



PROSTHETIC DESIGN®



IMPROVING LIVES THROUGH (INNOVATION)

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About Us

At Prosthetic Design, Inc., our mission is to improve lives through innovation by designing and manufacturing cutting-edge prosthetic components that enhance mobility, comfort, and quality of life for individuals with limb loss.

Since 1991, our commitment to innovation, technology, and customer service has driven us to set new industry standards. From modular carbon fiber Flex-Con components to elevated vacuum locking technology, we continue to redefine what's possible in lower-limb prosthetics.

Through close collaboration with our sister company, Dayton Artificial Limb, we bridge the gap between clinical care and engineering, ensuring that every product we develop is inspired by real patient needs and tested for real-world effectiveness. By leveraging advanced materials, digital scanning, and proprietary 3D printing techniques, we create high-tech, time-saving solutions that empower prosthetic professionals worldwide.

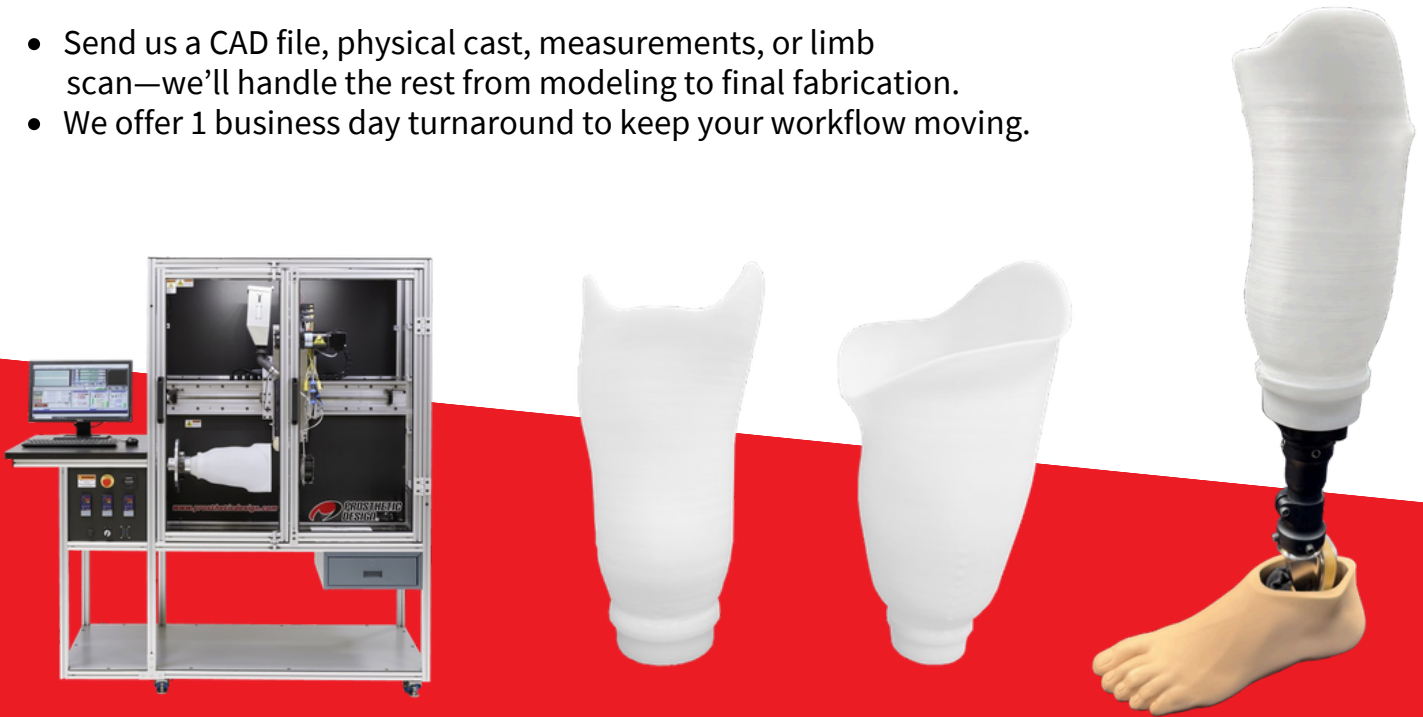
At Prosthetic Design, Inc., we don't just build prosthetic components— we engineer solutions that restore independence and improve lives.



Central Fabrication

We fabricate both transtibial and transfemoral sockets. Our definitive 3D printed sockets are ready for long-term use, made with durable, polypropylene polymers. The sockets supports vacuum, suction, lanyard strap, and pin suspension systems, and ensures a smooth, reliable fabrication experience every time.

- Send us a CAD file, physical cast, measurements, or limb scan—we'll handle the rest from modeling to final fabrication.
- We offer 1 business day turnaround to keep your workflow moving.



Part Number — Description
REVO-BK4-M - Medium Transtibial Definitive Socket
REVO-BK4-MLP - Medium Low Profile Transtibial Definitive Socket
REVO-BK4-L - Large Transtibial Definitive Socket
REVO-BK4-LLP - Large Low Profile Transtibial Definitive Socket
REVO-AK4-M - Medium Transfemoral Definitive Socket
REVO-AK4-MLP - Medium Low Profile Transfemoral Definitive Socket
REVO-AK4-L - Large Transfemoral Definitive Socket
REVO-AK4-LLP - Large Low Profile Transfemoral Definitive Socket
REVO-FAB-LAM - Lamination on top of a definitive socket
REVO-FAB-MOD- Creating/Modifying CAD Of A Socket
REVO-FAB-SKTPP - Finishing A Socket After Printing/Post Processing

LINERS

OFF THE SHELF LINERS AND CUSTOM LINERS

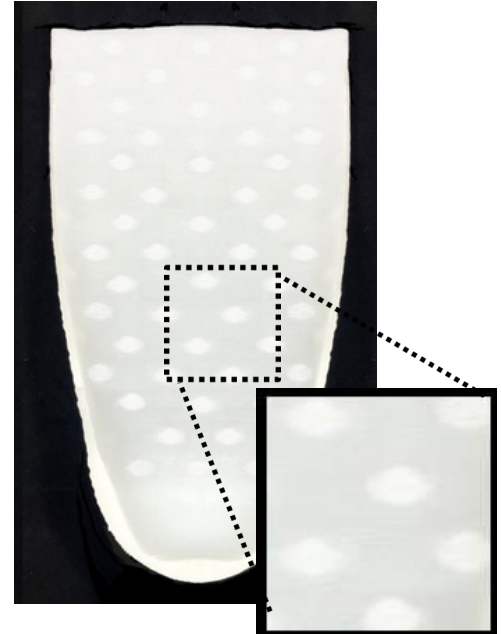
The SURFAC3D Custom Silicone Liner is the first liner to provide surface texture.

BENEFITS

- Improved perspiration management
- Increased grip

FEATURES

- Locking or Cushion options
- Works with volume management, suction, and locking suspension systems
- Full length matrix
- Dual Durometer



Cylindrical	Tapered
23 cm	23 cm
25 cm	25 cm
27 cm	27 cm
29 cm	29 cm
31 cm	31 cm
33 cm	33 cm
35 cm	35 cm
37 cm	37 cm
39 cm	39 cm
42 cm	42 cm
50 cm	45 cm
60 cm	60 cm

Custom Tapered
Full Custom

Textured - Ridges

Extra Textured - Ridges plus dimple mounds

Hybrid - Lower half extra textured; upper half textured

Custom liners require a suggested 5-business-day turnaround.
L codes apply only to custom orders. Use L5681 for the initial liner and L5673 for any additional liners.

Clinically Inspired | Original Concepts | Practical Elegance | Patient Proven

Squirt Shape 3D

Since 2005, the **PDI Squirt Shape 3D Printer** has been a game-changer in additive manufacturing, specializing in lower limb prosthetics. Designed for precision and efficiency, it seamlessly produces both large and small prosthetic sockets, ensuring a perfect fit for every patient. The PDI Squirt Shape creates prosthetic sockets that are structurally sound, durable, and lightweight. By incorporating PDI's proprietary printing material, these sockets are resistant to harsh chemicals and environmental conditions, providing long-lasting performance. Proven in clinical settings, the Dayton Artificial Limb Clinic (DALC) began fitting patients with PDI-printed sockets in 2009. The results were clear—patients experienced superior comfort and fit.

By 2013, DALC transitioned to exclusively using PDI-printed sockets, reinforcing their trust in this advanced manufacturing method. The PDI Squirt Shape 3D Printer is the future of prosthetic fabrication, combining speed, strength, and precision to enhance mobility and improve lives.

Physical Attributes

Printer Size: 1.9 meters in Length, 0.76 meters Wide, and 1.98 meters Tall

Printing

Print Technology: Fused Deposition

Print Volume Dimensions:

Radius - 165mm Length - 600mm

Print Times (average):

Transtibial - 1.5 hours

Transfemoral - 2.5 hours

Connectivity: USB Flash Drive

Materials

Supported Materials: PDI Copolymer PP

Material Type: Pellet

Software

Printer Controller: Mach3

Slicing Software: Limb Revolution

Supported File Types: .aop, .stl, .tap



EVLS - Dual Suspension

EVLS: Elevated Vacuum Locking System

The EVLS is a dual-connection shuttle lock designed for use in elevated vacuum prosthetic systems. Ideal for transfemoral and transtibial sockets, it combines plunger pin security with vacuum-assisted suspension for added confidence and stability.



Key Features

- The housing is made from impact-resistant Delrin for enhanced durability.
- Guide grooves on the lock make connection quick and easy.
- A built-in safety spring ensures the leg remains secure even if the push button breaks.
- The system supports both vacuum/suction and pin suspension for versatile use.

Parts Included

EV-X-PSH
EV-MAN
(2) X-XSPP
(4) M6X35
EV-TUBE

Technical Data

Size: 64mm
Load Rating: K1, K2 & K3 < 150kg (330), K4 < 120kg
(264lbs)
Weight: EV-X-PSH - 130g (4.6oz)

Note: The EVLS is compatible with all Prosthetic Design, Inc. tooling, including the CFP65-25, FET-KIT and the SSFT.



EV Components

EV-MAN: Manifold with Air Fitting

The EV-MAN is a compact manifold unit designed to route air from the socket to external vacuum pumps. It ensures clean, reliable airflow for both mechanical and electronic vacuum systems.

Technical Data

Weight: 50g (1.8pz), height 0.25"
Fitting for 1/8" ID tubing



EV-MAN-VLV: Manifold with Air Fitting and Valve

The EV-MAN-VLV provides a combination of manifold and valve/release for transferring air bi-directionally through vacuum locks or plates and has the capability to interface with mechanical and electric pumps.

Technical Data

Weight: 70g (2.5pz), height 0.25"
Fitting for 1/8" ID tubing



UAP4: Universal Adapter Plate

The UAP4 is a versatile attachment plate used to connect the socket to a lower limb prosthesis. Designed for both vacuum and non-vacuum applications, it's compatible with transfemoral and transtibial configurations.

Technical Data

Size: 64mm
Load rating: K1, K2, & K3 < 160Kg (350Lbs), K4 < 150Kg (330 Lbs)
Weight: 72g (2.20z)



Push Locks



P-PSH: PLUS: Pro Push Lock

The Pro Push Lock is a dependable push-release shuttle lock that simplifies liner to device connection. Built for routine use, it offers smooth, secure engagement in lower limb prosthetic systems.

Parts Included

- (2) X-SPP
- (4) M6X25 bolts

Technical Data

Weight: 133g (4.7oz)
Load Rating: K1-K4 < 136kg (300lbs)

X-PSH-PLUS—Xtreme Push Lock

The Xtreme Push Lock delivers key usability upgrades to the PDI push-lock family. A guide groove simplifies donning, an extended pin channel reduces motion for a more secure connection, and redesigned attachment areas resist binding buildup.

Parts Included

- (2) X-SPP
- (4) M6X25
- (4) M6X20TLbolts

Technical Data

Weight: 110g (3.9oz)
Load Rating: K1, K2 & K3 < 150kg (330lbs), K4 < 120kg (264lbs)



X-TI-PLUS: Xtreme Titanium-Reinforced Lock

The Xtreme Titanium Push Lock enhances the proven push-release design with added titanium reinforcement. It's built for high-strength applications and reliable long-term use in demanding environments.

Parts Included

- (2) X-SPP
- (4) M6X25
- (4) M6X20TLbolts

Technical Data

Weight: 112g (3.9oz)
Load Rating: K1, K2 & K3 < 180kg, (400lbs),
K4 < 150kg (330lbs)



LOCORD: Locking Lanyard

The LOCORD™ Locking Lanyard is a dual-purpose tool that aids in donning and securely suspending a prosthetic limb. Its durable nylon cord and spring-loaded release mechanism offer a streamlined user experience. Lanyard system

Parts Included

- (2) X-SPP
- (4) M6X25
- (4) M6X20TL bolts

Technical Data

Weight: 110g (3.9oz)
Load Rating: K1, K2 & K3 < 150kg (330lbs), K4 < 120kg (264lbs)



Lock Accessories

X-TI-SM: Xtreme Small Titanium-Reinforced Lock

The Xtreme Small Titanium Lock is a compact push-release shuttle lock with a 55mm diameter. It combines space-saving design with high-strength performance for smaller sockets.

Parts Included
(2) X-SPP (4)
M6X25TL bolts

Technical Data
Weight: 109g (3.9oz) Load Rating: K1, K2 & K3 < 120kg
(264lbs), K4 < 100kg (220lbs)



Plunger Pins

PDI Plunger Pins are precision-crafted from hardened, chrome-flashed steel. Engineered for longevity, they provide audible feedback for reliable engagement with all PDI Locks.

Key Features—hardened steel, audible indication of connection

Sizes—X-XSPP 3/4" Extra Short Plunger Pin, X-SPP 1" Short Plunger Pin, X-MPP 1-3/4" Medium Plunger Pin, X-LPP 2-1/2" Long Plunger Pin



AD4-SM-TL: Adapter Small Lock to 4-Hole European Pattern

The AD4-TI-SM adapter plate interfaces the X-TI-SM lock with standard European connectors. Lightweight and anodized, it simplifies compatibility while allowing plunger pin clearance.

Technical Data
Added Height: 6.5mm
Weight: 40g
Load rating 100kg



Alternate Push Buttons

Large Push Button: Increasing the button head to 1-3/8 diameter. Easing the depression force need to release the plunger pin.

Long Push Button: Lengthening the push button 2 in. Allowing the user to reach the push button without hassle

Short Push Button: Shortening the push button a 1/4". Reducing chances of catching on or running into anything



Flexcons

PDI **FLEXCON**'s are a modular alternative to labor-intensive laminations for patients with flexion contractures. Made of lightweight carbon fiber, the FLEXCON provides angular compensation for hip flexion contractures and the proper offset to achieve TKA alignment while absorbing shock, conserving energy, and normalizing gait. The FLEXCON is labor-saving, 3/8" thick, hosts the standard European 4-hole pattern, and connects to most popular knee-shin systems.



FC15-TD8CFI—15° Carbon Fiber FLEXCON

Technical Data

Weight: 90g (3.1oz)

Offset: 5.25cm (2.07")

Load Rating: K1, K2 & K3 < 120kg (264lbs),
K4 < 100kg (220lbs)

FC15-TD10CFI—15° Carbon Fiber FLEXCON

Technical Data

Weight: 94g (3.3oz)

Offset: 6.58cm (2.59")

Load Rating: K1, K2 & K3 < 120kg (264lbs),
K4 < 100kg (220lbs)



FC15-TD12CFI—15° Carbon Fiber FLEXCON

Technical Data

Weight: 100g (3.4oz)

Offset: 7.90cm (3.11")

Load Rating: K1, K2 & K3 < 120kg (264lbs),
K4 < 100kg (220lbs)



Offset Plates

PDI Carbon Fiber Offset Plates provide clinicians with a lightweight, durable solution for achieving proper component alignment in lower limb prosthetic systems. Each plate displaces a bottom-loaded connection component away from the socket, creating the necessary clearance while maintaining compatibility with the standard European 4-hole pattern. A central opening allows for plunger pin protrusion, ensuring seamless integration with shuttle lock systems.

OP1/2-4C4TCF—1/2" CARBON FIBER OFFSET PLATE

Technical Data

Offset: 1/2"

Added height: 1/4"

Weight: 36g

Load Rating: 147Kg (325lbs)



OP3/4-4C4TCF—3/4" CARBON FIBER OFFSET PLATE

Technical Data

Offset: 3/4"

Added height: 1/4"

Weight: 40g

Load Rating: 147Kg (325lbs)



OP-FULLCF-LP—1.41" CARBON FIBER OFFSET PLATE

Technical Data

Offset: 1/2"

Added height: 1/4"

Weight: 36g

Load Rating: 120Kg (265lbs)



Pyramid Components

STEALTH360 - Rotating Pyramid

The STEALTH360 is a titanium pyramid adapter with full 360° rotation and a hard anodized aluminum base. It locks securely with set screws and supports seamless alignment in lower limb systems.

Technical Data: Added Height: 7.53mm (0.3"), Weight: 59g (2.1oz), Load Rating: K1, K2 < 120kg (265lbs), K3, K4 < 100kg (220lbs)



PYR-SL-R-TI: Sliding & Rotating Pyramid (Titanium)

The PYR-SL-R-TI adds 360° rotation to a 12.7mm (1/2") off-center sliding pyramid in a low-profile design. Titanium construction for strength and 3-degree radial serrations ensures precise alignment control. The slide and rotation is locked using the 4 adjustment set screws of the interfacing component.

Technical Data: Added Height: 16.25mm (0.64"), Weight: 135g (5oz), Load Rating: K1-K4 < 120kg (265lbs)

PYR-SL-TI: Sliding Pyramid (Titanium)

The PYR-SL-TI enables 12.7mm of off-center slide for fine AP or ML adjustments. Manufactured from titanium, it offers a slim profile and locks easily via standard 4 set screw mounting.

Technical Data: Added Height: 13.48mm (0.53"), Weight: 123g (4.34oz), Load Rating: K1, K2 < 120kg (265lbs), K3, K4 < 100kg (220lbs)



PR-SL-R-TI: Sliding & Rotating Pyramid Receiver (Titanium)

Combining 360° rotation and a 12.7mm (1/2") off-center slide, the PR-SL-R-TI pyramid receiver supports fine alignment adjustments. Titanium construction and 3-degree radial serrations allow secure, repeatable tuning that locking when the 4 set screws are engaged.

Technical Data: Added Height: 30.5mm (1.3"), Weight: 171g (6.10oz), Load Rating: K1-K4 < 120kg (265lbs)



Spacer Plates

SPA: Spacer Plates

Prosthetic Design's Spacer Plates provide the clinician with a modular solution to increase internal distal pressure, decrease internal length of socket, or extend prosthesis total length. Spacer plates are compatible with standard European 4-Hole pattern and are constructed from high-strength, lightweight Delrin material. PDI Spacer Plates offer a simple way to adjust internal socket dimensions or overall prosthesis length. Made from lightweight, durable Delrin, they fit any system using the European 4-hole pattern.

SPA3: SPACER PLATE

Technical Data: weight 10g, load rating K1, K2, K3 < 150kg K4 < 120kg



SPA5: SPACER PLATE

Technical Data: weight 20g, Load rating K1, K2, K3 < 150kg K4 < 120kg

SPA10: SPACER PLATE

Vacuum Compatible

Technical Data: weight 35g, Load rating K1, K2, K3 < 150kg, K4 < 120kg



SPA20: SPACER PLATE

Technical Data: weight 5g, Load rating K1, K2, K3 < 150kg K4 < 120kg

Tooling



CFP65-25—Conventional Fabrication Plate

This reusable unit is designed for creating a void in the socket for locks in thermoplastic applications. 65mm diameter plate has a 2° taper for easy removal.

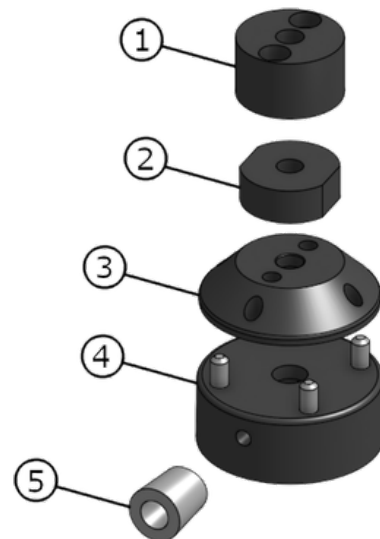
(4) Cone point set screws allow the user to mark the 4-hole pattern during thermoforming. A thumbscrew allows for easy tool removal after thermoforming.

Available in CFP-57-25 for small locks.

DLP-KIT—Delrin Laminating Plate

The reusable DLP creates a void in your laminated socket for Xtreme® and Pro Locks while establishing a standard 4-hole pattern, a through-hole for plunger pin insertion, and a parallel distal wall thickness. The DLP has a new push button hole fixture designed to create a relief for the lock push button. This relief can make motorcycling, bicycling, and horseback riding much safer. Use of the DLP-KIT will prevent lock binding and increase the life of your lock. DLP-SM-KIT is available for small locks.

1. DLP-PT, Parting Tool
2. DLP-CN, Compression Nut
3. DLP-OF, Outer Former
4. DLP-IF, Inner Former
5. DLP-PBHF, Push Button Hole Former



Tooling

FELP-KIT— Foam Extraction Laminating Plate

The FELP-KIT works with Prosthetic Design's Delrin Laminating Plate (DLP-KIT) and the Foam Extraction Tooling (FET-KIT) to establish a 4-hole pattern in laminated socket (foam models only), as well as creating a parallel inner and outer distal surface and a through hole for plunger pin insertion. The FELP-KIT makes extracting the foam from the laminated socket easier and cleaner when incorporated in the FET-KIT (as the instructions below will illustrate). The DLP-KIT and the FET-KIT are required tooling when using the FELP-KIT.



SSFT—Socket Surface Fabrication Tooling

The SSFT was designed to ensure consistent and efficient socket preparation for Prosthetic Design locks. This kit is essential for creating a 4-hole pattern and perfectly parallel distal socket surfaces. Making the distal surfaces parallel will prevent lock binding conditions. The SSFT also creates the medial hole to accommodate the lock push button. You can be sure that the medial hole is the correct height and centered for anterior/posterior.



SILI—Silicone Release Agent

Release agent for thermoplastics on foam models.

Each container is 64fl oz (2L)



EV-ET—Elevated Vacuum Lock Extraction Tool

EV-ET is used to extract Elevated Vacuum lock from the socket.

Tooling

FET-KIT—Foam Extraction Tools

This tooling allows for the removal of foam from within thermoplastic sockets cleanly and quickly. Eliminates distortion of hot plastic with compressed air or skin irritation from grinding.

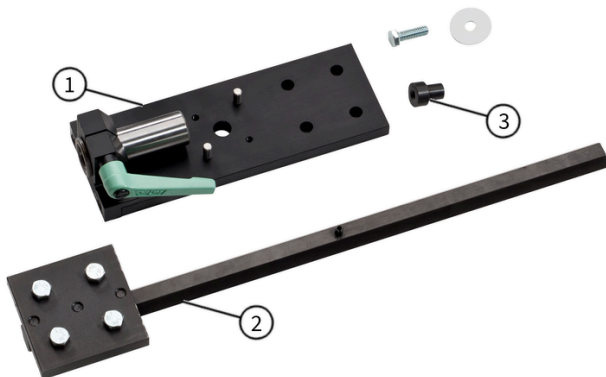
1. FET-1/4DB, 1/4" Drill Bit 18" Long
2. FET-DBLT, Drive Bolt
3. FET-DG, 17/16" Drill Guide
4. FET-DB33/64, 33/64" Drill Bit
5. FET-PP, Push Plate
6. FET-SP65, 65mm Separating Plate
7. FET-SP1, SP Threaded Insert
8. FET-1/4DG, 1/4" Drill Guide
9. FET-1716DB, 17/16" Drill Bit



SHF-KIT - Side Hole Fixture Tools

This tooling provides a consistent, repeatable method for drilling side holes in prosthetic sockets. Works for both adult and pediatric sockets, while ensuring accurate placement and alignment every time, reducing variability during fabrication.

1. SHF, Side Hole Forming Tool
2. SHF-MP, Side Hole Fixture Mounting Plate
3. SHF-SRN, Socket Retention Nut



Tooling & Accessories

Liner Racks



Vibra-Tite



Eclipse Sleeves



Diagnostic Fitting Light



Cutting Bit



Hand Vacuum Pump



Milwaukee Angle Grinder



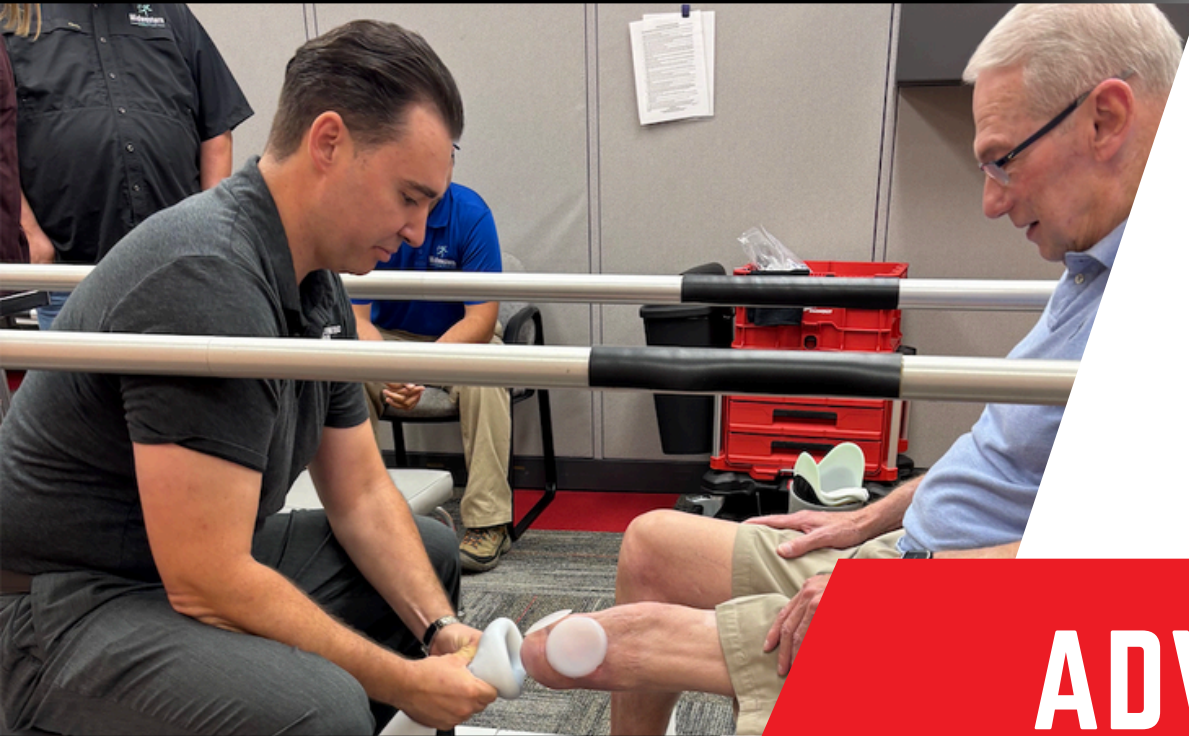
Casting Kit



Pylon Holder



Continuing Education



**Earn Accredited
CEUs**

**ADVANCE
YOUR SKILLS**

HANDS-ON TRAINING IN DUAL SUSPENSION & SQUIRT SHAPE TECHNOLOGY

We're pleased to offer our next accredited training course on the Dual Suspension System and Squirt Shape Technology. This interactive, hands-on program allows you to work directly with patients while expanding your clinical expertise.

Participants can earn 3.5 CEUs when the course is hosted at your clinic, or 5.5 CEUs when attending at our facility. All credits are approved through the American Board for Certification in Orthotics, Prosthetics & Pedorthics (ABCOP), ensuring your time and effort contribute toward professional development requirements.

Quick Links

Use the QR codes below to jump straight to the sections you need. Just scan with your phone or tablet's camera, and you'll be taken directly to the corresponding page for fast, easy access.



All Products



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Squirt Shape
3D Printer



Push Locks



ELVS



Pyramid
Components



Attachment
Components



Plunger Pins



Tooling

SQUIRT SHAPE

