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 precision infrared sensor available in three sizes
- Multi-sensor-system
  - Connection of additional sensors possible
- Network connection of the calibration system directly 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
  - no failures caused by positioning factors
  - 100 % quality assurance
- Reduction of costs
  - Prevents the production of defective parts
  - Reduces scrap and rework
  - Short setup times

Factory Automation

www.leoni-factory-automation.com
@LeoniFactoryAut
IN LEONI Factory Automation

Business Unit Robotic Solutions
LEONI protec cable systems GmbH

Brüsseler Strasse 12
30539 Hanover, Germany
+49 511 820793-30

Hausinger Strasse 4
40764 Langenfeld, Germany
+49 2173 1010-791

An der Auehütte 10
98574 Schmalkalden, Germany
+49 3683 6505-0
**advintec® TCP & advintec® TCP XS**

Our calibration systems

![Robot cabinet with FieldBus and Digital Power supply 24 V DC](image)

**advintec® TCP**  
Highest flexibility for upgrades and activation of various applications in up to 6D

**advintec® TCP XS**  
Best price for simple 2D or 3D applications

---

**Important information:**

advintec® TCP Basic 3D kit can be extended via activation codes for additional applications at a later stage.

advintec® TCP XS cannot be extended by activation codes.

<table>
<thead>
<tr>
<th>TCP XS 2D kit incl. standard IR sensor</th>
<th>TCP XS 3D kit incl. standard IR sensor</th>
<th>TCP basic 3D kit incl. standard IR sensor*</th>
<th>TCP 5D kit incl. standard IR sensor</th>
<th>TCP 6D kit Gripper incl. standard IR sensor</th>
<th>TCP 5D kit Milling incl. standard IR sensor</th>
<th>TCP kit Stud Welding (ext. x-y mode) incl. standard IR sensor*</th>
<th>TCP 5D kit Gluing – Hook Nozzle incl. standard IR sensor</th>
<th>TCP kit Arc Welding – Tandem Torch incl. standard IR sensor*</th>
<th>TCP kit Cutting Tool Blades incl. standard IR sensor</th>
<th>TCP kit Initial Tool calculation incl. standard IR sensor*</th>
</tr>
</thead>
</table>

TCP kit Automotive Body in White incl. standard IR sensor  
TCP kit Automotive Powertrain incl. standard IR sensor  
TCP kit Automotive Paint Shop incl. standard IR sensor

---

**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.
- Electronic, precise and fast
- Simple application – low-cost solution

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

---

**Mobile calibration case for the initial calibration of unknown tools and fixtures (TCP & Base)**
Flexible, mobile calibration for unknown tools and fixtures is now also possible with our mobile calibration case. Ideal for use when setting up new production lines.

---

* Upgrade to 5D possible via additional activation code