
Hegewald & Peschke
Meß- und Prüftechnik GmbH



Universal Testing Machine
Series Inspekt mini



Universal Testing Machine Inspekt mini 3 kN

Hegewald & Peschke Meß- und Prüftechnik GmbH 01683 Nossen Am Gründchen 1 Tel. 03 52 42 4 45 10 Fax 03 52 42 4 45 11
E-mail info@Hegewald-Peschke.com www.Hegewald-Peschke.com

Load Frames

The universal testing machine **Inspekt mini** is available with load frames of 3 kN and 5 kN.

The frame arms are driven by DC motor via a play-free pre-stressed ball race spindle. The driving spindle is protected against fouling by bellows.

Optionally, the speed range can be extended up to 2000 mm/min.



Inspekt mini 3 kN with video camera mounting

Force Measurement

Force measurement is conducted by a strain gauge dynamometer.

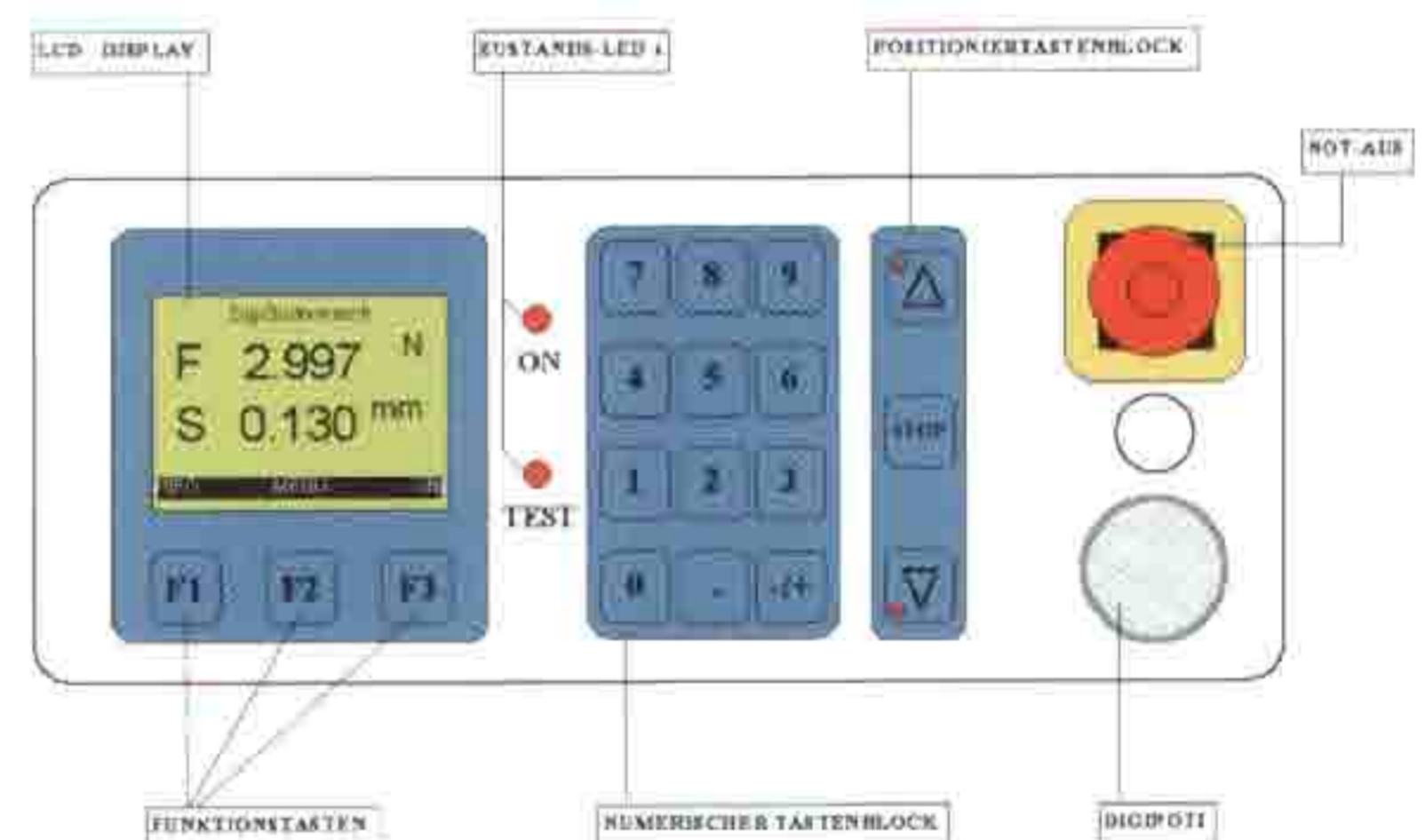
In the range between 0.8 and 100 % nominal load, the measurement electronics provide Class 1 (optionally Class 0.5) accuracy acc. to DIN EN ISO 7500.

All load cells are equipped with sensor plugs guaranteeing the automatic recognition of adjustment and calibration parameters.

Measurement and Control System

All elements of voltage supply as well as machine and motor control of the Inspekt mini series are arranged in a table casing. Machine control and synchronous data collection are provided by a digital controller.

The connection to the computer and application is implemented through the RS232 user interface.



Operator panel of controller unit

The machines can be operated either with PC or as standalone version for simple testing jobs. The controller has ports for additional data collection cards. The basic version is delivered with force and distance measurement channels. For the standalone version, the measured data are represented by a printer directly connected to the electronics, and the digital force-distance display.

LABMASTER Software

The **LABMASTER** software was specially designed for the use in material and part testing.

It is used for the testing machines of the series **Inspekt mini**, **Inspekt desk** and **Inspekt** as well as for upgraded systems.

The network-capable **LABMASTER** software can be operated under Windows 95/98/2000 ¹⁾ and Windows NT ²⁾

Data transfer via the internet is implemented in the software.

The heart of **LABMASTER** is a high-performance database storing all measurement data and parameters (interbase database server).

The standard package comprises the basis software **LABMASTER** as well as the evaluation software required for the test standard used.

The basis software is available for the test types

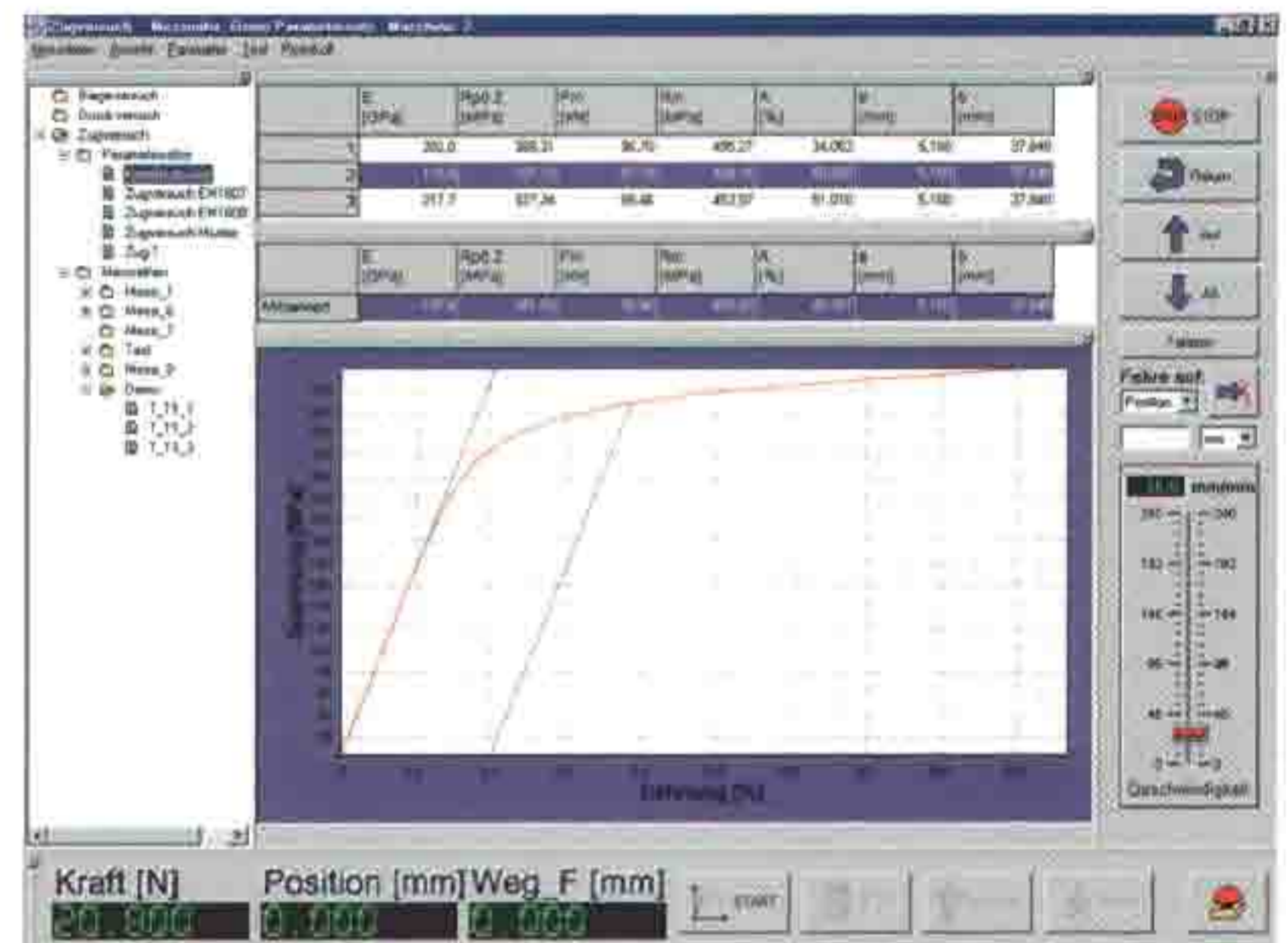
- tension-compression test
- bending test
- peeling test
- cyclic tests, such as spring tests
- free programming of testing procedures

and realizes all required functions :

- communication with the testing system, data collection
- automatic recognition, checking and calibration of all measurement sensors
- parametrization of the test process
- graphics settings
- protocol editor to produce user-defined result reports
- interfaces for the exchange of test and parameter data

The determination of the results according to the given standard or testing specification is conducted by an integrated evaluation module, which contains all formulae of the specified testing standard.

For this, a comprehensive and continuously expanded standard and specification library is available. The software option Formula Editor allows users to define their own calculation formulae.



Special attention was paid to clear and easy operation:

- storage of test parameter sets allowing instantaneous testing
- online help for testing and calculations
- master and user levels
- in-operation switching to different language
- remote servicing by H&P GmbH through modem (optional), error handling and parametrization support

The user surface design follows the Microsoft ³⁾ Office Software to enable fast operator training.

LABMASTER also can process data of peripheral measurement devices using a wide range of interfaces. This allows this package to be used as a universal laboratory management software.

We also offer our support for individual software solutions.

^{1),2),3)} Registered Trademarks

Technical Data

Loading capacity in kN	3	5
Article No.	10-008-001	10-008-011
Arm lift in mm	850	650
Testing space depth in mm	100	
Arm speed in mm/min	0.05 – 1000	0,05 – 650
Return speed	Vmax	
Drive	DC motor	
Force signal resolution	+/- 30.000 Digits with optional ETF card +/- 100.000 Digits	
Force measurement range	in range 0.8 – 100 % of nominal force of sensor Class 1 acc. to DIN EN ISO 7500	
Stroke measurement	incremental input with sensor monitoring, storing of stroke position	
Stroke resolution in µm	1	
Type of control	force-stroke-extension control	
Functions in standalone operation	start-stop-return, positioning with hand potentiometer, definition of testing rates and sample geometries, force- distance display, output of results (metal-plastic tensile test, peeling test, concrete compression test) and statistical data via display or printer	
Optional cards	<ul style="list-style-type: none"> - ETF data collection card (Art.No. 0725) for analogue extensometers and additional load cells, as well as +/- 10 V input for external measurement devices - I/O card for external devices control (Art.No. 0734) - analogue output for force and strain signal (Art.No. 0766) 	
Interface	RS-232 PC connection, standard data transfer rate 20 ms, (standard, minimum 1 ms)	
Weight in kg	45	
Connection values	115/230 VAC, 50/60 Hz, 200 W	
Dimensions WxTxH in mm	380 x 500 x 1000	