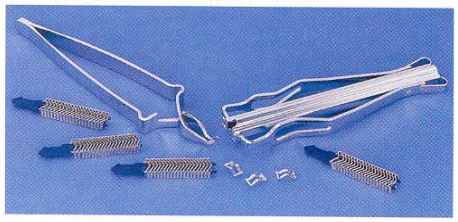
Instruments

Autoclip® Wound Closing System



The Autoclip® Applier works like a staple gun to rapidly apply Autoclip® closures. The applier will hold 20 Autoclips®, which are held firm and ready for use by rustless beryllium-copper springs. Autoclips® provide maximum holding force with minimal trauma. There is no need for assistance to operate the applier or remover. When the wound is healed, clips are easily removed with the Autoclip® Remover. Stainless steel Autoclips® are non-pyrogenic and supplied non-sterile, but may be autoclaved. Ideal for use with laboratory mice and rats.

MODEL	DESCRIPTION	PRICE
ACS-KIT	Autoclip Starter Kit (includes applier, remover, & case of 1,000 clips)	$500.00
ACS-APL	Autoclip Applier	$250.00
ACS-RMV	Autoclip Remover	$115.00
ACS-BX	Autoclips (Box of 100)	$ 30.00
ACS-CS	Autoclips (Case of 1,000)	$250.00

NEW LOWER PRICE

Germinator 500

Dry Sterilize Surgical Instruments in Seconds - Meets New NIH Guidelines

NIH guidelines recommend sterilizing instruments for small animal surgery. Hot glass bead sterilizers are ideal for this application. STAYS COOL TO THE TOUCH - The chassis stays cool, even at the end of a full day of operation. The air above the unit is cool enough to insert an instrument into the well without discomfort. Insert the surgical instrument into the well, sterilization of the inserted parts by dry heat (250° C) takes 2-5 seconds. The handles of the instruments, outside the heat, do not get hot. The metal in the beads is heated only on the surface, not to the depth, so cooling is quick after removal. Within 30 seconds, the surgical instruments are cool enough to use.

Specifications: Warm Up Time: 20 min, Working Temp: 250° C (approximately 500° F), Sterilization Time: 2-5 sec, Well Size: 20 cm deep x 5 cm diameter.

MODEL	DESCRIPTION	EACH
GER-5287	Dry Sterilizer	$425.00
GER-5289	Glass Bead Refill Package	$ 30.00

The beads will eventually, after extensive use, be worn or broken to powder, which will settle to the bottom of the well. When you notice it is difficult to push the instruments in deep enough, replace the beads.

A Revolutionary Method for Humane Identification of Laboratory Animals

NEW Aramis Micro-tattoo System

Micro-tattooing forceps with disposable hypodermic needle.

Individual identification is essential for the maintenance of health/study records and the management of colonies of laboratory animals. This instrument is in compliance with regulatory agencies and research protocol requirements for the care and use of laboratory animals.

Advantages

- Permanent mark which is easily readable on pigmented or albino animals.
- Humane
- Rapid and easy to apply
- Almost infinite ID numbers
- Sterile and disposable hypodermic needles prevent the spread of potentially infectious disease
- Inexpensive

Instructions:

- Choose the needle
- Fill the ink tank
- Immobilization
- Squeeze the instrument
- Identification with the grid location

The needle is re-inked when it enters the ink tank on the other side.

Discomfort of the animal is minimal and equivalent to a quick injection with a very fine needle.

Complete kit includes 1 Aramis micro-tattoo instrument, 1 oz. of Ketchum Green Tattoo Paste, 1 aluminium planchette, plastic holding case, and 2 practice hypodermic needles .

MODEL	DESCRIPTION	PRICE
MT-KIT	Complete Microtattoo Kit	$240.00
MTP-1	Green Tattoo Paste, 1 oz.	$ 4.50
MTP-5	Green Tattoo Paste, 5 oz.	$ 14.00

NEW Ear Punch

Animal Identification Systems

MODE	DESCRIPTION	PRICE
EP-901	Ear Punch (1mm punch)	$ 50.00
EP-902	Ear Punch (2mm punch)	$ 50.00

Visit our website at www.braintreesci.com

Instruments

Acculab Scales

Electronic Balance Scales

A variety of electronic balances all featuring large stainless steel platform, large LCD display, keypad calibration, gram and ounce weighing mode, tare and memory functions. Capacities ranging from 2 kg to 10 kg.

Model	Description	Price
GSI-200	200g Electronic Balance	$110.00
GSI-2K	2000g Electronic Balance	$110.00
VI-4K	4000g Electronic Balance	$175.00
VI-6K	6000g Electronic Balance	$225.00

Goldblatt Style Arterial Clamps

Induce Renovascular Hypertension

These surgical stainless steel clamps are used to create selective regional arterial stenosis, specifically, renal ischemia leading to renal hypertension. These clamps have a removable throat plate for implantation.

MODEL	DESCRIPTION	PRICE
GB-3	.125" (3.18mm) ID, .125" (3.18mm) thickness	$125.00 ea.
GB-4	.125" (3.18mm) ID, .255" (6.48mm) thickness	$125.00 ea.

Restrainers

NEW Rad Disk™ Rodent Microisolation Irradiator Cage

Protecting Irradiated Animals: Because Rad Disk™ is made entirely of polycarbonate plastic, it is autoclavable. The cage is 4" high and 10.75" in diameter, designed to fit into Gammacell 40 and Nordion Cesium Irradiator loading chambers. Used as instructed, Rad Disk™ prevents contamination of mice during and after irradiation. It is also a versatile carrier to protect rodents while transporting them in and out of facilities.

Cage Divider System: Rad Disk™ comes complete with a polycarbonate, removable, divider system which divides the cage into 4 to 8 separate compartments for irradiation, if desired. Without dividers, mice can free range, which allows greater uniformity of dose delivery during irradiation.

Protection from Contamination: The Rad Disk™ is autoclaved with the lid in place. Within a changing hood, the animals are transferred from their caging into the sterile and protective environment of the Rad Disk™, using standard microisolation techniques.

The lid of the Rad Disk™ contains a 3 ply filter which can be used up to 6 months depending on frequency of autoclaving. After animals are transferred into the Rad Disk™, the lid is put in place and secured to the base using plastic tape (if decontamination of the outside of the cage will be required to return to animal room).

The lid has 12 air holes through which potential airborne contaminates are trapped on the exterior of the filter. Rad Disk™ is now ready to be taken to the radiation source, even if moving through a dirty environment for irradiation.

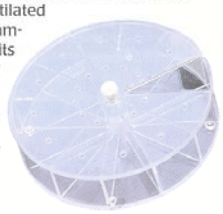
Sterile Transportation: After irradiation at a remote location, the Rad Disk™ containing the animals is prepared for re-entry into the animal facility by placing a strip of plastic tape over each line of air holes. Now the cage is completely sealed and can be liquid sterilized without wetting the filter. Once decontaminated, the cage is carried into the animal room or facility, and directly to the change hood to remove the tape from the side of the lid and to remove the lid from the cage, so that the animals can be placed back into their original housing. (This procedure must be accomplished within 20 minutes of sealing the airholes). The tape is left covering the airholes on the lid to isolate any contaminants trapped on the outside of the filter. The cage can now be moved to the wash and autoclave area where the tape can be removed from the top of the lid. (Always check with facility management to ensure compliance with facility protocols).

Cages are easy to clean and use.

MODEL	DESCRIPTION	PRICE
IRD-P	Irradiator Cage with Divider	$250.00
IRD-FLT	Irradiator Cage Replacement Filter	$ 3.75

Mouse Pie Cages

Circular cages hold up to 10 mice. The notched removable lid can be dialed to any of the ventilated pie-shaped chambers. These units were originally designed for whole body irradiation. Use for temporary transport or storage of animals for acute studies.



MODEL		PRICE
MPC	Mouse Pie Cage The mouse unit is 21.5 cm in diameter and 7.5 cm in height; individual chambers are 5 cm (base) and 9 cm (length).	$180.00

Rat Pie Cages available, call for prices.

Cages are easy to clean and to use.

Deltaphase® Isothermal Pad

Maintains animals or cultures at 37°C for hours. Ideal for NMR!

Based on fundamental thermodynamics, completely safe even with flammable gases, uses no electricity, no wires, no control box, and they are reusable.

Why you need them

Normal biochemical functions are based on the temperature of 37°C. In conscious animals, core temperature is maintained. During anesthesia, body temperature falls. Normal chemistry is disturbed, surgical tolerance is reduced, and recovery is slow.

Studies of mammalian cell biology are conducted at 37°C. in expensive incubators in order to maintain normal function. However, the manipulation of cultures in a clean hood or on the bench top almost always leads to significant cooling. At the least, this results in the displacement of growth curves. At worst it can lead to significant cell mortality.

To maintain temperature during experimental procedures, many methods are used. Coverings help, but are impractical during most procedures and cannot replace heat already lost. Electrical heaters must be carefully monitored to prevent over heating or oscillation. Electrical devices often interfere with recording equipment. They are a shock hazard in the presence of urine, blood, or culture media, and the spark of a thermostat might ignite a flammable anesthetic or solvent.

The **Deltaphase® Isothermal Pad** is a unique approach to temperature stabilization. It is a source of heat which cannot overheat. It is economical in that it needs no tubes, wires or electricity. It is also safer than other devices because it needs no thermostat or controller and does not generate electrical signals. But it can maintain a small animal or a culture bottle at near normal and constant temperature for several hours.

The concept of the **Deltaphase® Isothermal Pad** is derived from the basic thermodynamic principles that a phase change occurs at constant temperature.

A unique chemical solution, contained within a durable pouch, is in solid form at room temperature. When heated, the solution becomes fluid and the pad is ready to use.

When an animal or container is placed in contact with an activated pad, heat is transferred and the solution slowly undergoes a phase change. During this change, over 30 calories are available per gram of solution and the temperature remains constant. The pad remains isothermal until all of the liquid phase has solidified.

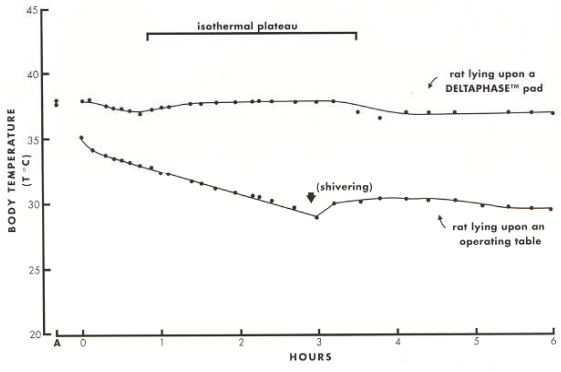
Experimental studies have shown that the pad temperature of 39°C is ideal for maintaining animal or cultures at 37°C. If desired, one or more pads may be placed within a foam box to create a bench top or portable incubator.

MODEL	PRICE
39 DP (Includes 3 Pads and 3 Insulators) Each Pad is 8" x 8" x .75"	$85.00

*Looking for a special size of the **Deltaphase® Pad**?
Please fax details to (781) 843-7932.

Laboratory Evaluation

Rectal temperatures of two rats during 6-hour experiment. (Animal weights 350 g. room temperature 24 5°C.) Animal on **Deltaphase® Isothermal Pad** maintained near normal temperature for more than three hours.



The **Deltaphase® Isothermal Pad** has been evaluated by researchers at a major medical center. Anesthetized rats (pentobarbital 45 mg/kg) were placed on either an operating table or a Deltaphase® Pad, and rectal temperature was monitored for 6 hours. The temperature of the rats on the conventional table fell rapidly and stabilized only near 30°C when pronounced shivering began. The rats on **Deltaphase® Isothermal Pad** maintained body temperature near a constant 37°C for 4 hours. Typical observations are shown in figure above.

Deltaphase® Operating Board

This compact operating board takes advantage of the **Deltaphase®** principle to maintain animal body temperature during surgical or experimental procedures. An eight and one half inch square stainless steel operating surface lies in contact with an activated **Deltaphase®** isothermal pad. The underside of the pad is insulated to provide a longer isothermal period. Molded wells are provided for sponges, instruments and anesthetic apparatus.

This board was designed by research scientists to be functional, durable, and easy to clean. Its low cost and safety make it appropriate for use in student laboratories. The unit is supplied with two **Deltaphase®** pads.

MODEL	PRICE
39 OP	$95.00

Instruments shown not included.

Vaporizers

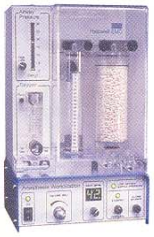
Calibrated 0.25 to 5% using a Laser Refractometer for the specified anesthetic drug. Complete with safety lock to help prevent accidental turn-on of dial. Fluctuations in temperatur flow rate and duration of use is automatically compensated f during use. When used with I.P.P.V. the variation in output is negligible.

Selectatec® Mounting and Key Fill configurations available. Call for pricing

(Selectatec® is a registered trademark of BOC/Ohmeda UK Ltd.)

MODEL NO.	DESCRIPTION	PRICE
VP	Cage Mounting & Well Fill	$1,495.00

Please Specify Drug type: Isoflurane, Halothane, Sevoflurane, Enflurane
Add an additional $100 if purchasing for Sevoflurane. Drug not included.



Anesthesia WorkStation

A compact (9" W x 9" D x 15" H), convenient system for use on animals under 7 kg (15 lb).

In clinical trials the AWS is being used for long term anesthetic procedures on 150-400gm rodents. The AWS has been shown to be effective with the induction, stabilization, and maintenance of patients for neurophysiological testing using inhalant anesthetics for daily 8 to 12-hour procedures. Using the AWS, rats under isoflurane anesthesia have been subject to extended electrophysiological recordings of cortical responses. Throughout these procedures the AWS has been shown to facilitate the administration of anesthetics, holding the subject in a very smooth, controllable anesthetic plane, as well as providing precise respiratory control.

The Hallowell EMC Anesthesia WorkStation is easy to use as BOTH a basic respirator (irrespective of anesthetic regime) and delivery source for inhalant anesthetics. It incorporates a time-cycled volume ventilator with an adjustable pressure safety limit. The only additional component necessary for immediate utilization is a vaporizer for the agent of your choice.

Free yourself from the restraints of the operating room, work on your bench top when appropriate.

MODEL NO.	PRICE
AWS	$4,815.00

Manifold

This manifold supports multiple procedures while utilizing only one vaporizer. While offering individual shut-offs, the manifold provides the intake of new gas to designated locations while the opposite side provides output for used gases to a scavenger unit.

MODEL	DESCRIPTION.	PRICE
MAN-4	4 Station Manifold	$225.00

Custom sizes are available, please call for a quote.

Co-axial Breathing Apparatus

Anesthetic gas enters the side port and flows to the front of the nose cone to be inspired by the patient. Upon exhalation the positive pressure lifts a precision ball valve for 1-way scavenging. A rubber balloon is attached at the opposite end acting as a diaphragm.

MODEL	PRICE
COAX	$449.00

SAAS - Small Animal Anesthesia System

- Flexibility in Use
- Minimum Maintenance
- Economy in Equipment
- Tabletop Mounted

Flexible/Versatile–The station allows the users to induce, anesthetize and maintain or, if work load demands, induce, anaesthetize/ maintain all at the same time. When combined with a vaporizer, flow meter and oxygen flush the station is a self-contained unit requiring minimum space.

Economy of Equipment–One work station is fitted with 4 breathing circuits allowing up to 4 animals to be anesthetized at any one moment. One anesthetic vaporizer provides anesthesia for up to 4 breathing circuits. Allows flexibility in the different breathing circuits. Includes 19mm scavenging ports for both induction and anesthesia.

Minimum Maintenance–The anesthesia manifold is easily removed to allow the induction chamber to be cleaned. The anesthesia manifold only requires servicing every five years. Servicing is facilitated via a "service exchange" thereby minimizing any downtime.

Tabletop Mounted–The system can be placed on any flat surface. The only additional equipment needed would be an oxygen supply, a vaporizer, and a flow meter.

MODEL	DIMENSION	PRICE
SAAS	Small Animal Anesthesia System	$1,500.00

Flow Meter Assembly

MODEL	PRICE
FLOW	$225.00*

*Please specify Air, N_2O or Oxygen when ordering.

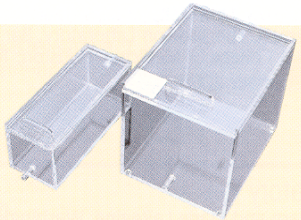
Gas Anesthetizing Box for use with Rodents

The 1/4 inch thick transparent plastic anesthetizing box allows for constant observation while anesthetizing. Helps protect against accidental overdosing

For use with rats and mice. Has an easy to move machine tooled sliding top. Made of durable plastic, this box should last for years.

Not for use with liquid organic solvents.

MODEL	PRICE
AB-1 SMALL BOX 10"L x 4"W x 4"H (25.4 cm L x 10.16 cm W x 10.16 cm H)	$90.00
AB-2 LARGE BOX 10"L x 8"W x 8"H (25.4 cm L x 20.3 cm W x 20.3 cm H)	$180.00



Braintree Scientific can make custom boxes to suit your needs. All that you need to do is fax (781) 843-7932 the size you are interested in and we will get back to you with a quote.