xonano.com | P: 801-709-0659 | info@xonano.com

XO·SOLE

3D Force Measurement Insoles

REHABILITATION & CLINICAL SETTINGS

- **Objective Assessment and Monitoring:** Quantify gait abnormalities and movement patterns in patients with neurological disorders, post-injury conditions, or mobility impairments. This provides objective data rather than relying solely on observation.
- **Real-Time Feedback & Protocol Adjustments:** Clinicians can monitor a patient's movements in real time, adjust exercises on the spot, and provide personalized feedback that improves compliance and accelerates rehabilitation.
- **Post-Injury & Post-Operative Care:** Track recovery from surgeries, sprains, or chronic conditions. Objective metrics allow clinicians to detect subtle improvements or setbacks, enabling timely intervention.
- **Gait Analysis:** Adaptable and validated for individuals with abnormal gait patterns, enabling clinics to adopt advanced biomechanical assessment into routine clinical practice.

Track recovery.
Personalize therapy.
Accelerate progress.

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WHY GROUND REACTION FORCES MATTER IN REHABILITATION

Ground reaction forces (GRF) describe how much force the body produces with every step, and *how* those forces are distributed. Understanding these forces helps clinicians:

- Identify gait abnormalities earlier.
- Detect compensatory patterns.
- Monitor asymmetry during recovery.
- Quantify progress with objective walking data.
- Reduce reinjury risk by improving loading mechanics.

REAL-WORLD DATA YOU CAN TRUST

XO-SOLE has been validated against a 3D force measuring treadmill, the gold standard in biomechanics, showing **high accuracy and reliability** in measuring 3D GRF (~7% avg. error). This provides confidence that:

- Progress is measured accurately.
- Subtle improvements are detected.
- Loading patterns are tracked consistently.
- Data can be used to justify treatment decisions.

XO-SOLE: Bringing advanced insights to every clinical practice.