ACCTee

New Measurement Style with New Concept
All Measurements and Analyses Available in a Document

ACCTee Integrated Analysis Software

Our newly developed ACCTee software represents the next generation of integrated TIMS software. Based on a new concept in measurement that combines document-based measurement and analysis with leading-edge operability and an intuitive work environment, ACCTee makes all operations available in the document (measurement result sheet), and enables all data and information to be saved with related data. Setting wizards simplify instrument setup and configuration, making it possible for anyone to easily perform a variety of measurement and analysis tasks, optimizing throughput and performance. This is the "All in the Document", next generation integrated software, ACCTee. By converting the measurement result data of the 3D coordinate measuring instrument to ACCTee compatible format (using the 3D coordinate measuring instrument software option), it is also possible to input and analyze it.

Easy-to-Use Interface for Leading-Edge Operability

ACCTee is equipped with a Windows style user interface that is easy for anyone to understand and use. User-friendly and intuitive icons guide you through a series of operations from measurement to the printing of analysis results.

Easy Mode
Ideal for manual measuring systems and inexperienced users, the Easy mode features a comprehensive set of wizards to guide you through a wide range of operations. Simply select the item you want to measure and set the measurement conditions by following the steps in the appropriate wizard. If you do not need to change any settings, just select the measurement item and click the measurement button to execute measurement.

Expert Mode
In the Expert mode you can create a CNC program without having to actually operate the measuring instrument. Then simply run the CNC program to run through all operations from workpiece measurement to results output. This mode is ideal for users of automated instruments and for expert users.
Detector Calibration Wizard

With ACCTee’s detector calibration wizard, you can calibrate sensitivity by selecting any of the following three options: Magnification calibration, Block gage, Level difference master. Next, specify the calibration condition by entering a reference value. Once the installation method for the calibration unit and the measurement start position have been confirmed, calibration is executed. The wizard takes you step by step through the procedure, making sure you get it right.

Effective Utilization as Offline Analysis Software

ACCTee is so designed that it can be used not only as incidental software for operation of roundness measuring instrument but also as user-friendly offline analysis software. If the format can be read with ACCTee, it is possible to import external text data and analyze, print with ACCTee.

Change of Analysis Condition with Preview Function

ACCTee’s analysis condition setting lets make changes to the Centering method, filter, notch setting and other parameters. You can see the analysis results in a preview display, and use trial and error analysis to select the optimum analysis condition.

Gear Tip Analysis

Facilitating automatic gear tip surface recognition and enabling roundness evaluation just using the gear tip surface, this function eliminates the need to set a number of notch segments.

Self-Diagnosis Function

Always running in the background, the built-in self-diagnosis function provides valuable support whenever you run into trouble. Error messages let you know where the problem is, what it is, and what the possible solution, allowing you to immediately take the appropriate action in order to resolve the problem as soon as possible.

Available in Multiple Languages (Standard Function)

ACCTee is available in multiple languages, including Japanese, English, German, French, Italian, Spanish, Chinese, Korean, Czech, Polish and Portuguese so that it can be used in any country around the world. (Contact us beforehand, if you are using it overseas.)

Straightness Measurement Function with Edge Detection

This function automatically identifies the edge-to-edge distance of a workpiece and sets a measuring length. It is ideal for rectilinear measurements of workpieces such as crankshafts.
Optional Programs

Piston profile analysis function

This is an optional function dedicated to piston analysis. It analyzes measurement data of piston profiles by checking against nominal values. Two kinds of analyses, namely, oval analysis to check the profile in the circumferential direction and barrel analysis to check the profile in the rectilinear direction can be performed. Nominal values, which include the upper and lower limits of tolerance, can be set for each angle in the oval analysis and for each height in the barrel analysis.

Oval shape

2D Display

Rectilinear deployment display

Barrel shape

2D Display

Slope analysis function

With respect to roundness, flatness or Z axis straightness data, this function calculates the difference between the maximum deviation and minimum deviation from a standard circle in a designated section and obtains the value for an entire cycle by moving the section by a certain angle. It is also possible to display the section where the difference is the largest. It is useful in determining the section with the largest step for workpieces with periodic convex profile.

*1 For Z axis straightness data, the difference between the maximum deviation and minimum deviation from a standard straight line is calculated for a designated section and the value for the measured length is obtained by moving the section by a certain length.

Analysis is performed by shifting the section by every angle θ from L1 to L2.
**Step volume analysis function**

With respect to roundness or flatness data, this function determines the difference between two points of designated angles in terms of deviation from a standard circle. The two points for the analysis can be easily designated by using a mouse. It is also possible to automatically determine acceptance or rejection by setting standard tolerances in advance. It may be used for the calculation of the deviation in the radial direction between the starting point and the endpoint of the groove in grooved workpieces.

<table>
<thead>
<tr>
<th>Angle 1 - Angle 2</th>
<th>Delta 1 (μm)</th>
<th>Delta 2 (μm)</th>
<th>Step height (μm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°</td>
<td>0.05</td>
<td>0.06</td>
<td>0.03</td>
</tr>
<tr>
<td>2°</td>
<td>0.07</td>
<td>0.08</td>
<td>0.04</td>
</tr>
<tr>
<td>5°</td>
<td>0.10</td>
<td>0.11</td>
<td>0.05</td>
</tr>
<tr>
<td>10°</td>
<td>0.15</td>
<td>0.16</td>
<td>0.07</td>
</tr>
<tr>
<td>15°</td>
<td>0.20</td>
<td>0.21</td>
<td>0.09</td>
</tr>
<tr>
<td>25°</td>
<td>0.30</td>
<td>0.31</td>
<td>0.15</td>
</tr>
</tbody>
</table>

**Difference data creating function**

This function calculates and generates differential data for each angle, using roundness data for two cross-sections or flatness data for two areas. Since the differential data is generated as roundness (or flatness) data, it is also possible to perform the step volume analysis and Fourier analysis as with the original data. It is effective in analyzing the thickness trends of workpieces for each angle from the measurement of top and bottom surfaces of disk-shaped workpieces or inner and outer diameters of cylindrical workpieces.