AW600.080.000V: LED Laryngoscope Handle - AA Battery Powered
- AW600.080.002V: LED Laryngoscope Handle - C Cell Powered
- AW600.080.004V: LED Laryngoscope Handle - Angled Handle
- AWVVMAG00: Laryngoscope Blade (Miller size 00) with Magnification Loupe
- AWVVMAG0: Laryngoscope Blade (Miller size 0) with Magnification Loupe
- AWVVMAG1: Laryngoscope Blade (Miller size 1) with Magnification Loupe

The EZ Tie is designed to be quick and easy to hold any endotracheal or anaesthesia mask safely in place. The thin but strong plastic tubing has 2 sliding clasps. These clasps readily move along the tubing but hold steady under tension. The first clasp is used to tighten around the ET tube or mask. The second slides along to tighten around the patient’s muzzle. It also works extremely well with challenging brachycephalic breeds such as pugs and felines.

EZ TIE ENDOTRACHEAL TUBE SECURING DEVICE

025094 EZ Tie Endotracheal Securing Device Pack of 3

EZ Tie Endotracheal Tube Securing Device
Non-invasive blood pressure monitoring. Hypertension is often overlooked during diagnosis, treatment and routine physical examinations in small animals. In addition many hypotensive patients, such as those suffering from shock, benefit greatly from Doppler measurement of blood pressure when knowing the pressure can mean effective and timely treatment.

Combining Doppler with an appropriate sized ‘cuff’ for small animals, provides the veterinarian with the same non-invasive method for testing blood pressure as is available in human medicine. A small probe is placed over a peripheral artery (e.g digital or coccygeal). An ultrasonic crystal in the probe transmits pulse wave sound back to the amplifier. The pressure cuff is inflated until the pulse sound is no longer audible. The cuff is slowly deflated, using the manometer, until pulse sounds are audible once more, at which point the manometer displays a numeric value of the animal’s systolic pressure.

Lightweight hand-held unit; high quality, vet spec sphygmomanometer. Comes complete with 2 cuffs (2.5cm and 5.0cm). Runs on 9 volt battery. Complete with headset and carrying case. All consumables are available.

Doppler Ultrasonic Blood Flow Monitor

This tiny monitor is a simple apnoea alert monitor. The microprocessor beeps with every breath.

- Highly sensitive.
- Easy to use - just connect between the endotracheal tube and anaesthesia circuit.
- No adjustments. A sophisticated algorithm will recognise and indicate with a beep every breath from a kitten to St Bernard.
- Apnoea Alert. If your patient fails to breathe for 45 seconds a distinctive apnoea alert will sound.
- Auto shut off.
- High density long-life lithium battery will last for years.

Apalert Respiration Monitor

Increasing sophistication of monitors means nurses to monitor the instruments rather than the patient. Simple respiratory monitoring plus a competent nurse offers the most reliable patient monitoring. Respiratory arrest almost always precedes cardiac arrest in an anaesthetic emergency. Prompt action at the point of respiration failure will usually save the patient.

The Apalert is:
- Reliable. It beeps at each breath and the display shows the interval since the last breath.
- Rechargeable approx 70hrs use. You can still use it as it recharges.
- Adjustable by beep volume and sensitivity.
- Alarming, The alarm gets louder if you ignore it. The alarm can be reset by the surgeon using magic eye facility without compromising sterility.

This unit saves lives with a minimum of fuss.

Apalert Respiration Monitor

I.V. Splints

Maintains foreleg in extension for long term I.V. therapy. Different sizes to suit all patients. Stainless steel, will autoclave. Well tolerated, even by cats. Supplied with full instructions.

I.V. Splints

Drip Stand Cage Door Mount

- Clips onto all mesh or bar fronted cages.
- Stainless steel.
- Adjustable for height.
- Occupies no floor space.
- Moves with cage door causing no obstruction when examining patient.