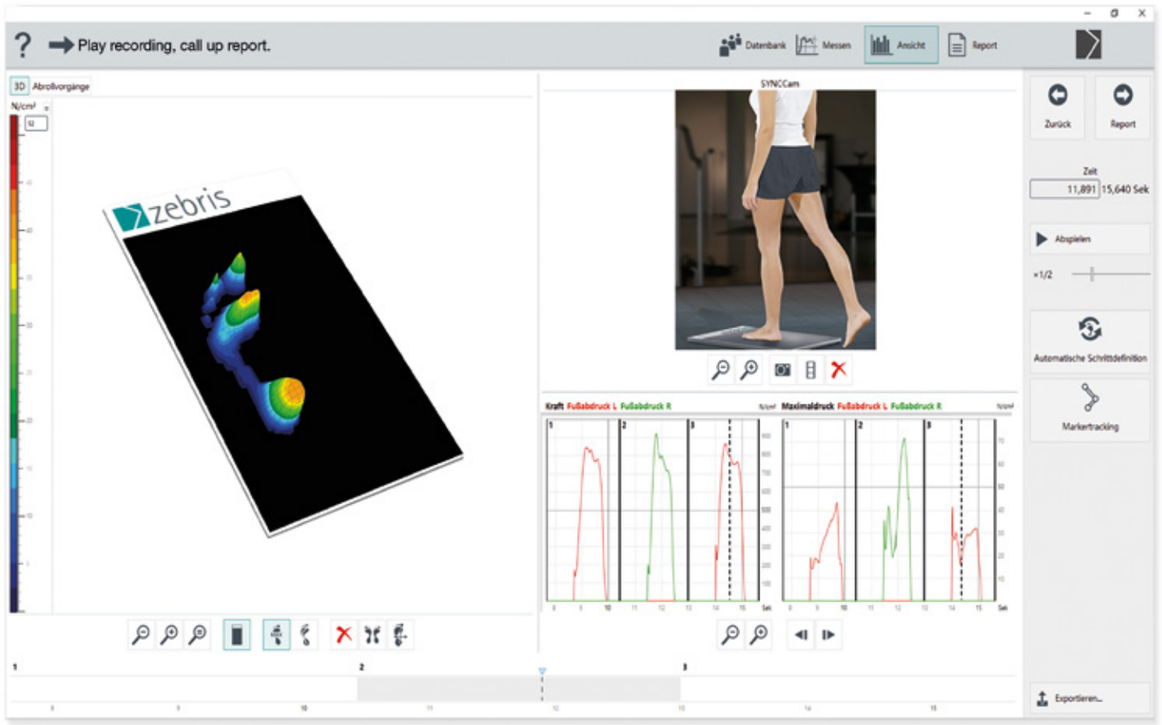
PDM-C

Measuring System for Stance and Roll-off Analysis

zebris

The PDM-C System for Static and Dynamic Pressure Distribution Analysis

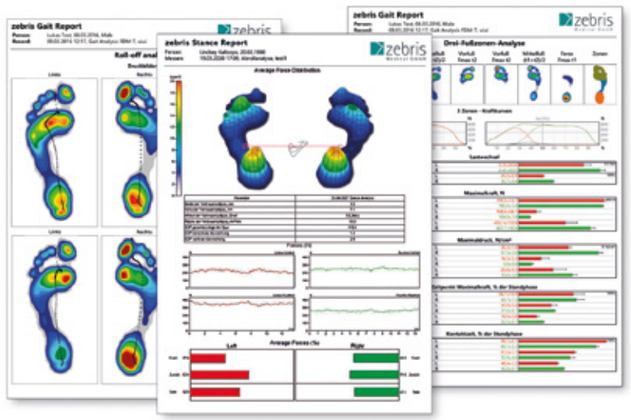


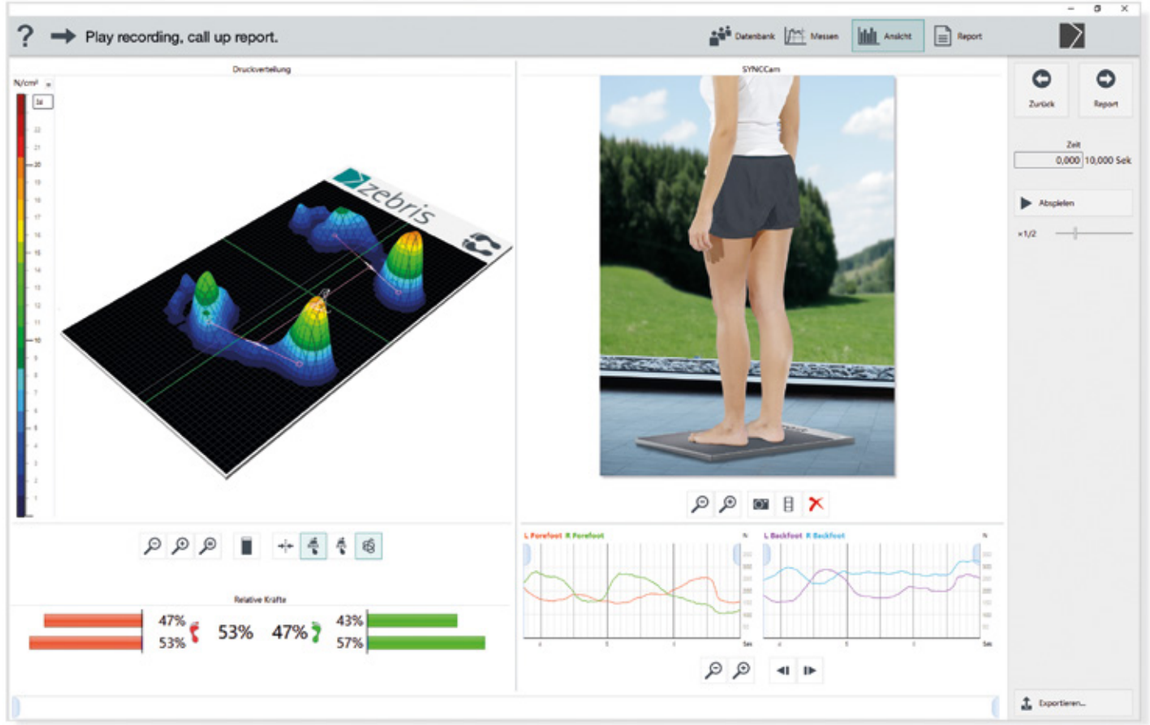
The software program consists of a database, a playback module, and a report generator. The stored pressure measurement data can be displayed in slow motion in complete synchronization with the recorded video data.

The zebris PDM-C system consists of a pressure measurement plate that is connected to a stationary PC or notebook via the USB interface. The addition of the fully synchronized camera (SYNCCam) turns the PDM-C system into a complete measuring station for stance and roll-off analysis.

The highly accurate and robust zebris PDM-C and PDM-XC pressure measurement plates contain a large number of individually calibrated, capacitive pressure sensors and enable the analysis of static and dynamic pressure distribution under the feet when standing and walking. Foot deformities, foot function, posture, and balance can be analyzed.

The evaluation reports are freely configurable and show, in addition to the averaged load distributions, the maximum pressure patterns, pressure and force curves, and the individual phases of the roll-off process.
Comparative analysis of two measurements are possible. All raw values and the calculated parameters of the evaluation report can be exported in various formats.





During the stance analysis, the distribution of pressure across the forefoot and heel, as well as between the right and left sides, is displayed in real time as a bar chart and measurement curves.

Any number of stance tests and roll-off movements can be performed directly one after the other. The results are available in configurable evaluation reports.

The pressure measurement plates have a video synchronization output as standard and are therefore prepared for connection to the optionally available SYNCCam camera. No separate power supply is required for operation.

APD data export is available for CAD/CAM systems for the creation of insoles.

An optional software module allows playful training of coordination and balance skills in three adjustable difficulty levels.
By shifting the body weight, the inclination of a surface is virtually changed, thereby guiding a ball through a maze. Depending on the success, plus points are collected.

zebris

System Components

The measuring station for stance and roll-off analysis works with a standard PC according to the specified requirements.
It is recommended to order the system with a pre-installed notebook.

The SYNCCam and SYNCCam HS cameras are precisely synchronized with the sensor technology of the pressure measurement plates. Multiple cameras can be operated on one system. The adjustable shutter speed guarantees high image sharpness.
The tripods are available with casters or a base plate.

Technical Data
zebris PDM-C Pressure Measuring Platforms

Powered by USB

Type: PDM-XC
Dimensions (L x W x H): 540 x 400 x 15 mm, Sensor area: 406 x 339 mm, Sensors: 1.920, Sampling rate: 120 Hz, Measuring range: 120 N/cm^2, PC Interface: USB, Video SYNC

Powered by USB

Type: PDM-C
Dimensions (L x W x H): 680 x 400 x 15 mm, Sensor area: 542 x 339 mm, Sensors: 2.560, Sampling rate: 120 Hz, Measuring range: 120 N/cm^2, PC Interface: USB, Video SYNC

©zebris 4/2026.
Subject to technical and content changes.

zebris

zebris Medical GmbH · Germany · PO box 1143 · D-88305 Isny · Am Galgenbuehl 14 · D-88316 Isny
Telefon +49-7562-97260 · Telefax +49-7562-972650 · info@zebris.de · www.zebris.de