

Available in two sizes
(internal dimensions):

- 120 mm x 120 mm
- 240 mm x 240 mm

Advantages at a glance

- **Automatic absolute calculation of robotic tools and fixtures**
- **Auto-commissioning and ease of use**
- **Simplified Integration**
in the production line due to small footprint
- **Robust sensor available in two sizes**
- **Multi-sensor-system**
(connection of additional sensors possible)
- **Connection of the calibration system to the robot controller,**
i.e. the calibration procedure takes place in an evaluation unit
and transfers correction values to robot controller
 - High process reliability
 - No additional PC's required
 - Logging of calibration data
 - Data evaluation possible at any time
- **Automatic correction of the trajectory**
due to wear and tear or tool-replacement
 - 100 % quality assurance
- **Reduction of costs**
 - Prevents the production of defective parts
 - Reduces scrap and rework
 - Short setup times

LEONI Protec Cable Systems GmbH Brüsseler Straße 12
30539 Hannover

Germany

Phone +49 (0)511-820793-30

Fax +49 (0)511-820793-40

E-mail industrial-solutions@leoni.com

www.leoni-industrial-solutions.com



Please scan
for more information
about LEONI tool data calculation



advintec TCP

Calculation and calibration
of robotic tools and fixtures
in up to 6 dimensions

Applicable for all robot brands

Fast and simple

09.2014/en_500

The Quality Connection

LEONI

At a glance advintec TCP robotic tool and fixture calibration systems

The challenge

Continually securing the correct operating position for robotic tools

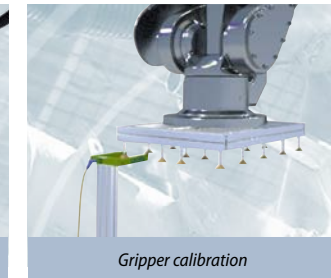
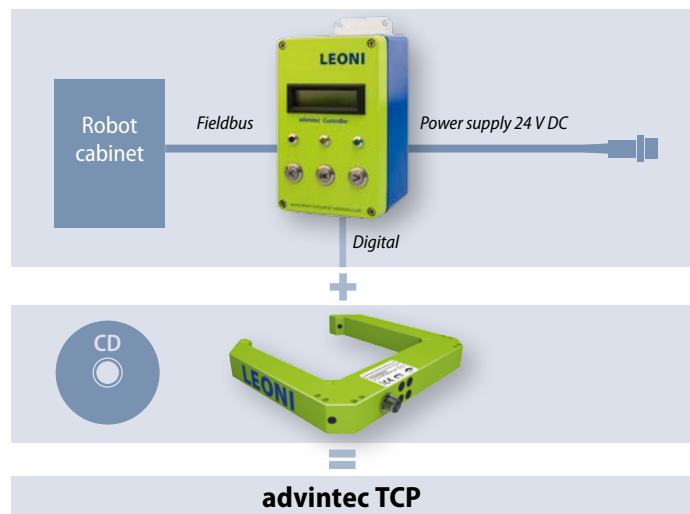
The solution

The advintec TCP tool calibration system calibrates the tool and fixture in up to six dimensions in the ongoing production process

- Three translatory and three rotatory dimensions
- Electronic, precise and fast

The trajectory is automatically corrected by the measured variations and ensures that the tool always operates at the correct position.

Our calibration system – everything from one source



	3D	5D	6D
Calibration time	3 sec. complete 2D calibration 6 sec. complete 3D calibration	9 sec. complete 5D calibration	15 sec. complete 6D calibration
Dimensions	2 or 3 translations	5 (3 translations, 2 rotations)	6 (3 translations, 3 rotations)
Fields of application (applicable for all robot brands)	Arc welding, stud welding, spot welding, laser welding, tig welding, gluing, milling		Gripper calibration, fixture calibration, power train applications, high precision applications

Technical data at 20 °C / 24 V DC

Sensor type	2 channel infrared 880 nm, pulsed at 2kHz
Interface	Serial or field bus (DeviceNet, Profibus, Profinet, Interbus etc.)
Measuring accuracy	0.02 mm
Protection class	IP67
Dirty surroundings	Yes
Casing	Aluminium
Automatic correction of tool data	Yes
CE mark	Yes
Operating voltage, Connections	10 – 34 V DC, IBS connector, 5 pin, PE advance conn.