



***tyromotion***

**PABLO<sup>®</sup>**

Sensor-based assessment  
and therapy tool

**TYROTHERAPY**  
GET BETTER.  
EVERY DAY.

PABLO<sup>®</sup> IS ENGINEERED, DESIGNED,  
AND MANUFACTURED IN AUSTRIA.



# PABLO® COMPONENTS



## PABLO® Handsensor

Measurement of hand grasp and release force and of various finger grips, as well as movements in all three motion axes.



## PABLO® Multiball

Therapy with focus on wrist movements, exercising pronation/supination, flexion/extension, and ulnar/radial abduction.



## PABLO® Multiboard

Supported training of postural control, elbow flexion and extension as well as mobilization in different directions of the upper extremity.



## PABLO® Motionsensor

Flexible straps allow application on various parts of the body enabling precise movement detection.



## PABLO® Charging Station

Wireless charging of Motionsensors and Handsensor

# TYROSTATION THE PERFECT MATCH!

The TYROSTATION is home to all components of PABLO® and provides ergonomic adaptability for patients.

- Height-adaptable therapy table and stool
- Safe storage and structured application environment

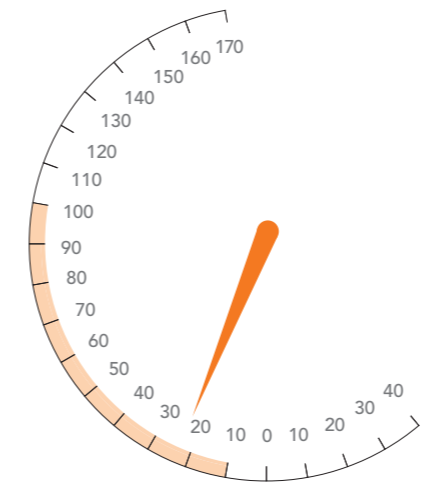


# ASSESSMENT AND THERAPY

- Cylinder grip / Extension
- Pinch grip
- Three-point grip
- Lateral grip
- Interdigital grip
- Force Control Index
- Wrist Extension – Flexion
- Supination – Pronation
- Ulnar / Radial Deviation
- Elbow Extension – Flexion
- Shoulder Abduction – Adduction
- Shoulder Extension – Flexion
- Gait Assessment (PABLO® Lower Extremity)



Ext. 0 - 10 - 100 Flex.



Measure, train, and improve activities of daily living with PABLO®.



# PABLO® LOWER EXTREMITY

PABLO® Lower Extremity is an IMU-based gait analysis and training system. It precisely assesses gait parameters that provide essential information for treatment of walking impairments. The simple and non-obtrusive application makes the package complete.

## Why PABLO® Lower Extremity?

- Gait assessment and training
- Objective measurement of gait pattern
- Lightweight, wireless, portable
- Quick and simple setup
- No restriction in movement
- Easy integration into daily therapy

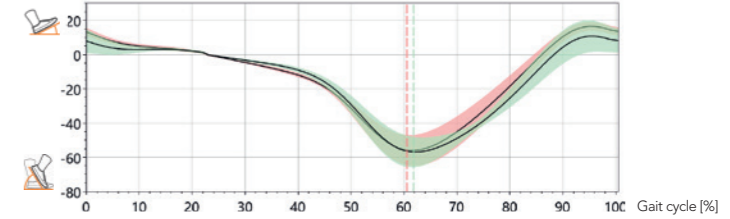


*Wearable inertial measurement units (IMUs) have the potential to enable non-restrictive and accurate gait assessment under different pathological gait patterns.<sup>1</sup>*

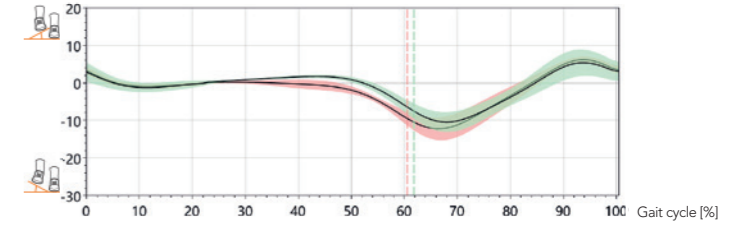
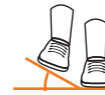
## Basic and Advanced report:

- Spatiotemporal parameters
- Gait phase durations
- Angles related to the dorsi-plantarflexion and pronation-supination of the foot
- Lateral deviation and vertical lift

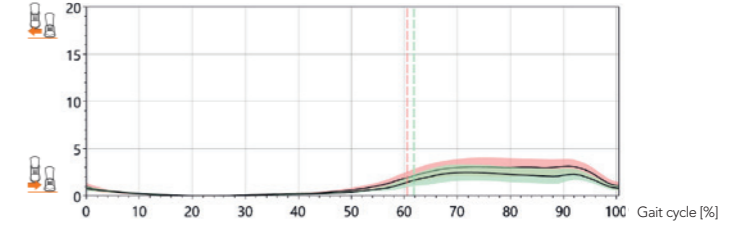
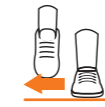
Foot/floor sagittal angle (degrees)



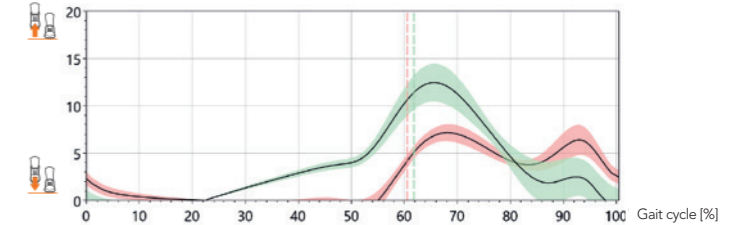
Foot/floor frontal angle (degrees)



Lateral deviation (cm)



Vertical lift (cm)



# 3

## Components of TyroTherapy:



Intensity



Dose



Motivation

# TYROTHERAPY

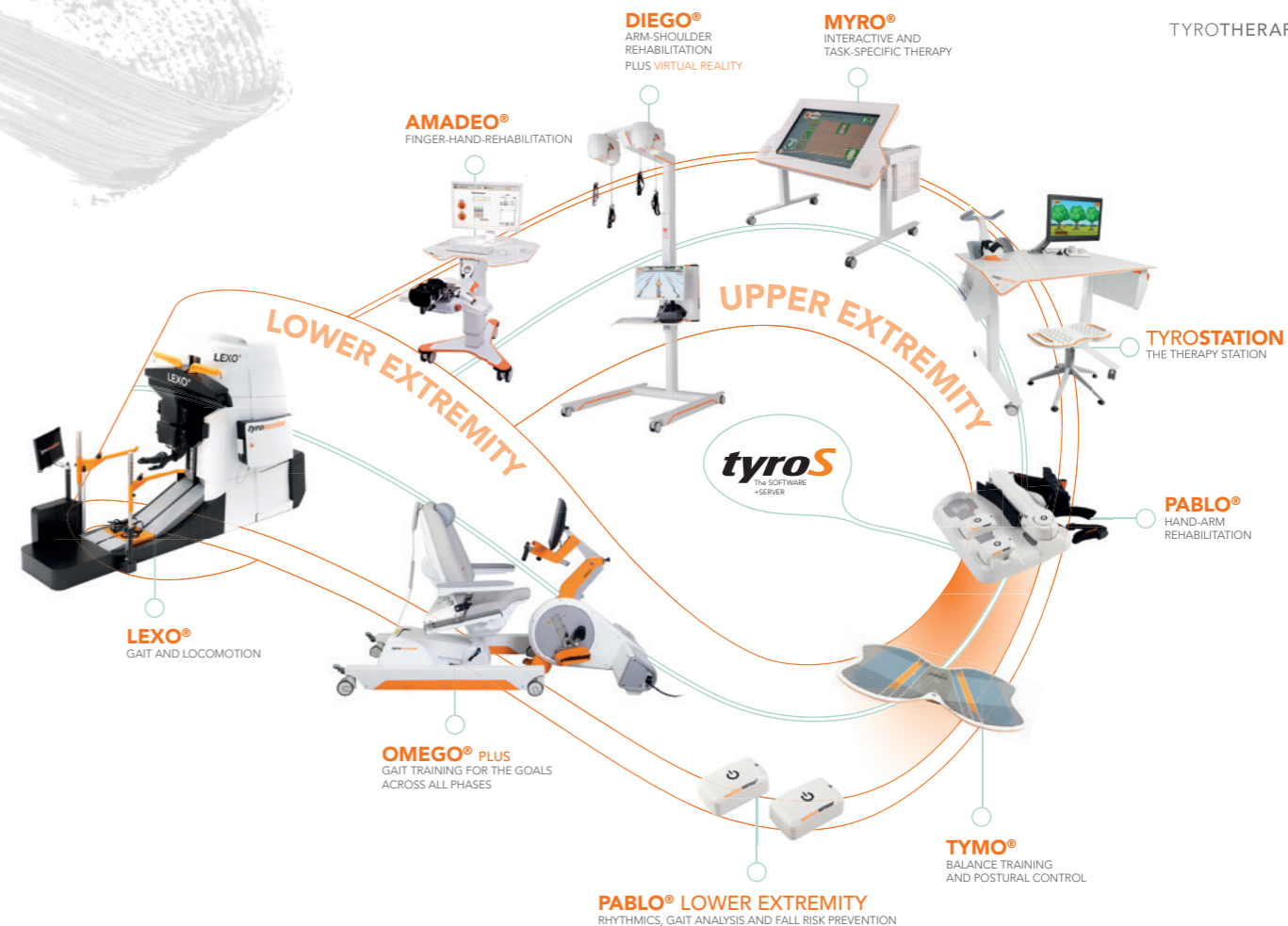
## TyroS

The TyroS software has been developed in close collaboration with therapists. This proprietary software is the heart of the Tyromotion technology and combines devices,

clinical expertise, and therapeutic games. The software is a sophisticated, therapeutic system that helps to challenge and encourage patients.

- Highly intensive, focused and motivated training
- Enforces motor learning principles
- Combines motor and cognitive therapy
- Intuitive and easy to learn
- Visualizes therapy progress

<sup>1</sup> Laidig D, Jocham AJ, Guggenberger B, Adamer K, Fischer M, Seel T. Calibration-Free Gait Assessment by Foot-Worn Inertial Sensors. Front Digit Health. 2021 Nov 4; 3:736418



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