





- Icon Based, Interrupt Driven Operation
- Full Color Graphics, Such as Analog Meters, Level Bars, Waterfall Charts and Histograms
- Uninterrupted Background Data Collection While Using Other Programs
- Use of DDE for Real-Time Export to Other Applications
- Context Sensitive On-Line Help
- Macro Box Modularization of Common Setups Into One Reusable Icon



WorkBench for Windows is a measuring, process control, and analyzing software package which takes full advantage of the features and graphical interface provided by Microsoft Windows.

# Intuitive Operation

With WorkBench for Windows, a measuring, process control or simulation task can be set up direct on screen, freely and in any configuration of the integrated functional components, by selecting and connecting modular elements. These elements can be arranged without limitations and most comfortably, thanks to the intuitive operating environment. Even highly specialized tasks can be solved immediately on the screen, interactively and without difficulty.







### Measuring, Control and Analysis Functions

Among the module functions provided are A/D and D/A . converters, Pre/Post and Start/Stop triggers, Digital I/Os, mathematics from fundamental arithmetic to integral and differential calculus, statistics, digital filters of several types, frequency analysis including various evaluation windows, signal generators for simulation purposes, scopes for the graphic display of results, logical connectors like AND, OR, NOR etc., a chart recorder, file I/O, timer, digital meter, bar graph, analog meter and more.

#### Ample Resources

The maximum worksheet size is 2,000 by 2,000 pixels and a worksheet can contain up to 26 modules. For most modules, up to 16 inputs/outputs can be configured. Thus, the virtual working area at the user's disposal is much larger than what can be presented in the active window on-screen. When dealing with more extensive applications where the complete arrangement of module symbols will not fit on the screen, the user can scroll the screen window vertically and horizontally.

# Display of the Results

Readings are directly displayed graphically or numerically by means of specially assigned modules. For example, this can be done

effectively by making use of scope modules. Each one provides a freely sizable window in which data from several channels can be displayed; a system of suitable coordinates (linear, logarithmic, polar, waterfall) and different color codes (for multiple signals) can be selected. Freely scalable analog instruments, bar graphs and LED indicators are especially helpful when it comes to process control and testing. As these elements can be freely placed and combined, all the instruments necessary for any process can be integrated completely.

# Storing Data and Data Exchange

The acquired data and process results can also be saved to files so that they can be retrieved for further purposes later. Using Dynamic Data Exchange (DDE), data can also be transferred directly to other Windows applications supporting the DDE protocol. For example, Excel and applications with DDE capabilities may be used to start WorkBench and control it while running an experiment.



IBM PS/2

## **Process Control**

External systems can easily be manipulated by employing appropriate modules for digital I/O or D/A conversion. WorkBench for Windows provides a wide range of powerful modules for digital operations (AND, OR, NOT etc.), counters and PID control functions.

# **Base Edition Functions**

X-Y Graphing Y-t Graphing PID Control **RS-232** Serial interface Trigonometry Thermocouple Linearization Internal Waveform Generator Chart Recorder Analog Meter

#### Extended Edition **Additional Functions**

Statistics Filters **Regression Analysis** FFŤs Correlation Histograms

System Requirements: A personal computer with a standard keyboard, mouse or similar pointing device, 80386 (minimum) or 80486 (recommended) processor, or 8 MB RAM, a high resolution display adapter which is supported by Windows (e.g., EGA, VGA or super VGA) 4 MB free hard disk space, a 3.5 or 5.25" floppy drive

#### **Data Acquisition Hardware** Supported

WB-FAI, WB-AAI, WB-ASC, DS-12, DS-16, WB-WORKMATE, WB-FLASH\*, WB-DIO\*, WB-AVO\* \*Consult engineering for availability

To Order <b>(Specify Model Number)</b>		
Model Number	Price	Description
SWD-WBWIN	\$ 995	Workbench for Windows Base Edition
SWD-WBWIN-EX	1295	Workbench for Windows Extended Edition

Each unit supplied with 3.5" disks and complete operator's manual Ordering Example: SWD-WBWIN Workbench for Windows Base Edition, \$995.