

Intellect<sup>®</sup> F-SW<sup>™</sup> USA



A non-invasive treatment,  
proven effective for plantar fasciitis\*

# Intellect® Focus Shockwave

## *Greater Power & Depth for Better Treatment*

In Extracorporeal Shock Wave Therapy (ESWT), a cylindrical wave is generated underwater inside the handpiece. This wave is focused through the reflector and transmitted into the tissue.

Chattanooga's Intellect Focus Shockwave device electromagnetically generates an extracorporeal shock wave, which produces a high pressure peak in a very short amount of time ( $<2\mu\text{s}$ ). Thus, allowing for focused treatment of heel spur at a depth of 1 inch. The shock wave is focused to a small targeted area for treating heel pain due to chronic proximal plantar fasciitis.

## Key features

- LCD touch screen
- Enhanced Energy: 0.01 - 0.55 mJ/mm<sup>2</sup>
- Optimal focal size for an easy and efficient treatment
- 2 stand-off variations
- Therapeutic penetration depth up to 4.7" (12 cm)\*\*
- Broad Frequency Range: 1 - 8 Hz



Enhanced Energy: 0.01 – 0.55 mJ/mm<sup>2</sup>

Pulse Counter

Broad Frequency Range: 1 – 8 Hz

Weight – 50 lbs (22.1 kg)



## Intuitive and easy to use

The Intellect Focus Shockwave® is operated via a touch screen that displays all essential parameters such as frequency, energy and total number of applied shock waves. Previously stored and customised treatment parameters can be easily retrieved, preventing the need for repetitive manual navigation, and ultimately saving time for the user.

*Focused Shock Wave therapy: a non-invasive treatment option for patients with heel pain due to chronic proximal plantar fasciitis\*.*

Gollwitzer, H. et al. Clinically relevant effectiveness of focused Extracorporeal shock wave therapy in the treatment of chronic plantar fasciitis: a randomized, controlled multicenter study. *J Bone Joint Surg Am.* 2015 May 6;97(9):701-8. doi: 10.2106/JBJS.M.01331.

Lou J, Wang S, Liu S, Xing G. Effectiveness of Extracorporeal Shock Wave Therapy Without Local Anesthesia in Patients With Recalcitrant Plantar Fasciitis: A Meta-Analysis of Randomized Controlled Trials. *Am J Phys Med Rehabil.* 2017 Aug;96(8):529-534.





# Physiological Effects of Extracorporeal Shock Waves

The acoustic wave positively influences the body's cell functions and intrinsic healing capabilities. The physiological effects of shock waves on the tissue include enhanced neovascularity, accelerated growth factor release, inhibition of molecules that have a role in inflammation, and stimulation of cellular processes that contribute to tissue healing and regeneration.<sup>1,4</sup>

## *Benefits*

- Short treatment time (a few minutes)
- Precise and targeted application
- Results in a few treatments (1-5)<sup>5,6,7,8</sup>
- Non-invasive technology
- Alternative to medication





*Applicator has different stand-offs to allow customization of the treatment*



*Stand-off I  
(Short)*



*Stand-off II  
(Long)*

## Treatment Guidelines

Patient lies prone on the table. The feet are supported on a rolled towel for optimal relaxation of the muscles. Keep the tendon in a slightly stretched position.

Treat the specific painful spots in the heel or fascia with the handpiece held still at the most tender spots. Small variations in angle during treatment are recommended.

### *Recommended protocol*

Energy level:  $0.25 \text{ mJ/mm}^2$  <sup>5,6</sup>

Frequency: 4 Hz

Stand-off: Short/Long

Three sessions of 2000 impulses in weekly intervals<sup>5,6,7,8</sup>



*"As Evidence Based Practitioners, clinicians will find it hard to ignore the efficacy of ESWT given the quantity and quality of the research evidence. Once incorporated into patient management for Plantar Fasciitis, clinicians will find the results even more compelling."*

Cliff Eaton MSc PGc MSCP SRP  
Clinical Support Specialist - Chattanooga



*"The Chattanooga® Focus Shockwave treats deeper conditions with good results, such as plantar fasciitis\*, with fewer standoffs than other ESWT devices. The focal zone of 30mm ensures that the targeted area is treated with precision and accuracy making it easier to find the painful spots as well as implement in everyday clinical practice."*

Jan Vinding, BSc physiotherapy, Exam OMI  
Clinical Support Specialist - Chattanooga

# Focused Treatment

## Focused Shock Waves (F-SW)<sup>TM</sup>

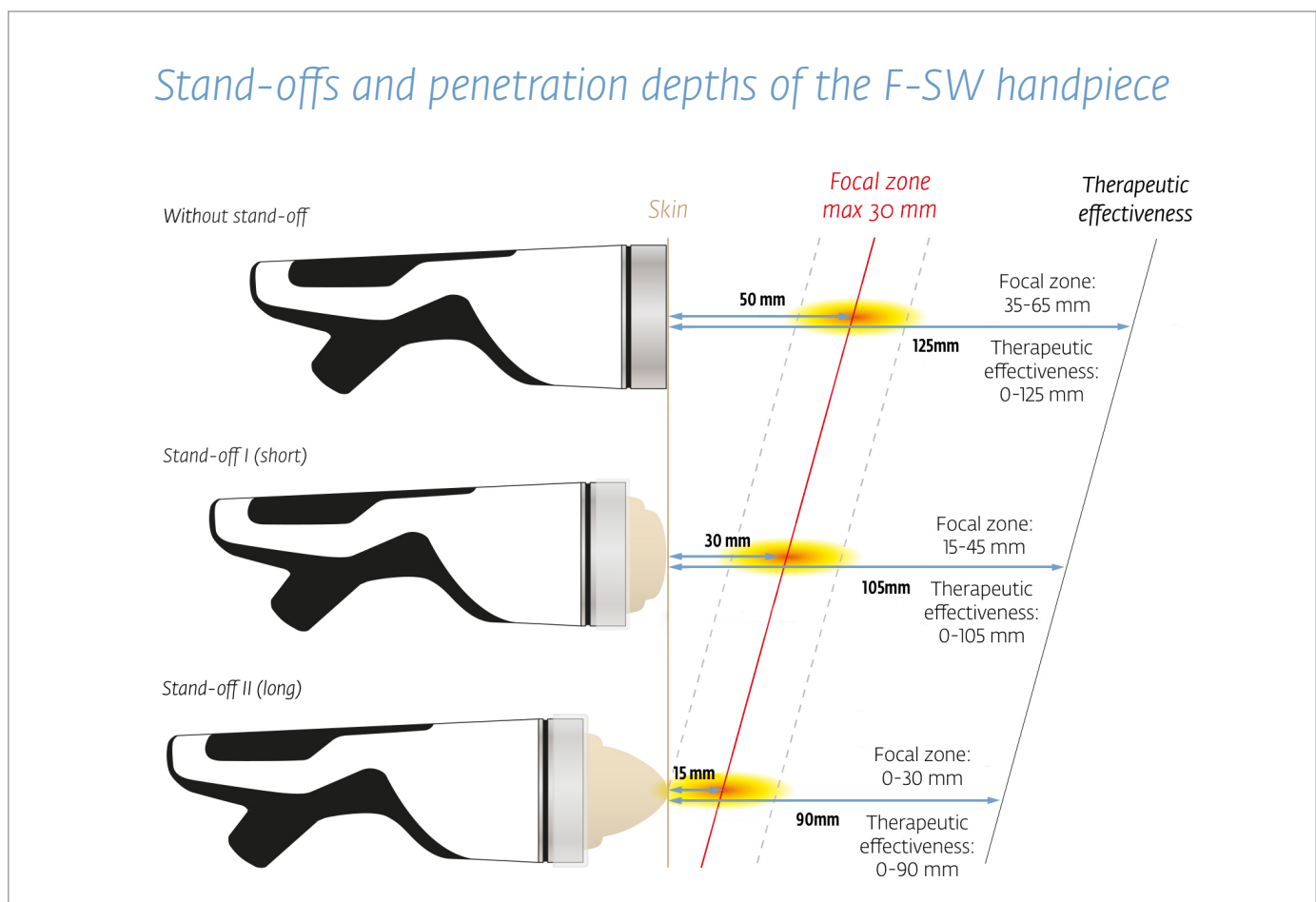
Focused shock waves are preferably used in the treatment of deep target areas. The extracorporeal, focused shock wave permits precise diagnosis and therapy of active latent trigger points associated with Plantar Fasciitis. Focused shock waves can provide therapeutic effectiveness up to the depth of 4.7" (12 cm)\*\*.

## Treatment

The efficiency of this modern ESWT device derives from the powerful and individually selectable energy range. The device's shock wave source is equipped with a cylindrical coil and offers a constantly high energy dynamic in the entire focus zone.

## 2 stand-offs for tailored treatment

The stand-offs provide different treatment options. The shorter the stand-off head, the greater the penetration depth. The longer the head, the smaller penetration depth.







## Intellect® Focus Shockwave

### Ordering Information

Part Number	Product Description
21090-US	Intellect F-SW Set including:
- 19000	- F-SW Handpiece set
- 4600	- F-SW Water bag
- 4700	F-SW, Silicone oil
- 22601	Ultrasound gel 250 ml (8.5 oz)
- 13-00061-US	- Operating manual
- 0.0032.012-US	- Power cord US
- 13-27268	- Handpiece holder

### F-SW™ Accessories

19100	Stand-off I (Short)
19200	Stand-off II (Long)
19300	Closing ring transparent for stand-off I and II
4650	F-SW cart
13-26493	Service kit, one coil minimum 1 million shocks

## Clinical References

- 1 Cristina d'Agostino M, Craig K, Tibalt E, Respizzi S. Shock wave as biological therapeutic tool: From mechanical stimulation to recovery and healing, through mechanotransduction. *Int J Surg.* 2015 Dec;24(Pt B):147-53.
- 2 Furia JP, Rompe JD, Cacchio A, Maffulli N. Shock wave therapy as a treatment of nonunions, avascular necrosis, and delayed healing of stress fractures. *Foot Ankle Clin.* 2010 Dec;15(4):651-62.
- 4 Ciampa AR, de Prati AC, Amelio E, Cavalieri E, Persichini T, Colasanti M, Musci G, Marlinghaus E, Suzuki H, Mariotto S. Nitric oxide mediates anti-inflammatory action of extracorporeal shock waves. *FEBS Lett.* 2005 Dec 19;579(30):6839-45.
- 5 Gollwitzer H, Saxena A, DiDomenico LA, Galli L, Bouché RT, Caminear DS, Fullem B, Vester JC, Horn C, Banke IJ, Burkhart R, Gerdesmeyer L. Clinically relevant effectiveness of focused extracorporeal shock wave therapy in the treatment of chronic plantar fasciitis: a randomized, controlled multicenter study. *J Bone Joint Surg Am.* 2015 May 6;97(9):701-8.
- 6 Gollwitzer H, Diehl P, von Korff A, Rahlfs VW, Gerdesmeyer L. Extracorporeal shock wave therapy for chronic painful heel syndrome: a prospective, double blind, randomized trial assessing the efficacy of a new electromagnetic shock wave device. *J Foot Ankle Surg.* 2007 Sep-Oct;46(5):348-57.
- 7 Ulusoy A, Cerrahoglu L, Orguc S. Magnetic Resonance Imaging and Clinical Outcomes of Laser Therapy, Ultrasound Therapy, and Extracorporeal Shock Wave Therapy for Treatment of Plantar Fasciitis: A Randomized Controlled Trial. *J Foot Ankle Surg.* 2017 Jul - Aug;56(4):762-767.
- 8 Rompe JD, Decking J, Schoellner C, Nafe B. Shock wave application for chronic plantar fasciitis in running athletes. A prospective, randomized, placebo-controlled trial. *Am J Sports Med.* 2003 Mar-Apr;31(2):268-75.



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