

VOLUME ESWT

LINEAR FOCUSED

PIEZO SHOCKWAVE



170 mm²
2476 mm³
15,45 ml

ESWT

Focused Volume ESWT

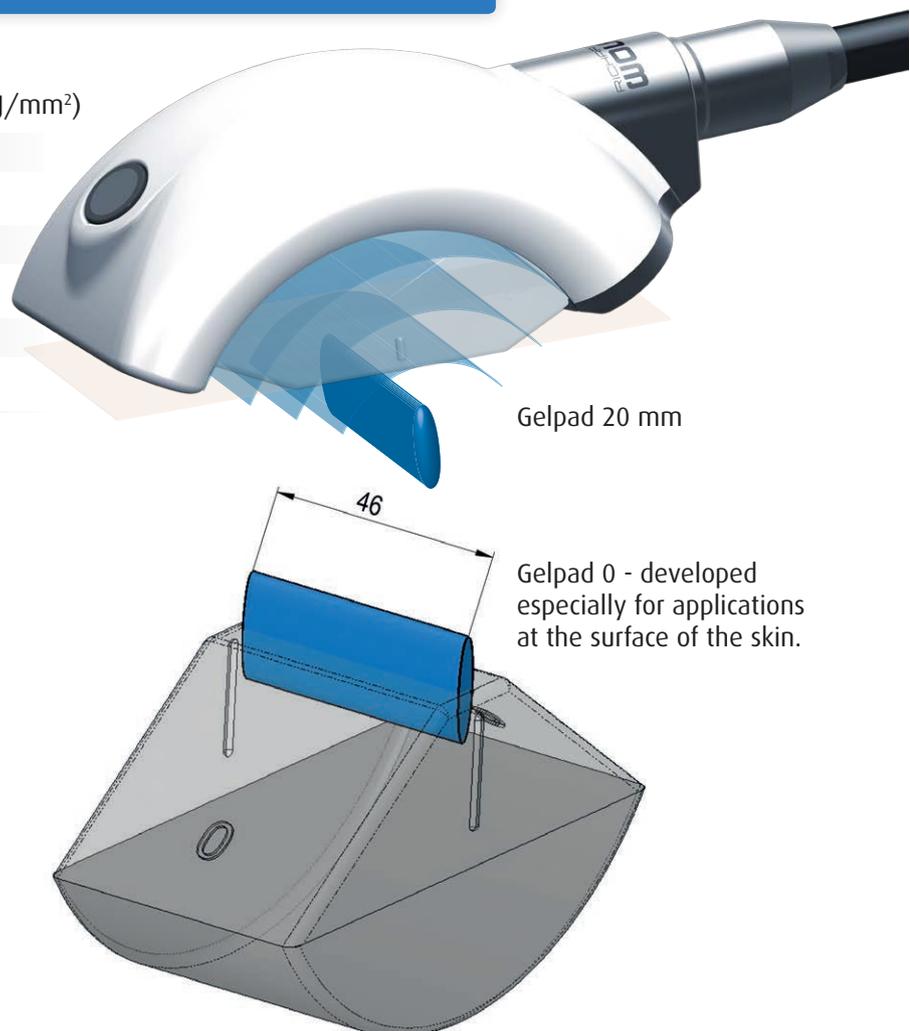
Piezo shockwave with linear shaped therapy focus

Richard Wolf GmbH and ELvation Medical GmbH have developed a new and unique technology: a linear focused piezo shockwave. The aim was to design a more homogeneous, rapid and effective application for focused shockwaves. With a variable penetration depth ranging from 0-30mm (distal) which is adjusted using gel pads, the acoustic field has been optimally adapted to treat larger volumes.

- Greatly enlarged treatment volume, resulting in quicker and more homogeneous application
- Optimally adapted to treat larger anatomical areas (tendon insertions, muscles, wounds ...)
- Simultaneous focused shockwave application to several adjacent areas
- Easier application

Energy flux density: therapy source FBL10x5G2

Level	FBL10x5G2 Energy flux density (mj/mm ²)
0,1 - 1	0,018
2	0.021
3	0.027
4	0.029
5	0.034
6	0.041
7	0.046
8	0.051
9	0.060
10	0.064
11	0.069
12	0.079
13	0.087
14	0.097
15	0.106
16	0.113
17	0.126
18	0.139
19	0.147
20	0.160



Description of the therapy zone

The linear focused therapy source FBL10x5G2 is a double-layer piezoelectric source with a unique geometry and features. The focal zone (intensity 10/-6dB zone) consists of a 3-dimensional area with a volume of 46mm x 20mm x 4mm. In contrast to point focused therapy sources, the maximum energy flux density of 0.160mJ/mm² is not merely achieved at the central axis of the therapy zone but also along in the length (y) of the therapy zone. Based on the figures for the 5MPa zone, the output achieved with this therapy source has not been previously achieved and sets a new standard:

Pulse energy: 15.45mJ – this is 23 times the pulse energy of the standard point focused F10G4 piezoelectric therapy source of the PiezoWave²

Therapy area (x y): 170mm² – this is 19 times the therapy area of the standard point focused F10G4 piezoelectric therapy source of the PiezoWave²

Therapy volume (x y z): 2476 mm³ – compared to the standard point focused F10G4 piezoelectric therapy source of the PiezoWave², this amounts to an increase in the volume of treated area by a factor of 40-50.

(Comparison of pulse energy and therapy source at 11MPa. Treatment volumes are compared based on maximum values)

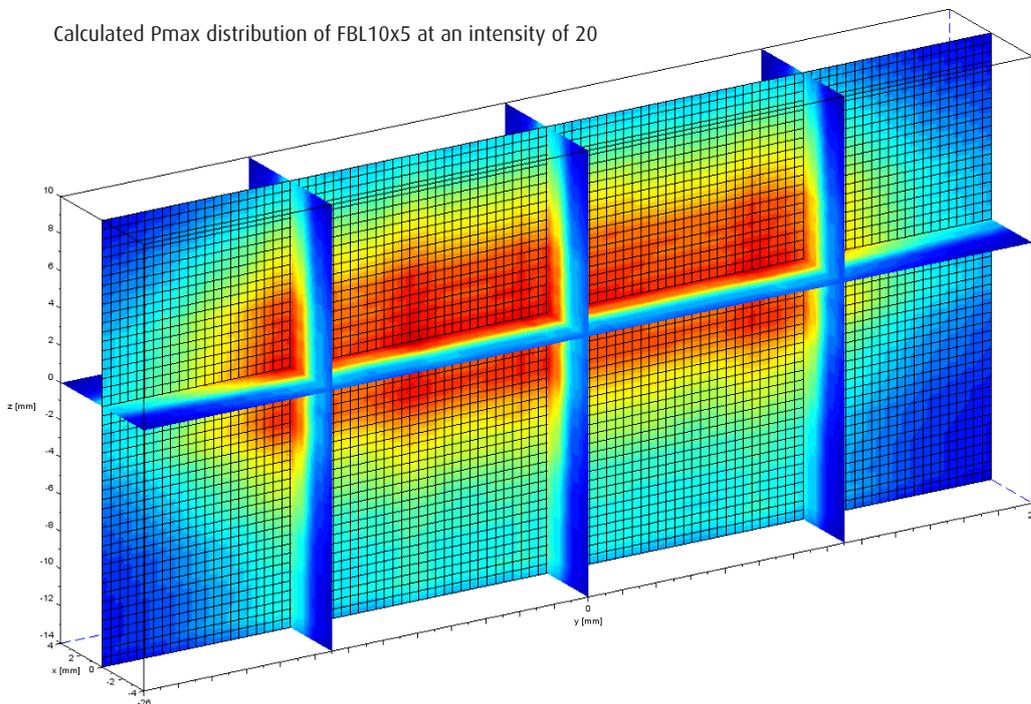
 = Linear focused therapy zone

 = Point focused therapy zone



Example:
epicondylitis

Calculated Pmax distribution of FBL10x5 at an intensity of 20



Typical areas of application:

- Classic ESWT applications, including adjacent tendon insertions and musculature
- Extended tendon insertions
- Localization and treatment of multiple trigger points
- Treatment of plantar fasciitis
- Extended treatment in the direction of the muscle fibers
- Wound treatment
- Erectile dysfunction

etc.



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spirit of excellence

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