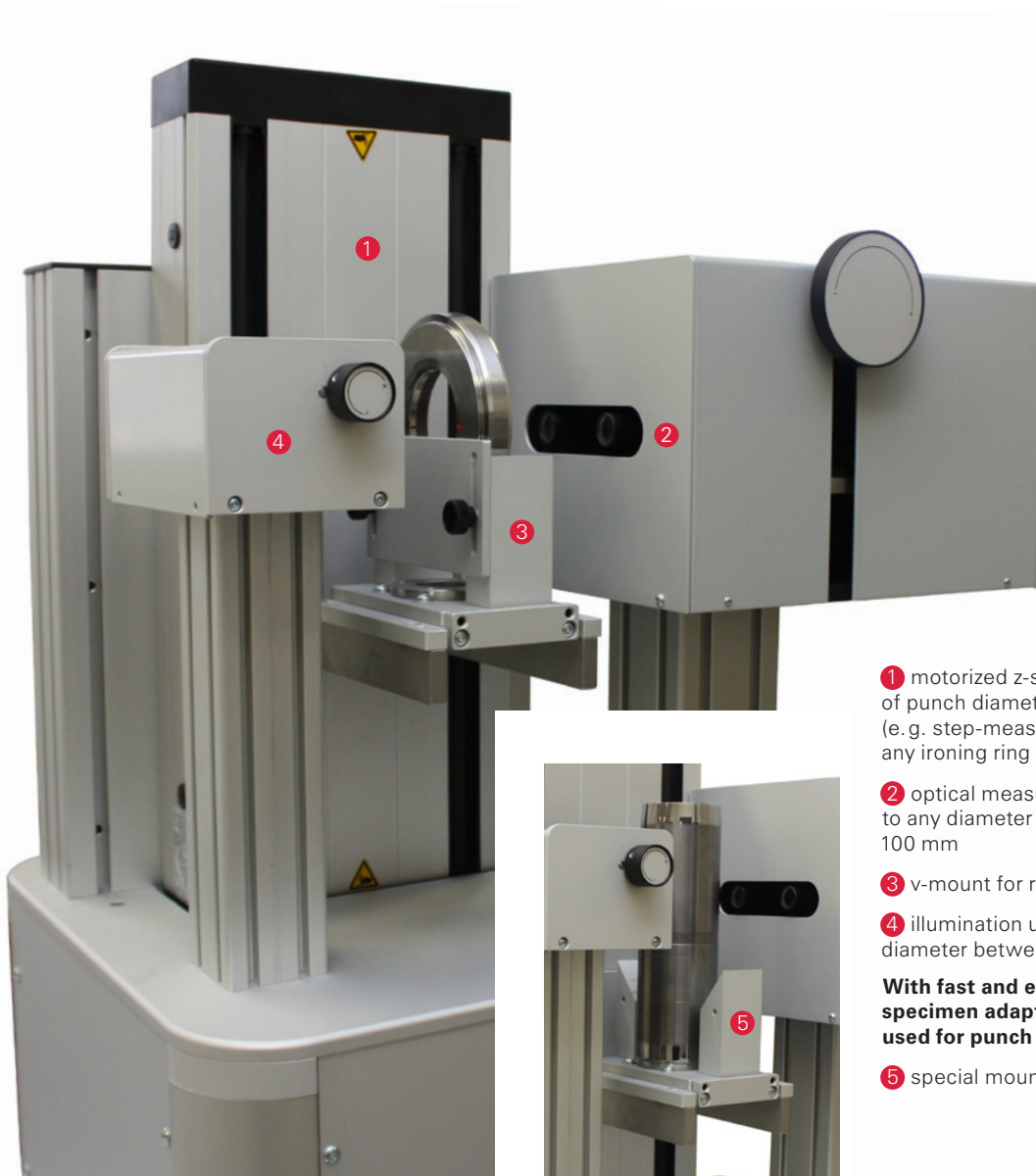




# URP 100 Universal ring and punch gauge

Highly accurate measuring instrument for inside diameter of ironing rings and outside diameter of punches, used in beverage can manufacturing



① motorized z-stage for measurement of punch diameter at different positions (e.g. step-measurement) and adaption to any ironing ring type

② optical measuring system, adaptable to any diameter between 40 mm and 100 mm

③ v-mount for rings

④ illumination unit, adaptable to any diameter between 40 mm and 100 mm

**With fast and easy change of the specimen adapter the URP 100 can be used for punch measurement!**

⑤ special mount for punch



## DESCRIPTION/TECHNICAL PARAMETERS

### Technical parameters\*

suitable for all rings with inside land (edge), usually used for beverage can manufacture

outside diameter range of specimen 110 ... 170 mm  
(outside diameter is not measured!)

for necking die measurement special adapters are necessary

inside diameter measuring range 40 mm ... 100 mm\*\*

outside diameter measuring range 40 mm ... 100 mm\*\*

resolution of measuring system 0.05  $\mu$ m

accuracy inside diameter/roundness 1  $\mu$ m\*\*\*

position accuracy for punch measurement 0.1 mm

### URP 100 CONSISTS OF

- stable mechanical basic setup
- high resolution optical measuring system
- motorized z-stage 400 mm for exact positioning of specimen table
- stepper motor controller
- computer for data acquisition and process control, soft and hardware installed
- 19" Flat Panel Monitor

- Windows software for device control, data acquisition and evaluation

### MEASURING FUNCTIONS

- inside diameter of ironing rings and necking dies (special adapter necessary)
- roundness of inside diameter by measurement in different azimuths (manual rotation of specimen)
- outside diameter of punches and knockouts (z-position freely choosable)

- step (automatic motorized movement of specimen to the measuring points)
- roundness of outside diameter by measurement in different azimuths (manual rotation of specimen)

### ADDITIONALLY NECESSARY

- Master rings and master punches\*\*\* for calibration

### MEASURING PRINCIPLE

The measuring principle corresponds to the principle of the worldwide proven measuring systems **RINGMASTER** and **PUNCHMASTER**.

The system is calibrated by a reference measurement, using a master ring or master punch.

\* These parameters apply to the standard device and can be adapted to different diameters.

\*\* manual adjustment of diameter by operator, stepless between 40 mm and 100 mm

\*\*\* certified master ring for calibration required

Technical specifications subject to change without notice



### OEG GMBH

OEG GmbH provides the full range of measuring equipment for tools for the beverage can manufacturing.

General features are highly accurate measurement by optical, non contact measuring principle.

Beside the universal ring and punch gauge URP 100, more specialized equipment with more functions exist.

These are measuring systems in particular for ironing rings and necking dies (**RINGMASTER**), measuring system for punches and knock outs (**PUNCHMASTER**) and measuring systems for the inside ring profile (**RICOS**). All these instruments are special developed for the beverage can industry and meet especially their needs. With our worldwide proven measuring technology we guarantee for

easiest handling of the equipment, best reliability in connection with highest measuring accuracy at the same time.

Detailed informations about the complete product line of OEG GmbH for tools for beverage can manufacture are provided on our website [www.oeggmbh.com](http://www.oeggmbh.com).

Test our equipment and you will learn: There is no better way to measure dies and punches in beverage can industry!

### VIDEO

A little video showing the change of the setup from ring to punch measurement you can download here: <http://www.oeggmbh.com/download/neu/URP100.wmv>