

Biomechanical Comfort Certificate - 18.10.24

UMANA

Biomechanical Analysis Health Centre

CERTIFIES

that the technology

FOOTGEL TECHNOLOGY (Gel+PU+Microfiber hybridization)



developed and marketed by

INYERASP S.L.

and integrated into

INSOLES

provides a high improvement of the

COMFORT AND BIOMECHANICAL PERFORMANCE

compared to conventional insoles (PU, EVA, Dr SCHOLL or PORON foam, with or without arch support),
regarding the parameters described in the technical annex.

UMANA guarantees the accuracy and objectivity of the biomechanical tests, which have been carried out under strict study protocols and which allow obtaining values for the analytical parameters in a direct, instrumental manner without human intervention.

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Technical annex (improvement of comfort and biomechanical performance parameters)

 force absorption	 x3 more force absorption	FOOTGEL TECHNOLOGY FOOTGEL TECHNOLOGY insoles offer 20.1% shock absorption against the ground vs. 6.1%-10.6% offered by conventional insoles. It means, FOOTGEL TECHNOLOGY multiplies impact cushioning by 2-3, which reduces the loads on the feet and joints when walking.
 force uniformity	 x4 more force uniformity	FOOTGEL TECHNOLOGY FOOTGEL TECHNOLOGY insoles offer 19.6% uniformity of plantar forces vs. 4.8%-7.7% offered by conventional insoles. It means, FOOTGEL TECHNOLOGY multiplies the uniformity of plantar forces by 3-4, improving the sensation of plantar comfort when walking.
 returned energy	 x 1,8 more returned energy	FOOTGEL TECHNOLOGY The GEL of the FOOTGEL TECHNOLOGY insoles offers 90.3% elastic energy return vs the 50.0%-70.1% offered by conventional insole materials (EVA, PU, GEL and PORON). It means, the GEL of the FOOTGEL TECHNOLOGY multiplies by up 1.3-1.8 the return of elastic energy related to the impulse in the pushoff phase.

Users sample

Nationality: Spanish
Height: 175cm - 188cm
Percentile: 56 - 98,3
Weight: 66kg - 100kg
BMI: 20,1 - 28,3
Sex: 5 men
Tread pattern: diverse
Foot type: diverse

Test conditions

Activity: Walk
Velocity: 4-6 km/h
Slope: 0%
T^a: 18-22°C
%HR: 60-80%

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