

Posture support

姿勢補正

"meta insole" fits into your feet instantly, disperses the impact of landing, and stabilizes your feet as you walk, by taking advantage of the super flexible medical gel called Crystal Gel® which has a 1,000% elongation along with high resilience and superior elasticity.



without insole

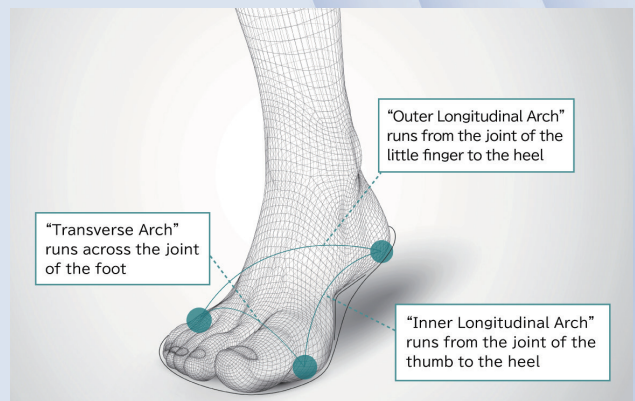
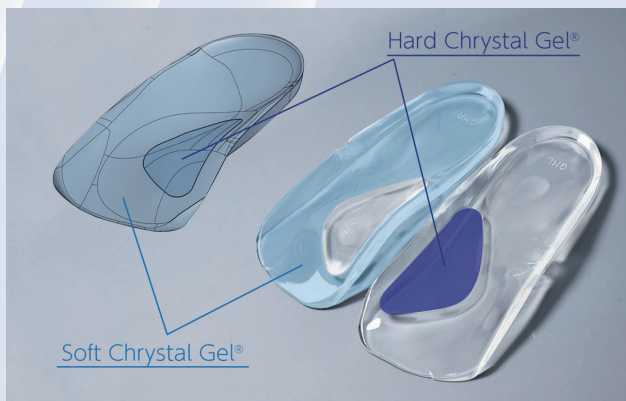


with "meta insole"

Arch support

アーチサポート

"meta insole" is uniquely designed to support three arches of your foot effectively. To improve comfortable fitting and excellent shock-absorption, the top surface contacting the foot sole is made soft, while the inner arch area is made hard for stable support. The proper positioning of different hardness, based on the anatomy of the foot, allows it to effectively support your arches and reduce strain.



High Elongation

高伸長性

Whereas general insoles leave a gap around the inner arch, Crystal Gel® perfectly fits the arch with its excellent elongation and contributes to stable walking.

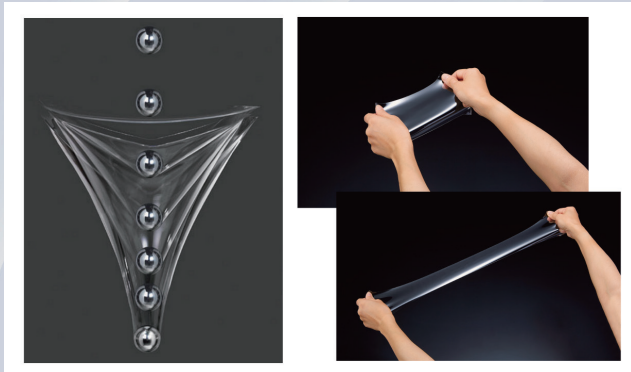


クリスタルゲル®

What is Crystal Gel®?

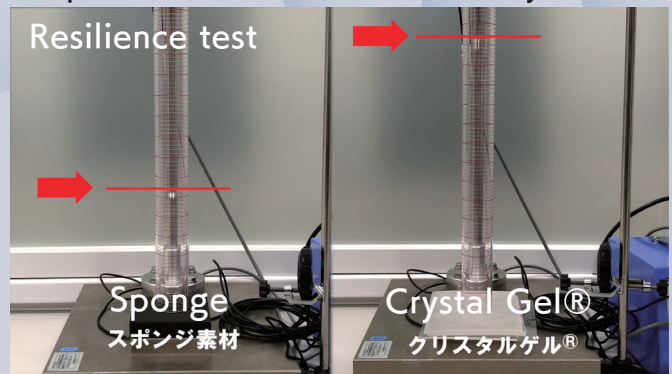
Crystal Gel®, used for “meta insole”, was originally developed for medical use. It is biologically safe (ISO10993), highly durable, weatherable, ozone resistant, acid resistant, and alkali resistant. It remains nearly unaffected by hydrolysis or aging degradation and it hardly deforms over time.

【Elongation】



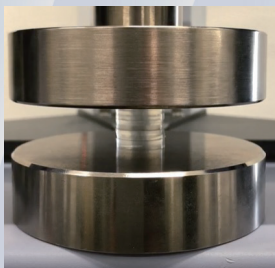
More than 1,000% elongation

【Superior resilience and elasticity】

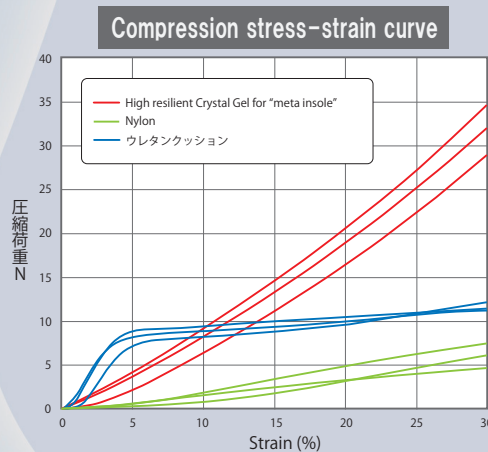


Crystal Gel marked 80% on resilience, while the general high resilient urethane foam marked 50-70%.
*Test resilience by dropping a 16.8g steel ball vertically on to the test piece and measure the rebound height to calculate the rebound ratio. *In-house comparison

【Compression test】



	High resilient Crystal Gel
10% compressive load	8N
20% compressive load	18N
30% compressive load	33N
Compression set	5%



【Durability】

Durability Test: Bending fatigue test



Repeated tensile test: 30rpm for 350,000 times

	Before test	After test	Change rate (%)
Hardness JIS-E	17	18	1
Tensile strength (MPa)	Min 0.13	Min 0.13	0
Elongation (%)	Min 800%	Min 800%	0
200% stress (MPa)	0.10	0.10	0
500% stress (MPa)	0.10	0.10	0
800% stress (MPa)	0.13	0.13	0
Appearance	—	No change	—

【Crystal Gel in medical field】



Training model for surgical anastomosis



Vascular suture model, multi-layered intestinal suture model



Mask cover for endoscope for infection control



Robot hand glove for myoelectric prosthesis