

Vector 1 and Partial Digital Amputation

The Vector 1 Hand Rehabilitation Device offers specific clinical advantages to patients who have experienced partial digital phalanx amputations.

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Hand CPM set-ups, viewed as impossible or at best challenging with other machines in the marketplace, are now accomplished with the Vector 1's unique finger wires and finger plates. The Vector 1's finger components can be adapted to address specific clinical presentations of the post-traumatized hand whether from a crush or torsion injury. Additionally, the elongated glove system may be modified longitudinally to maximize fit in residual digits.



Photo 1

As demonstrated in the photo, the finger plate is positioned more proximally to address the digit with remaining 1st phalanx. (Photo 1, digit #3) This unique set up is also accomplished by bending the malleable finger spring to the desired arc of motion.

The elongated glove system is then modified by cutting longitudinally to the most proximal aspect by the elbow crease on both the radial and ulnar sides of the involved digit. This technique separates the finger sock from the other digits and allows the clinician or vendor to custom fit the residual digit from a length perspective.

Clinically this offers a tremendous advantage when multiple digits have experienced different levels of amputation. The glove finger socks may then be cut with tabs (Photo 1, digits #4 & #5), 1/2 moon (Photo 1, digit #3), or Z-plasty to address edema concerns.

Lantz Medical's Vector 1 hand rehabilitation device continues to meet the challenging scenarios presented to the treating hand clinician.

Your representative looks forward to assisting you and your patient with these unique set-up techniques.



Place business card here

The Vector 1 allows for positioning of finger plates for different clinical indications. In this photo, the Vector 1 is addressing PIP range of motion.



Photo 2

Vector₁

Innovation In Continuous Passive Motion

Lantz
Medical

Positive outcomes, hand delivered

Indications

For the treatment and prevention of intra-articular adhesions, extra-articular contractures, and excessive post-operative swelling. Vector1 has been used for, but is not limited to the following diagnoses:

- MP arthroplasty
- Tenolysis
- Escharotomy
- Fasciotomy
- Skin Graft
- Dupuytren's contracture
- Complex regional pain syndrome
- ORIF
- Post external fixation
- Edema
- Burn
- Degloving
- Partial digital amputation
- Volar plate repair
- Flexor tendon repair
- Stiff hand syndrome
- Extensor tendon repair
- Tendon transfer

Key Features and Benefits

- -21° hyperextension to 340° flexion (full composite fist)
- 9 gradations of speed: low-end torque
- Up to 45 minutes, 25 seconds of pause at extension and flexion limits which allows for a controlled stretch and rest period
- Intrinsic plus/safe hand position accomplished by first phalanx positioning of finger plates
- Intuitive and convenient digital display of angle, ROM settings, speed and force
- Simple hand control functions
- Telescoping forearm splint for increased base of support
- Malleable splint for increasing surface area contact circumferentially

Clinical Advantages

- Strongest motor on the market to prevent rebound of unit during prescribed ROM
- Dynamic spring leaf caterpillars: Malleable to accommodate ROM considerations
- Glove option to ease donning and doffing of unit-facilitates increased compliance
- Programmable force, ROM, and speed to accommodate vast clinical considerations for optimal outcome
- Expand feature for patient warm-up
- Pause feature increases low load prolonged stretch to enhance tissue remodeling

