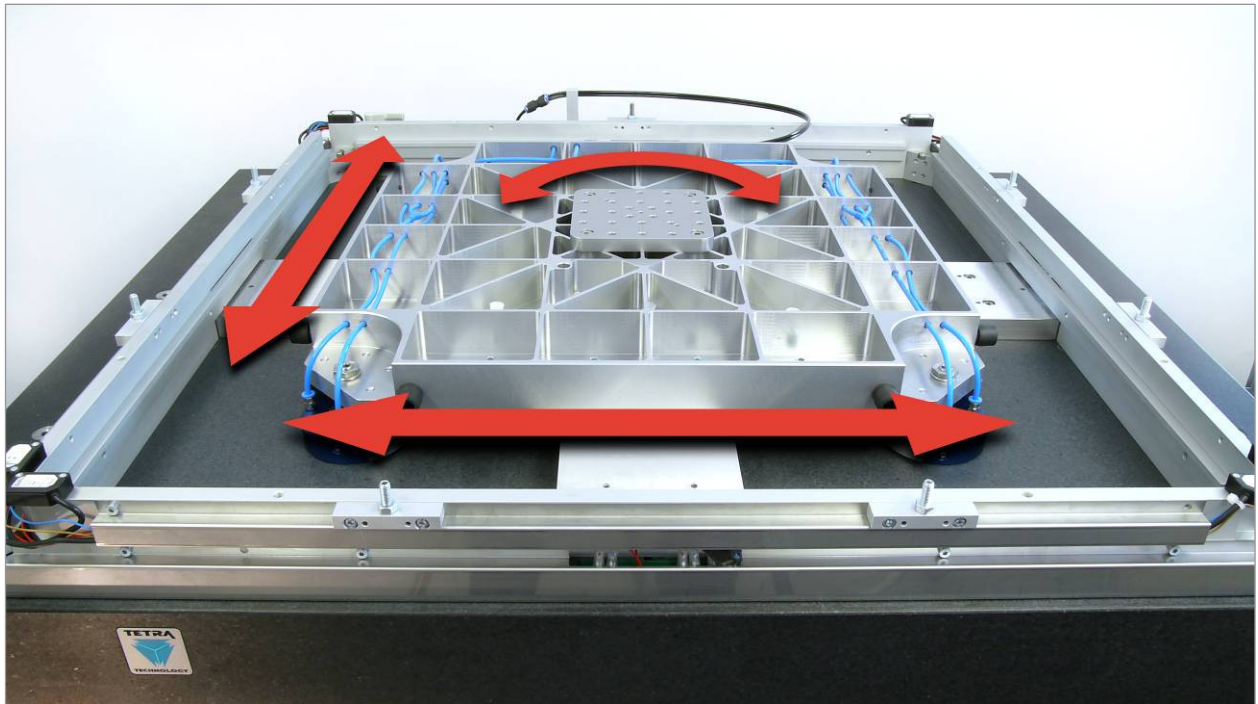


## Application information PPS - Planar Positioning System



### Advanced Positioning Technology

Position resolution (X, Y): **0,05  $\mu\text{m}$**

Repeatability (X, Y): **0,2  $\mu\text{m}$**

Path accuracy (X, Y):  **$\pm 1 \mu\text{m}$**

[www.tetra-ilmenau.de](http://www.tetra-ilmenau.de)

 **PRECISION  
Mechatronics**



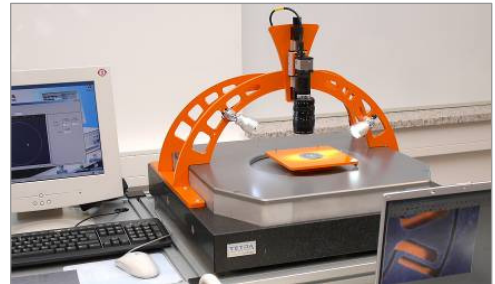
## Highest accuracy . Excellent motion properties . No mechanical contact

The extremely high positioning accuracy of less than 1µm and the excellent motion properties are reached by the application of a unique two dimen-

sional drive concept (Electro dynamical direct drive).

### Measuring / Testing

- Coordinate measurement devices
- Wafer and solar cell inspection
- Surface characterisation
- Material test equipment



### Micro machining

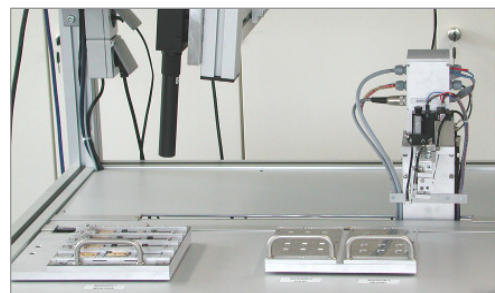
- Precision laser cutting
- Laser direct writing
- Laser adjustment
- Micro soldering



### Micro assembling

Multi assembling systems for

- Mechatronical components
- Micro sensors / actuators,
- Micro laser objectives.



## Benefits

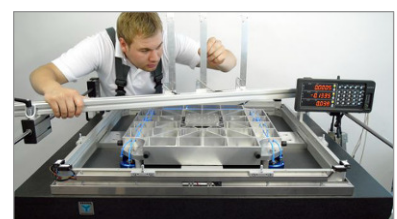
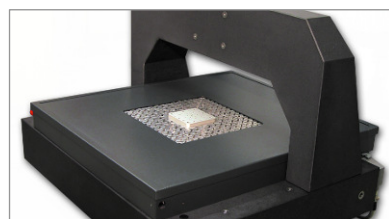
- Short processing times by high dynamic of movement
- Technological advantage by exclusive machine parameters
- Low occupancy costs due to compact design
- Low maintenance costs (no wearing parts)

## Compact design / Clean-room capability

In the accuracy class of 1 $\mu$ m the PPS has an extremely compact design in relation to stages with crossed axes. The slider runs without mechanical contact on air bearings. The generation of the movement is done without mechanical contact.

Precise controlled magnetic fields are enabling an extremely high motion quality of the slider (synchronous operation, high dynamics, no stick-slip).

<p>PPS 100-3  <math>\varnothing</math> 100mm  <math>\varphi \pm 0,25^\circ</math></p>	<p>PPS 200-4            200mm x 200mm  <math>\varphi \pm 0,25^\circ</math></p>	<p>PPS 250-4            250mm x 250mm  <math>\varphi \pm 0,25</math></p>
		



## Contact

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