TiMS

Continuously evolving analysis versatility and expanding the scope of analysis

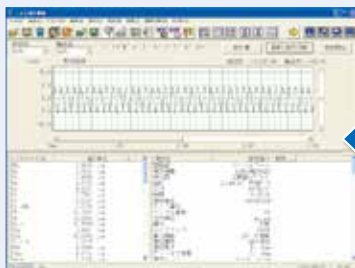## TiMS Integrated Measuring System Software

TiMS performs measurements, analyses and evaluations of data on roundness measuring instruments. It's easy-to-use interface allows measurement and analysis conditions to be specified quickly and easily. Graphical representations of surface profile characteristics for bearing area curve (BAC), power spectrum curve, Fourier analysis are provided.
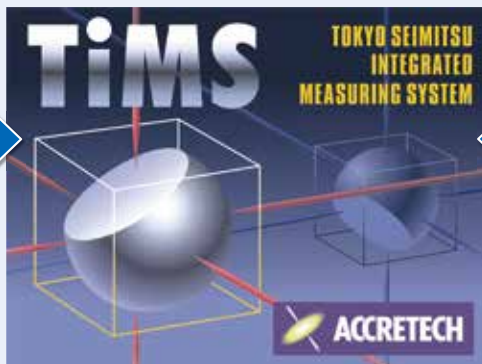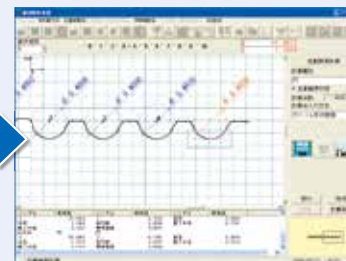
Integrated Measuring System

Easy operation

Various functions such as AI function, customize function and auto measuring range expansion function reflect ACCRETECH's commitment to developing measuring tools that are easy to use and understand.

TiMS

TiMS is short for "TOKYO SEIMITSU Integrated Measuring System". It is an advanced system that provides unrestricted access to data produced by our measuring instruments. TiMS is currently used by a large number of satisfied customers all over the world.
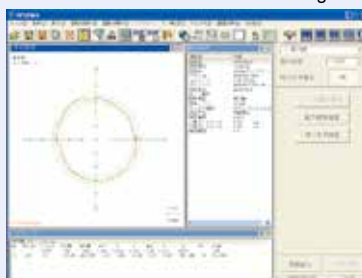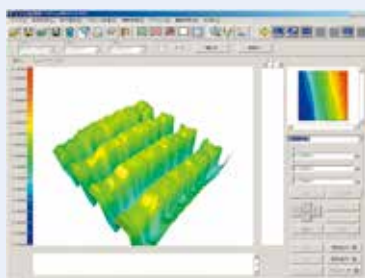
TiMS Software

High efficiency measurement

A wide range of functions are provided to facilitate highly efficient measurement such as a teaching/playback function for full automatic measurement, multitasking for parallel processing, high speed alignment and much more.

Each program is linked to icons

Designed to maximize performance and efficiency, the system provides measuring windows for each instrument, enabling you to operate multiple units, easily switching between windows just by clicking icons.

Setting screen of measurement conditions

Measurement result analysis screen (Coaxiality)

Examples of Measurement Items

Roundness

Concentricity/Thickness variation

Coaxiality/Shaft center roundness

ACCRETECH TOKYO SEIMITSU

Centering/Tilting support function (patent pending)

Our original algorithm simplifies troublesome centering and tilting operations.

Preparation
Measure the first and second sections of a workpiece.

Tilting adjustment
Adjust to match the tilt of the rotational axis of the workpiece and the rotational axis of the table.
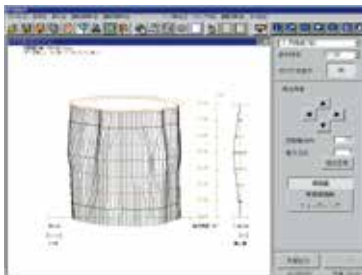
Centering adjustment
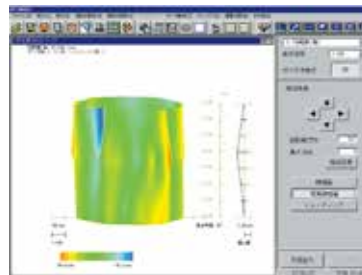Adjust to match the rotational center of the workpiece and the table.

Visual representation of cylindrical profile

Cylindrical profiles are analyzed visually and viewpoints can be moved to any location.
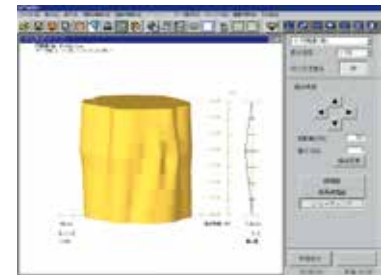Contour line and shading displays clearly identify defects such as shrinkage of a plastic product or deformation of a pressed part.

Cylindrical form (3D profile display)
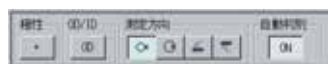
Cylindricity (Contour line display)

Cylindricity (Shading display)

Easy operation

• **Rearrangement of icons**
Customizing and/or hiding icons as needed enhances operability.

• **Automatic recognition of measuring direction**
The system automatically recognizes the setting of a pickup measuring direction.

• **Automatic magnification calibration function (patented)**

Teaching/Playback function (patented)

Once a measuring procedure (including the alignment operation) has been registered, everything from measuring to printing can be performed automatically.

Power spectrum/Fourier analysis

Analysis of peak components in a roundness profile enables noise and vibration evaluations. The power spectrum graphically shows the strength of each amplitude component (which have different frequencies in roundness profiles). A Fourier transform of extracted curves is provided for analysis of periodicity in waveforms.

Power spectrum

Bearing area curve/Amplitude distribution function

By analyzing surface characteristics of a workpiece using the bearing area curve and/or amplitude distribution function, you can assess its wear and life expectancy.

Bearing area curve display

Optional programs

Gear analysis (patented)
The peaks of notches in a workpiece are connected in order to perform roundness analysis.

Piston profile analysis
Design value collation can be performed for oval and barrel profiles. Value data for each angle or numeric expression can be used as design values. Evaluation of ring groove tilt and waviness is also available.
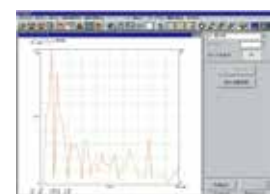
Oval profile

Barrel profile

Software