WENZEL Group GmbH & Co. KG is one of the leading manufacturers of industrial metrology solutions. The wide range of WENZEL products includes solutions in the fields of coordinate measuring machines, gear metrology, computed tomography and high speed measuring and digitizing systems. Founded in 1968 as a family business WENZEL Group combines tradition with innovation, relies on values such as reliability, trust and respect for the environment. Subsidiaries as well as sales and service partners worldwide represent the company in more than 50 countries. The WENZEL Group employs more than 630 people worldwide.
Higher Precision and Efficiency

**XOplus**

As a new member of WENZEL Group’s XOrbit family designed for market development and customer needs, the XOplus series can complete different measurements quickly and easily while providing higher precise measurement results. Equipped with multifunctional measuring head systems, it proves itself a highly cost-effective and competitive WENZEL product since it can meet a complete range of industrial measurement needs.

**XOplus Features**

- Three axes made from granite material ensure all axes have the same thermodynamic properties
- The granite surfaces of all three axes are uniquely hand lapped by WENZEL, to ensure the precision of the mechanical structure, which guarantees long-term precision stability of measuring machines
- The use of a heavy granite surface plate minimizes the possible impact of surface plate deformation on measurement precision due to work piece weight and makes reliable measurement results possible
- The Y-Axis guide-way is directly integrated into the granite surface plate and is completed with high-strength air bearing guides for excellent long-term stability
- All axes are equipped with embracing air bearings and self-cleaning function to ensure precise and stable operation of the machine construction
- X- and Y- Axis completely protected with bellows to avoid contamination of the guide surfaces
- Ergonomic design for convenient daily operation
- Modular design that is easy to maintain

**XOplus Specifications**

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>Z</th>
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<tbody>
<tr>
<td>XOplus 55</td>
<td>500</td>
<td>500/700/1000</td>
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<tr>
<td>XOplus 77</td>
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<td>1000/1500/2000</td>
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<tr>
<td>XOplus 98</td>
<td>900</td>
<td>1200/1500/2000</td>
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</table>

The design and parameters are subject to change without prior notice due to continuous technical development.

Granite: The Preferred Material for Coordinate Measuring Machines

Due to the physical property of temperature insensitivity, granite is an ideal material in the metrology field. People’s first impression is that aluminum is much lighter than granite. In fact, the specific weight of granite is only 1% higher than that of aluminum while the expansion coefficient of aluminum is almost four times that of granite. Three granite axes of the same material on the coordinate measuring machine can ensure their identical thermodynamic properties.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Steel</td>
<td>7.25</td>
<td>11.411E-5</td>
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<td>205-215</td>
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<tr>
<td>Aluminum</td>
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<td>23.11E-5</td>
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<tr>
<td>Ceramics (Al₂O₃)</td>
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<td>9.11E-5</td>
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<tr>
<td>Granite</td>
<td>2.6</td>
<td>7.91E-5</td>
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</tr>
</tbody>
</table>

**Metrossoft QUARTIS®**

WENZEL Metrossoft QUARTIS® measuring software is one of the most powerful and widely used metrology software in the market which is most conveniently to operate. It can provide customers with precise and significant measurement results quickly and efficiently.

- 1st measuring software using Microsoft Office Fluent™ user interface technology in the field of metrology
- Based on measurements of CAD model, curves and surfaces, and unknown free-form surfaces
- Result-oriented measuring software that can generate visual and vivid reports easily
- A wide range of measurement applications are available such as reverse engineering, computed tomography (CT), die & mould manufacture, etc.
- Special modules such as pipe measurement, high-efficient turbine blade evaluation, or other customized applications are available

**Probe Systems**

### PH10T/M
- Motorized Indexing Head
- Automatically indexable probe head in 7.5° increments. Extensions of up to 200mm possible

### PHOENIX
- WENZEL Optical 3D Measuring Sensor
- The most compact and versatile probe system for scanning on a global scale

### SP25M
- Compact Scanning Probe
- The most compact and versatile probe system for scanning on a global scale

### SHAPETRACER
- WENZEL 3D Line Scanner
- The ideal tool to record and handle point clouds Perfect for tool and die making, and designed for model construction

### TP200
- High precision Touch-Trigger Probe
- Highly precise and suitable for stylus up to 100mm in length. 3D stylus can be changed via tool changer

### PH200™
- Continuous 5-Axis Touch-Trigger Head
- Integrated TP20 probe body. The modules and extension bars can be changed via tool changer

For more measuring probe systems, like MH20i, TP20 or SP80, etc. please contact your local WENZEL office.