



BIODEX SYSTEM 4 PRO

APPLICATIONS

- orthopedics
- neurorehabilitation
- sports
- older adult
- industrial medicine
- wellness/injury prevention
- cardiopulmonary
- medical fitness

*The most popular and advanced dynamometer in the world just got better!
The Biodex System 4 offers pioneering breakthroughs in neuromuscular testing and rehabilitation technology. Biodex assessment and treatment of physical impairments provide a fast, effective, documented return to function.*



“Biodex Isokinetic System, together with technical support from IPRS, have ensured continuity of our Isokinetic services to patients and athletes at an optimum level for many years”

Chartered Physiotherapist, Dublin

BIODEX SYSTEM 4 PRO

Combine the art and science of rehabilitation

Dynamic and static muscle loading environments give unlimited combinations of technique and applications.

- **Isokinetic mode** in a continuous reciprocal motion. Impact-free acceleration eliminates joint trauma during the achievement of high speeds that correlate to function. The ability to choose **concentric** (500 deg/sec) and **eccentric** (300 deg/sec) contractions, allows the performance of isolated plyometric exercises.
- **Passive motion** mode with speeds low enough to overcome the natural stretch reflex and fast enough to allow active assistive exercise (.25deg/sec).
- **Reactive eccentric** mode for submaximal neuromuscular re-education in the early phases of rehabilitation.
- **Isometric** mode to initiate an active muscular contraction as well as monitor strength gains when excessive motion is a concern.
- **Isotonic** mode for inertia-free concentric or eccentric muscular contractions.
- **Progressive** controlled range of motion training with real-time biofeedback.
- **Specific protocol** for proprioceptive and kinesthesia and training.
- **Compare patients** to normative database supplied or develop goals based on your clinical population.

Fast and easy to use

What's the best piece of equipment? The one that's used the most. System 4 makes a point of being easy to use for all skill levels, bringing the clinical advantages of this technology to every application.

- Touch-screen panel for quick, easy operation.
- Positioning set-ups are as simple as turning the dynamometer and chair to the labelled joint pattern.
- The simple step-by-step touch screen operations makes the System 4 easy for everyone to operate.
- Innovative on-demand action videos demonstrate exercise and test patterns – so there is no forgetting how to set up!

Communicate need, progress and outcome

Biodesx Objective Data helps you communicate need, progress and outcome clearly and accurately. Easy to read and interpret colour graphic reports are produced with normative data. Graphic reports and narrative letters compare patient's status to normative data for all joints. Data legends and on-screen editing helps communicate the information in simple terms for patients, doctors, third-party payers and employees



Lumbar flexion/extension

Wrist pronation/supination

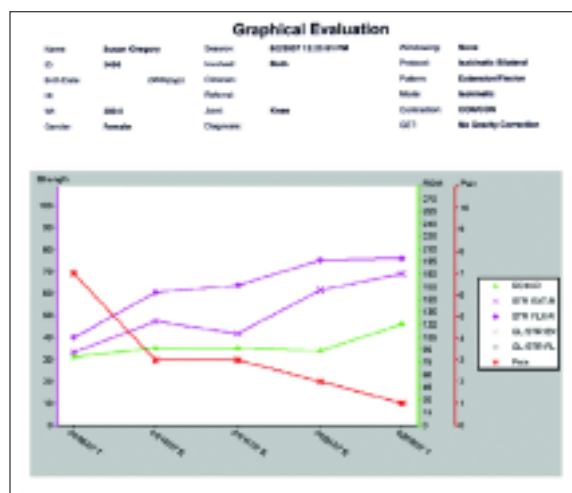


Knee flexion/extension

Shoulder internal/external rotation

The Biodesx System 4 is a modular design. By adding attachments as needs arise, you can strategically expand: orthopedic, sport, pediatric, industrial, neurological and older adult medicine.

- **Compact:** 6m² operational area
- **Full educational programme**
- **Full warranty:** 2 year parts and 1 year labour



- **Prove and document need**
- **Evaluate status**
- **Document progress and outcome**



Evidence-based reference examples

DROUIN, JM et al
Validity of the Biodesx System 3 Pro Isokinetic Dynamometer position, torque and velocity measurements
Journal of Athletic Training, June 2001, S-103
Biodesx #92-219

FEIRING D, et al
Test-re-test reliability of Biodesx Isokinetic Dynamometer
JOSPT, 11:7, 298-300, January 1990
Biodesx #92-266

MONTGOMERY, L et al
Reliability of an isokinetic test of muscle strength and endurance
JOSPT, 315-322, February 1989
Biodesx #93-173

KRIELLAARS, D et al
Strength maps – Evaluation of neuromuscular Performance using Dynamometry – Orthopaedic Physical Therapy Clinics of North America 9:4, 563-580, Dec 2000
Biodesx #91-199

PINCIVERO, DM, et al
Relation between open and closed Kinematic chain assessment of knee strength and functional performance
Clinical J of Sports Med, 7:11:11-16 (1997)
Biodesx #93-276

VOIGHT, ML, et al
The Effects of muscle fatigue and the relationship of arm dominance to shoulder proprioception
JOSPT (23) 6:348-52, June 1996
Biodesx #91-100

To order, or for more information contact...



IPRS Mediquipe on **0870 756 3090**
www.iprsgroup.com