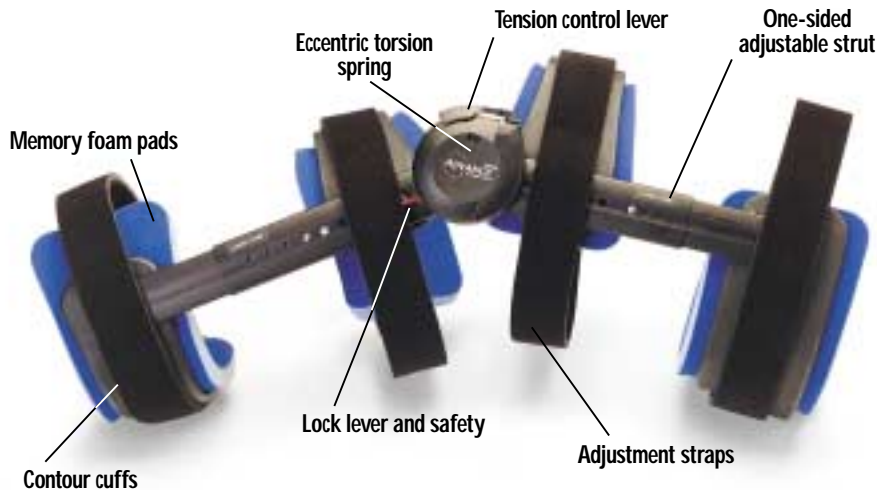


# The Advantages of the Advance Dynamic ROM Design

The innovative design of the Advance Dynamic ROM orthosis provides several key features that make it **superior** to other commercial dynamic orthoses.



## Superior, Consistent Performance

- Patented\* eccentric torsion spring delivers gentle and consistent tension across the full deflection range
- Maintains tension with little or no end-range drop off, which limits frequent adjustments

## Easy to Fit

- Bendable contour cuffs and easy-to-adjust struts make custom fitting simple and precise
- Adjustments for tension and length are integrated into the device, eliminating the need for adjustment tools
- Innovative lock/lock lever safety feature provides a safe and convenient method to lock out tension during fitting and removal

## Designed for Patient Comfort

- Comfortable cuffs with soft, repositionable “memory foam” pads adapt to the patient’s limb contour and help reduce pressure points
- Increased comfort level may enhance patient compliance

\*U.S. Patent No. 5,399,154

For more information on the complete line of Advance Dynamic ROM® orthoses, or to schedule an in-service, contact your local Empi representative or Empi Clinic Services at **1-800-328-2536**.

Discover a New Movement in Therapeutic Orthoses.

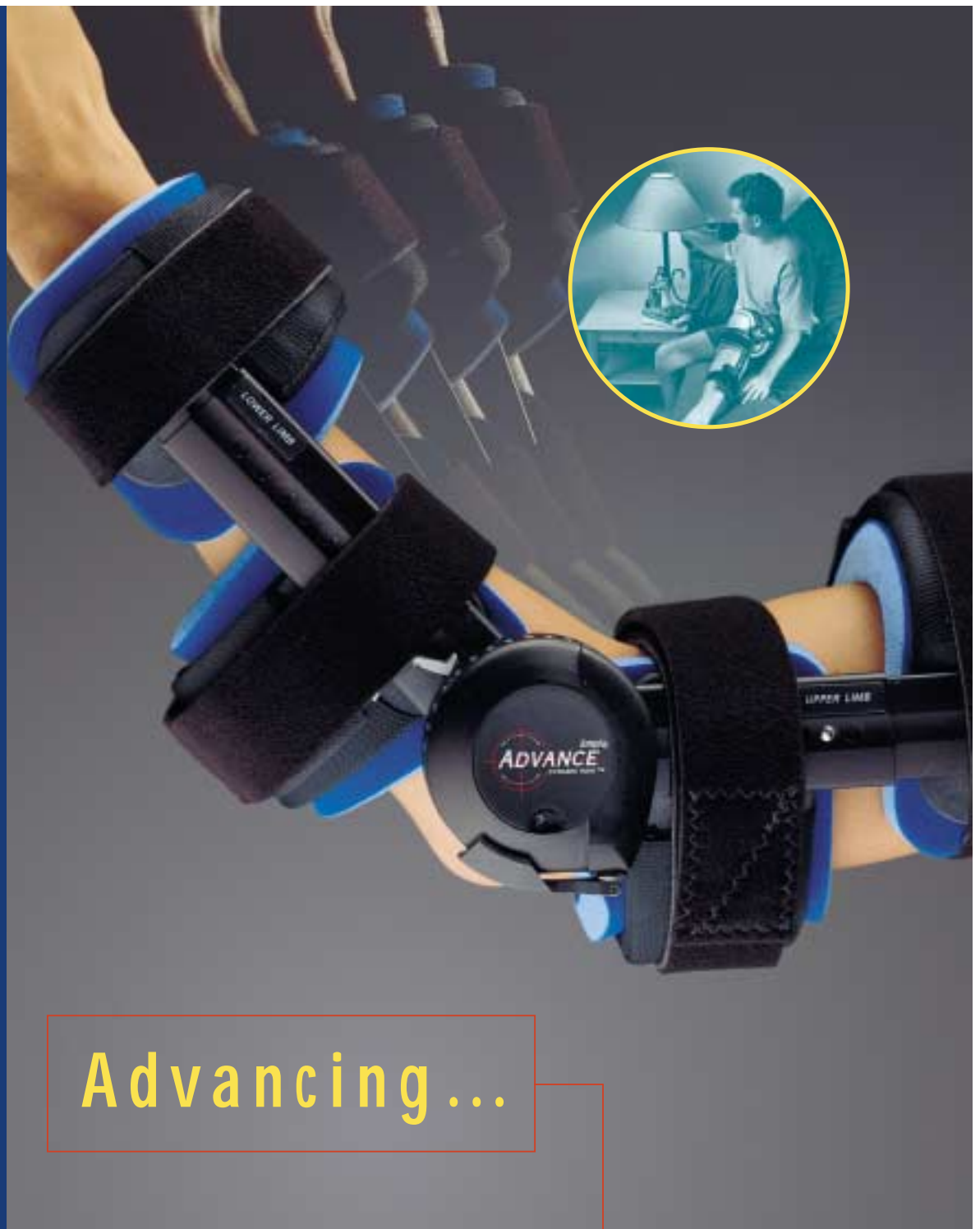


Empi  
599 Cardigan Road  
St. Paul, Minnesota 55126-4099 USA  
651-415-9000; 1-800-328-2536  
www.empi.com  
802071 Rev. C; © 1997, 2001 Empi 9/01

For complete instructions for use, indications, contraindications, precautions and warnings, see Instruction Manual.

### References

1. Flowers, KR, BS, PT, and Michlovitz, SL, MS, PT. Assessment and Management of Loss of Motion in Orthopedic Dysfunction. *Post Graduate Advances in Physical Therapy*, 1988. 1-11.
2. McClure, PW, et al. The Use of Splints In The Treatment of Joint Stiffness: Biological Rationale And An Algorithm For Making Clinical Decisions. *Physical Therapy*, 1994. 74:12, 18-24.
3. Sapega, AA, MD, et al. Biophysical Factors In Range-Of-Motion Exercise, *The Physician and Sportsmedicine*. 1981. 9:12, 57-65.



Advancing...

Patients with Range of Motion Challenges.



Discover a New  
Movement in  
Therapeutic  
Orthoses



# A.M.

## 'Round the Clock Therapy for ROM Gains

A growing body of literature supports what many physicians and therapists already know—that applying gentle, low-load stress over a prolonged period of time may result in long-term tissue remodeling. Applying that force to shortened connective tissue at end-range promotes non-traumatic tissue remodeling into a lengthened position and leads to ROM gains.

### Which Patients Should You Consider for Dynamic Splinting?

Adjunctive therapy with dynamic splinting can be an effective at-home therapy for patients struggling to regain complete range of motion. In general, this therapy may be applied to patients with limited range of motion resulting from connective tissue changes secondary to orthopedic or neurological conditions, including:

- Post-surgery
- Fractures
- CVA
- Burns
- Cerebral Palsy
- Below Knee Amputation



Knee



Elbow



Wrist

## How Advance Dynamic ROM<sup>®</sup> Works

Advance Dynamic ROM<sup>®</sup> orthoses are designed to help you achieve desired clinical outcomes by utilizing an adjunctive, cost-effective treatment outside the clinic setting — allowing you to take advantage of valuable “non-clinic” hours. The biological principle is that periarticular connective tissue (PCT) will remodel in response to the type and amount of physical stress it receives. That’s the major advantage of dynamic orthoses in restoring ROM. Treating with dynamic orthoses:

- Addresses the plastic component of connective tissue deformation which may facilitate long-term ROM improvement
- Delivers low-load stress at the joint’s end-range over a prolonged period of time, called Total End-Range Time (TERT)<sup>1</sup>
- Applies an opposing force over time to shortened muscle

### Goal: ROM Gains for Your Patients

Combined with other passive and active ROM techniques, Advance Dynamic ROM orthoses help facilitate more long-term range gains for your patients. And, they achieve these gains safely and comfortably.

“High-force, short duration stretching favors recoverable, elastic tissue deformation, whereas low-force, long duration stretching enhances permanent, plastic deformation.”<sup>3</sup>

“The major advantage of using (dynamic) splints to increase ROM is that forces are applied for longer periods of time and, as a result, are more likely to induce a change in tissue length by remodeling.”<sup>2</sup>



Ankle



Amputee



Supination

