

# Vector<sub>1</sub>

Innovation In Continuous Passive Motion

**Lantz**  
Medical

*Positive outcomes, hand delivered*



Exclusive Distributor: Joints In Motion Medical, LLC  
262-547-4276 toll-free: 866-546-4276

## Indications

For the treatment and prevention of intra-articular adhesions, extra-articular contractures, and excessive post-operative swelling. Vector<sub>1</sub> 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



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# Vector 1 and Tenolysis

The Vector 1 Hand Rehabilitation Device offers specific clinical advantages to patients undergoing the secondary procedure of Tenolysis.

When considering successful flexor tendon gliding it is imperative for the flexor digitorum profundus (FDP) to differentially glide from the flexor digitorum superficialis (FDS). Previous challenges encountered when utilizing hand CPM devices post-operatively included; inability to accomplish a full composite fist due to inadequate ROM and / or Force.

**The Vector 1's unique design overcomes these challenges by:**

- Offering the strongest hand CPM motor in the industry.  
The device will not reverse prior to reaching the prescribed end ROM due to inadequate force. Coban-wrapped digits are no longer a barrier to motion when being used post-operatively to exanguinate edema from the hand.
- Providing greater ROM settings: -21 degrees of hyperextension to 340 degrees of flexion in order to overcome immediate post-operative challenges of MP axis of motion malalignment secondary to bulky post-operative dressings. True anatomical full digit extension and composite flexion is now attainable.



Fibrotic tissue excised from hand

**The benefits of the Vector 1 include but are not limited to:**

- Increased passive tendon/joint excursion time outside of the therapy clinic creating a direct mechanical effect which inhibits adhesion formation.
- Increased pumping of synovial fluids allowing general nutrition to improve.
- Organized collagen matrix due to longer doses of motion.
- Gate control pain management mechanism by over-riding pain transmissions due to constant proprioceptive feedback.

The Vector 1 Hand Rehabilitation Device has demonstrated positive patient outcomes over previous hand CPM devices, thus allowing the hand clinician to focus on AROM, blocking and desensitization exercises.

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Your representative looks forward to assisting with patient set-up when you consider utilization of the Vector 1 Hand Rehabilitation Device.

