

# HEIDENHAIN



## Testing and Inspection Devices For HEIDENHAIN Encoders

[www.heidenhain.com/service](http://www.heidenhain.com/service)

# Encoder diagnostics

HEIDENHAIN encoders provide all of the information needed for their own setup, monitoring and diagnostics.

The exact information depends on the interface and the type of encoder. To help you analyze this data, HEIDENHAIN offers the PWT testing devices and the PWM inspection devices.

The PWM 21 inspection devices can be used with all HEIDENHAIN encoders, feature low measuring tolerances and can be calibrated. Testing devices such as the PWT 101 offer fewer functions, have wider tolerances and cannot be calibrated.

## Diagnostic capabilities

- Encoder diagnostics with the PWM and PWT:  
The encoder is connected directly to the testing or inspection device
- Diagnostics within the control loop with the PWM:  
The PWM inspection device is interposed within the closed control loop

## PWM 21

The PWM 21 inspection device, including the ATS software, is used for diagnosing and adjusting HEIDENHAIN encoders with absolute and incremental interfaces.



## PWT 101

The PWT 101 is a testing device for the functional testing and adjustment of absolute and incremental HEIDENHAIN encoders.



# PWM 21 inspection device

HEIDENHAIN offers a package for diagnosing and adjusting HEIDENHAIN encoders with absolute and incremental interfaces. It consists of the PWM 21 and the ATS software. The inspection device is connected to a PC via a USB port. The ATS adjustment and inspection software features a local encoder database for automatic encoder detection.



## Properties

- Inspection device for all encoders, featuring extensive diagnostic and adjustment functions through the ATS software
- Calibratable
- Continuous development of ATS software functionality

## Functionality

The ATS software supports a variety of functions, limited only by the specific encoder and its interface. If an encoder uses the EnDat interface, then along with displaying the position value, the package can output the encoder's online diagnostics, read and write its parameters, shift its datum, set write protection and perform other inspection functions.

## Encoder interfaces

- EnDat
- DRIVE-CLiQ (for HEIDENHAIN encoders only)
- Fanuc
- Mitsubishi
- Panasonic
- Yaskawa
- SSI
- 1 V<sub>PP</sub>
- 11 μA<sub>PP</sub>
- TTL
- HTL (via adapter)

Find out more in the *PWM 21/ATS Software* Product Information document available at <https://www.heidenhain.com/service/downloads/brochures>.



DRIVE-CLiQ is a registered trademark of Siemens AG

# PWT 101 testing device

The PWT 101 is a testing device for the functional testing and adjustment of absolute and incremental HEIDENHAIN encoders. Thanks to its compact and rugged design, the PWT 101 is ideal for portable use. A 4.3" touchscreen serves as both its display and operating screen.

The PWT 101 supports a variety of functions, limited only by the specific encoder and interface. If the encoder uses the EnDat interface, then along with displaying the position value, the PWT 101 can output its online diagnostics, shift its datum and perform other inspection functions.



## Properties

- Testing device with integrated 4.3" touchscreen
- Power via external power supply unit
- Expandable functionality through firmware updates

## Functionality

The functionality of the PWT 101 can be expanded through a firmware update. The firmware files are available at [www.heidenhain.de](http://www.heidenhain.de). They can be uploaded to the PWT 101 via a memory card (not included).

## Mounting wizard

The PWM 21 is recommended as a mounting tool for the adjustment of HEIDENHAIN encoders that require a special mounting wizard (e.g., the LIP 2xx, ERO 2xxx).

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For more information, see the *PWT 101* Product Information document at: <https://www.heidenhain.com/service/downloads/brochures>



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## Do you have technical questions about our testing and inspection devices?

Simply contact the free HEIDENHAIN helpline:

 +49 (8669) 31-3104

 [service.ms-support@heidenhain.de](mailto:service.ms-support@heidenhain.de)

## Do you need a quotation?

Ask for your individual quotation today:

 +49 (8669) 31-3121

 [service.order@heidenhain.de](mailto:service.order@heidenhain.de)

## Do you need training in encoder diagnostics?

 +49 8669 31-3049

 [mtt@heidenhain.de](mailto:mtt@heidenhain.de)

Dates and more information:

[www.heidenhain.de/service/technische-schulungen](http://www.heidenhain.de/service/technische-schulungen)

## Information on the HEIDENHAIN service department:


[www.heidenhain.com/service](http://www.heidenhain.com/service)


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