

ALAMO BIOLOGICS PARTNERS IN INNOVATION

Alamo Biologics

Alamo Biologics, formerly known as Alamo Tissue Service, is a full-service tissue bank of high-quality allografts and biologics. Founded in 1998, Alamo Biologics has established itself as a highly respected organization for its commitment to quality, innovation and customer service.

We are committed to honoring the gift of donation by providing safe, extensive, and high-quality allografts to the medical community and, ultimately, to the patients who depend on them.

We offer a wide selection of allograft tissue and biologics. From custom grafts to the company's vast tissue bank network, we will work with you to meet your needs.

We look forward to partnering with you. If you have any questions, please contact us today at 800.226.9091 or info@alamobiologics.com.

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A Commitment to Quality and Innovation

OUR MISSION

Alamo Biologics is committed to honoring the gift of donation by providing a safe, extensive and high-quality allografts to the medical community and to the patients who depend on them.



INNOVATIVE LEADERS

Alamo Biologics is committed to innovation. We develop products to fulfill the current needs of the medical community to support better patient outcomes.

EXCLUSIVE STERILIZATION TECHNOLOGY

Our proprietary PASCO₂® process, a supercritical CO₂ technology, sterilizes donor tissue and preserves integrity.



The revolutionary PASCO₂® sterilization process relies on supercritical carbon dioxide to extract unwanted compounds from soft tissues without compromising their integrity. Balancing the pressure and temperature of the fluid, allograft tissue is prepared for use in a problem-free tissue transplant.

 $PASCO_2^{\circ}$ is perfect for sports medicine allografts and other reconstructive procedures. Tissue is processed to a validated Sterility Assurance Level as recommended by the AATB and FDA.



EXCEPTIONAL CUSTOMER SERVICE

We consider our customers our partners and work hard to exceed their expectations. To best serve you, the team is available and on call after hours.

Toll-free: 800.226.9091 San Antonio: 210.738.2663

Email: purchases@alamobiologics.com

URL: AlamoBiologics.com

Accreditation and Compliance

Alamo Biologics is accredited by the American Association of Tissue Banks (AATB) and registered with the U.S. Food and Drug Administration (FDA). Additionally, we are licensed for tissue banking operations in the following states which require separate licensure. Please contact us or visit our website for copies of our accreditations.

- California
- Oregon
- Maryland
- Illinois

- Florida
- New York
- Canada
- Delaware

Donor Screening and Recovery

A comprehensive screening process is conducted to review prospective donor's medical and social history, in accordance with FDA regulations and AATB standards. Upon receiving consent from the donor's family, qualified personnel perform and document physical examinations and review the donor's medical records. Approved donors are tested by a CLIA certified, FDA-registered laboratory.

Tissue Processing

Processing begins after a donor has passed the thorough screening process. Our highly trained technicians operate in state-of-the-art clean rooms to process and prepare tissue. Our dedicated team is committed to providing high quality allograft tissue to enhance lives.



Distribution

We offer reliable world-wide delivery. Courier services are available for stat deliveries. Shipping validations and temperature monitoring devices available upon request. Our packaging methods meet or exceed federal, FDA and AATB requirements.



Proper Allograft Storage

Fresh Frozen (FF) allograft tissue should be stored at -40°C or colder and may be stored up to six months at -20°C to -39°C. Freeze Dried (FD) (lyophilized) tissue should be stored between +4°C to +40°C (ambient temperature).



Quality Systems

Quality is inherent in everything we do. Our FDA- and AATB-compliant systems and procedures are designed to ensure highest-quality allografts and biologics.

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Sports Medicine Grafts



Introducing our Revolutionary

PASCO₂® Technology





ADVANTAGES OF PASCO₂ TECHNOLOGY COMPARED TO OTHER PROCESSING

- Thoroughly inactivates pathogenic microorganisms
- Allows for increased cell proliferation
- Assists with reduction of postoperative inflammation and foreign body reaction
- Reduces incorporation time
- Increases tissue's ability to endure physiological demands



A **leading supplier** of allograft tissue

Alamo Biologics is proud to introduce the revolutionary $PASCO_2^{\circ}$ technology. This technology utilizes supercritical CO_2 to cleanse and sterilize allograft tissue. In its supercritical state CO_2 can effuse through solids like a gas and dissolve materials like a liquid.

PASCO₂® technology balances pressure and temperature of SCCO₂ extracting blood and lipids from the allografts. The low temperature of the process and the stability of CO₂ allow compounds to be extracted with no damage or denaturing to the tissue. PASCO₂® allografts are processed to a validated sterility assurance level (SAL) of 10⁻⁶as recommended by the AATB and FDA.

A **new and enhanced** way to sterilize allograft tissue

ACCREDITATION AND COMPLIANCE

Precision Allograft Solutions is accredited by the American Association of Tissue Banks and registered with the U.S. Food and Drug Administration. Please contact us or visit our website for copies of our accreditations.

REVOLUTIONARY STERILIZATION PROCESS

SCCO₂ sterilized allografts exhibit biomechanical properties closer to those of natural tissues when compared to those treated with gamma irradiation.

Tensile Strength



Honoring the **gift of donation**

Extreme care is taken to ensure that donor tissue is recovered, processed, and distributed in a way that gives the utmost respect to donors and is most beneficial to recipients. Precision Allograft Solutions is committed to honoring the gift of donation by providing safe, high quality PASCO₂ allografts to the medical community.

CUTTING EDGE TECHNOLOGY

PASCO₂® technology is a cutting-edge allograft processing technique. It combines

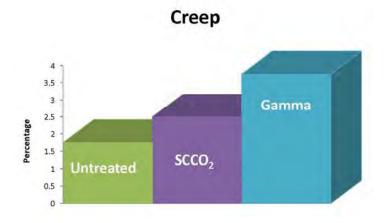
the principles of supercritical CO_2 with that of traditional chemical and mechanical steps for the removal of organic materials, such as blood particles and lipids, from both hard and soft tissues. In addition to a highly effective validated washing procedure, $PASCO_2^{\circ}$ technology utilizes a mild, non-toxic sterilizing agent, to thoroughly inactivate pathogenic microorganisms and achieve a Sterility Assurance Level of 10^{-6} while simultaneously maintaining

biocompatibility as well as the physiological properties and mechanical integrity of the tissue.

Trained surgical technicians in certified Class 100 clean rooms utilize this proprietary, validated process based on ISO 14937:2009 (sterilization requirements for Health Care products) to process donated human tissue into high quality PASCO₂® allografts. Precision Allograft Solutions provides tissue crafted with exacting standards for use in a variety of surgical procedures.

EXCLUSIVE PASCO₂® TECHNOLOGY

Research has shown that allograft tissue sterilized using $SCCO_2$ better maintain their elastic properties and strength as compared to tissue treated using other, more traditional, sterilization methods.





STERILITY

PASCO₂® technolog thoroughly inactivates pathogenic microorganisms and achieves a sterility assurance level (SAL) of 10°6.



QUALITY

Allografts processed with PASCO₂® technology allow for increased cell proliferation as a result of blood and lipid removal.

PASCO₂® technology grafts retain their original biologic and biomechanical properties (maintaining their ability to endure the physiological demands placed upon them after surgery) better than gamma irradiated allografts.



INNOVATION

Allografts processed with PASCO₂® technology assist with the reduction of postoperative inflammation and foreign body reaction thereby reducing incorporation time.



Description

Product Code

Achilles Strip FF	AT189FF
Achilles Strip FF (PASCO)	PS189FF
Achilles Tendon FF	AT290FF
Achilles Tendon FF (PASCO)	PS290FF
Gracilis Tendon FF	AT393FF
Gracilis Tendon FF (PASCO)	PS393FF
Patella Tendon Hemi FF	AT292FF
Patella Tendon Hemi FF (PASCO)	PS292FF
Peroneus Longus FF	AT294FF
Peroneus Longus FF (PASCO)	PS294FF
Pre-Shaped Achilles Tendon FF	AT289FF
Pre-Shaped Achilles Tendon FF (PASCO)	PS289FF

Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40°C or cooler.

FD: Freeze Dried



<u>Description</u> <u>Product Code</u>

Pre-Shaped Patella Tendon FF	AT293FF
Pre-Shaped Patella Tendon FF (PASCO)	PS293FF
Semitendinosus Tendon FF	AT392FF
Semitendinosus Tendon FF (PASCO)	PS392FF
Semitendinosus/Gracilis Combo FF	AT394FF
Semitendinosus/Gracilis Combo FF (PASCO)	PS394FF
Tibialis Tendon Anterior FF	AT801FF
Tibialis Tendon Anterior FF (PASCO)	PS801FF
Tibialis Tendon Posterior FF	AT841FF
Tibialis Tendon Posterior FF (PASCO)	PS841FF

To Place an Order:

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General Ortho Grafts



<u>Description</u>	Product Code

Cancellous Crushed/Chips 5 cc (1-4mm)	AT802FD / AT802FF
Cancellous Crushed/Chips 5 cc (4-10mm)	AT803FD / AT803FF
Cancellous Crushed/Chips 10 cc (1-4mm)	AT804FD / AT804FF
Cancellous Crushed/Chips 10 cc (4-10mm)	AT805FD / AT805FF
Cancellous Crushed/Chips 15 cc (1-4mm)	AT806FD / AT806FF
Cancellous Crushed/Chips 15 cc (4-10mm)	AT807FD / AT807FF
Cancellous Crushed/Chips 30 cc (1-4mm)	AT808FD / AT808FF
Cancellous Crushed/Chips 30 cc (4-10mm)	AT809FD / AT809FF
Cancellous Cubes 7.5 cc	AT427FD / AT427FF
Cancellous Cubes 15 cc	AT402FD / AT402FF
Cancellous Cubes 30 cc	AT401FD / AT401FF
Cloward Dowel 12 mm	AT112FD / AT112FF
Cloward Dowel 14 mm	AT114FD / AT114FF
Cloward Dowel 16 mm	AT116FD / AT116FF
Cortical Matchsticks Small FD	AT342FD
Cortical Matchsticks Large FD	AT343FD

Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40°C or cooler.



<u>Description</u> <u>Product Code</u>

Cortical/Cancellous 5 CC (1-4mm) FD	AT347FD
Cortical/Cancellous 5 CC (4-10mm) FD	AT855FD
Cortical/Cancellous 10 CC (1-4mm) FD	AT345FD
Cortical/Cancellous 10 CC (4-10mm) FD	AT346FD
Cortical/Cancellous 15 CC (1-4mm) FD	AT348FD
Cortical/Cancellous 15 CC (4-10mm) FD	AT856FD
Cortical/Cancellous 30 CC (1-4mm) FD	AT349FD
Cortical/Cancellous 30 CC (4-10mm) FD	AT857FD
Costal Cartilage up to 5 cm FF	AT524FF
Costal Cartilage up to 5.1 - 8 cm FF	AT528FF
Costal Cartilage > 8 cm FF	AT529FF
Demin Strip 10x7x7mm (1 per pk)	AT723FD
Demin Strip 20x7x7mm (1 per pk)	AT724FD
Demin Strip 26x19x7mm (1 per pk)	AT777FD
Demin Strip 50x10x5mm (1 per pk)	AT726FD
Demin Strip 50x20x5mm (1 per pk)	AT730FD
Demin Strip 50x20x5mm (2 per pk)	AT731FD
Demin Strip 50x5x5mm (1 per pk)	AT733FD

Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40 $^{\circ}\mathrm{C}$ or cooler.



Description	Product Code
Fascia Lata 1-49sqcm	AT823FD / AT823FF
Fascia Lata 1-49sqcm (PASCO)	PS823FD / PS823FF
Fascia Lata 50-100sqcm	AT824FD / AT824FF
Fascia Lata 50-100sqcm (PASCO)	PS824FD / PS824FF
Fascia Lata101-150sqcm	AT825FD / AT825FF
Fascia Lata 101-150sqcm (PASCO)	PS825FD / PS825FF
Fascia Lata ≥151sqcm	AT826FD / AT826FF
Fascia Lata ≥151sqcm (PASCO)	PS826FD / PS826FF
Fascia Lata Patch 15x20mm	AT820FD / AT820FF
Fascia Lata Patch 20x30mm	AT821FD / AT821FF
Fascia Lata Patch 30x40mm	AT822FD / AT822FF
Femoral Head w/Neck	AT447FD / AT447FF
Femoral Shaft >6 cm	AT444FD / AT444FF

Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40 $^{\circ}\text{C}$ or cooler.



Description	Product Code
Femoral Shaft Split 1 pk	AT446FD / AT446SFF
Femoral Shaft Split 2 pk	AT445FD / AT445FF
Fibula Section 3.1 - 6 cm	AT428FD / AT428FF
Fibula Section >6 cm	AT429FD / AT429FF
Tibia Distal FF	AT454FF
Tibia Shaft	AT648FD / AT648FF
Tibia Split 1 pk	AT650FD / AT650FF
Tibia Split 2 pk	AT651FD / AT651FF
Tricortical Blk 8-15 mm	AT305FD / AT305FF
Tricortical Blk 16-19 mm	AT302FD / AT302FF
Tricortical Blk 20-29 mm	AT308FD /AT308FF
Tricortical Blk 30-39 mm	AT309FD / AT309FF
Tricortical Blk ≥ 40 mm	AT280FD / AT280FF

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Amnion Grafts



AmnioBioGraft +

AmnioBioGraft + is a dual layer patch-like tissue derived from the amniotic membrane of the placenta.





Applications

- Regenerative medicine
- Wound management
- Chronic and non-healing dermal wounds
- Cutaneous wound care
- Re-constructive medicine
- Ocular
- I njuries and reparative eye work
- Burn care

Benefits

- Matrix for cellular migration and proliferation
- Increased healing
- Non-immunogenic
- Reduces inflammation
- Reduces scar tissue
- Pain reduction at application site
- Acts as a natural biological barrier

Description

AmnioBioGraft + (8mm)
AmnioBioGraft + (10mm)
AmnioBioGraft + (12mm)
AmnioBioGraft + (14mm)
AmnioBioGraft + (16mm)
AmnioBioGraft + (2x3cm)
AmnioBioGraft + (3x4cm)
AmnioBioGraft + (4x4cm)
AmnioBioGraft + (4x6cm)
AmnioBioGraft + (4x8cm)

Product Code

AT744FD
AT745FD
AT746FD
AT747FD
AT753FD
AT752FD
AT749FD
AT748FD
AT750FD
AT751FD

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Bio-Matrix +

Bio-Matrix + is demineralized cortical fiber with a proprietary blend of mineralized cancellous and cortical bone. Bio-Matrix + has natural Osteoconductive and Osteoinductive potential. Excellent handling characteristics as a bone void filler. Sterilized to SAL 10⁻⁶.

Bio-Matrix Fiber

Bio-Matrix Fiber is a proprietary mixture of demineralized cortical fiber. It has natural Osteoinductive potential and excellent handling characteristics as a bone void filler. Sterilized to SAL 10⁻⁶.

Applications

- Surgical application requiring bone void filler.

Benefits

- Compressible
- Pliable and mold-able when re-hydrated
- Wicking capabilities



Storage

- Freeze-dried for ambient temperature storage.

Description	Product Number
Bio-Matrix +, 2.0cc	AT738FD
Bio-Matrix +, 5.0cc	AT739FD
Bio-Matrix +, 10.0cc	AT740FD
Bio-Matrix +, 20.0cc	AT754FD
Bio-Matrix Fiber, 2.0cc	AT741FD
Bio-Matrix Fiber, 5.0cc	AT742FD
Bio-Matrix Fiber, 10.0cc	AT743FD
Bio-Matrix Fiber, 20.0cc	AT755FD



DBM Putty

100% DBM, moldable, virally inactivated, resistant to irrigation and can be stored at room temperature. Provides osteoinductive properties that promotes bone growth.

DBM Putty Crush Mix

100% DBM, moldable, virally inactivated, resistant to irrigation and can be stored at room temperature. The cortical-cancellous bone chips incorporated into the DBM Crush Mix provides osteoinductive and osteoconductive scaffolding properties which promotes bone growth.



<u>Description</u>	Product Code
DBM Putty 0.50cc	AT686FD
DBM Putty 1.00cc	AT677FD
DBM Putty 2.50cc	AT678FD
DBM Putty 5.00cc	AT679FD
DBM Putty 10.00cc	AT680FD
DBM Putty Crush-Mix 0.50cc	AT685FD
DBM Putty Crush-Mix 1.00cc	AT681FD
DBM Putty Crush-Mix 2.50cc	AT682FD
DBM Putty Crush-Mix 5.00cc	AT683FD
DBM Putty Crush-Mix 10.00cc	AT684FD



<u>Description</u> <u>Product Code</u>

Demin Cancellous Crushed/Chips 5 cc (1-4mm)	AT812FD / AT812FF
Demin Cancellous Crushed/Chips 5 cc (4-10mm)	AT813FD / AT813FF
Demin Cancellous Crushed/Chips 10 cc (1-4mm)	AT814FD / AT814FF
Demin Cancellous Crushed/Chips 10 cc (4-10mm)	AT815FD / AT815FF
Demin Cancellous Crushed/Chips 15 cc (1-4mm)	AT816FD / AT816FF
Demin Cancellous Crushed/Chips 15 cc (4-10mm)	AT817FD / AT817FF
Demin Cancellous Crushed/Chips 30 cc (1-4mm)	AT818FD / AT818FF
Demin Cancellous Crushed/Chips 30 cc (4-10mm)	AT819FD / AT819FF
Demin Cancellous Cube 10mm FD	AT834FD
Demin Cancellous Cube 12mm FD	AT835FD
Demin Cancellous Cube 14mm FD	AT836FD
Pericardium 15x20mm	AT827FD / AT827FF
Pericardium 20x30mm	AT828FD / AT828FF
Pericardium 30x40mm	AT829FD / AT829FF

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Description

Product Code

Cortical ACF 11 x 14 5°, 5mm	AT772FD
Cortical ACF 11 x 14 5°, 6mm	AT773FD
Cortical ACF 11 x 14 5°, 7mm	AT774FD
Cortical ACF 11 x 14 5°, 8mm	AT775FD
Cortical ACF 11 x 14 5°, 9mm	AT776FD



Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40 $^{\circ}\text{C}$ or cooler.



Description Product Code

Cortical Disc Cervical Spacer, 5mm	AT767FD
Cortical Disc Cervical Spacer, 6mm	AT768FD
Cortical Disc Cervical Spacer, 7mm	AT769FD
Cortical Disc Cervical Spacer, 8mm	AT770FD
Cortical Disc Cervical Spacer, 9mm	AT771FD



Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40 $^{\circ}\text{C}$ or cooler.



Description

Product Code

Cortical Cervical Button 12x5 mm	AT756FD
Cortical Cervical Button 12x6 mm	AT757FD
Cortical Cervical Button 12x7 mm	AT758FD
Cortical Cervical Button 12x8 mm	AT759FD
Cortical Cervical Button 12x9 mm	AT760FD



Store freeze dried sterile bone grafts at ambient temperature. Store fresh frozen grafts at -40°C or cooler. FD: Freeze Dried

FF: Fresh Frozen

