

## ZEDsystem

The ZEDsystem is an individually configurable sliding carriage system for leak testing. It allows the integration of additional processes, rapid conversion and loading by hand or via robotics. It can be integrated into fully automatic production lines as well as used manually and offers the optimum solution for every customer requirement through three series.

### TYPICAL APPLICATIONS

- + **Automotive:** housing, Al-cast cylinder block, cylinder head, transmissions, heat exchangers, control electronics, battery, pipes, valves, fuel cells, pumps, etc.
- + **Medical technology:** Catheters, dialysis filters / boxes, flushing systems, tubing systems, secretion containers, syringes, respirator devices, etc.
- + **Packaging / cosmetics:** Dosing pumps, plastic bottles, cartridges, etc.
- + **Domestic appliances:** Water diverters, water pumps, gas valves / fittings, electrical components, etc.
- + **General industry:** Cylinders, safety / check valves, couplings, grippers, ball valves, seals, etc.

#### Processes:

- + Component identification by means of laser (DMC code), scratch embossing, center mark or colour point
- + Joining
- + Pressing in balls / expanders
- + Screws
- + Electrical test
- + Presence check
- + Barcode / data matrix scanning

### MEASUREMENT METHODS

Available modules for leak testing with the test media air and helium:

|                 |                                            |
|-----------------|--------------------------------------------|
| <b>RD</b>       | Relative pressure<br>(optional: 2-channel) |
| <b>RD / GP</b>  | Relative pressure with bell testing        |
| <b>RD / iDF</b> | Relative pressure with indirect flow       |
| <b>RD / DF</b>  | Relative pressure with flow                |
| <b>DD</b>       | Differential pressure                      |
| <b>DD / GP</b>  | Differential pressure with bell test       |
| <b>SD</b>       | Dynamic pressure                           |
| <b>MF</b>       | Mass flow                                  |

(for available pressure ranges, see technical data)



## ZEDsystem: Series at a glance



1000 series

2000 series

3000 series

### Product features:

|                              |                                                                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control unit                 | Siemens PLC                                                                                                                                                                          |
| Controls                     | Multi-touch mobile panel and control panel                                                                                                                                           |
| Communication                | Connection to customer-side ERP systems via OPC-UA, TCP-IP, ... or USB and network interface, e.g. for file export to CSV, XML                                                       |
| Safety                       | Lateral enclosure, swinging doors with safety switches at the rear, accessibility at the front through safety light curtains<br>Safety connection to automatic loading and unloading |
| Pneumatics/electrical system | Integrated into the system                                                                                                                                                           |
| Status display               | System status via signal light, component test OK/not OK via LED concept                                                                                                             |
| Interchangeable tools        | Coded quick-change system                                                                                                                                                            |

| Series                           | 1000                         | 2000                          | 3000                          |
|----------------------------------|------------------------------|-------------------------------|-------------------------------|
| Component size approx (LxWxH)    | 350 x 350 x 250 mm           | 600 x 500 x 300 mm            | 600 x 500 x 300 mm            |
| Component weights max.           | 25 kg                        | 50 kg                         | 50 kg                         |
| Adaptation forces max.           | <30kN / <5kN (vert./horiz.)  | <100kN / <15kN (vert./horiz.) | <100kN / <15kN (vert./horiz.) |
| Cycle time                       | approx. 8 s (plus test time) | approx. 10 s (plus test time) | approx. 12 s (plus test time) |
| Dimensions of the system (LxWxH) | 1,100 x 1,100 x 2,200 mm     | 1,540 x 1,540 x 2,200 mm      | 3,740 x 2,640 x 2,200 mm      |
| Number of leak test modules      | up to 3 (max. 6 channels)    | up to 4 (max. 8 channels)     | up to 4 (max. 8 channels)     |
| Power supply                     | 400 V                        | 400 V                         | 400 V                         |

On request, all installed pressure sensors can be supplied directly by ZELTWANGER in accordance with DIN EN ISO/IEC 17025 with a calibration certificate and accreditation symbol.

