

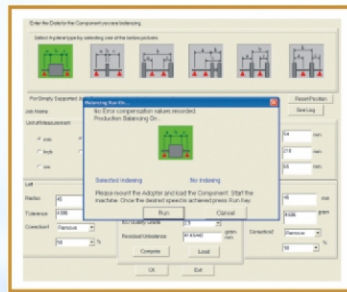
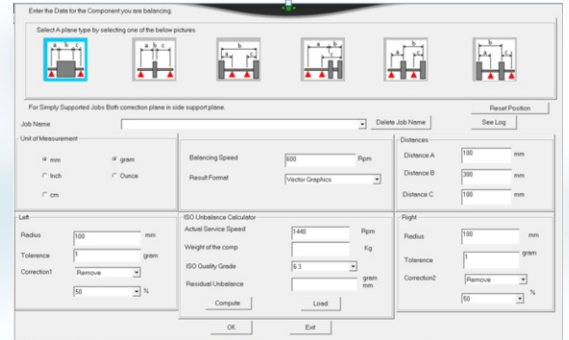
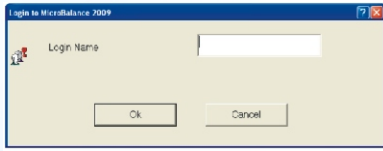
Balancing Instrumentation

The heart of all Proteq Dynamic Balancing Machines is the Microprocessor Based Electronic Measurement system.

BASE (BALANCING ASSIST SOFTWARE FOR ENGINEERS)

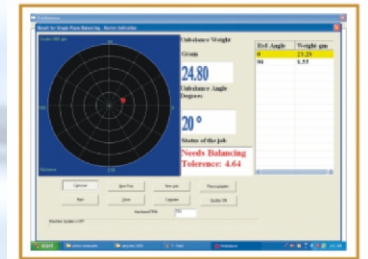
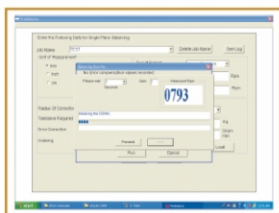
BASE is a windows based software and hardware package representing the state of the art in PC based dynamic balancing instrumentation technology. It runs on any standard PC or laptop without requiring any special configuration. The software is menu driven with simple data

entry. The operator simply needs to click OK with the mouse to start the measurement cycle automatically. It has a built in Calculator to set balancing tolerances in compliance with ISO 1940, thus



the operator need not manually calculate the residual unbalance tolerance required. The display of unbalance amount and location for each plane is available in Polar, Vector or Cartesian formats on the PC screen. Rotor data and test results are automatically saved and stored on the hard disc of the PC, the operator simply recalls the rotor data from the memory at the time of balancing. Log data can be

exported to Excel or Word format for further analysis. It is possible to select any geometrical configuration, feed data through keyboard, set tolerance levels, save and upload rotor history with data storage of more than 10000 rotors. The results are displayed in large and easy to read formats simultaneously in vector and polar modes. Printout facility for each balancing run is available on demand.



MABI (MICROPROCESSOR ASSISTED BALANCING INSTRUMENTATION)

MABI is a fully digital microprocessor based system with the facility of direct data input from the front panels and direct display of the status and balancing results on its high illumination, high readability 7 segment digital LED displays. Using a true digital system developed by the company, the entire signal processing is done digitally using high speed ADCs and latest VLSI technology. The Microprocessor Assisted Balancing Instrumentation MABI electronics is designed to ensure a high degree of reliability coupled with the use of switched capacitance filters for precision. The entire system has no moving parts which could cause a fatigue failure, thus enhancing hardware reliability. A versatile system software makes balancing extremely simple for the operator. The printer can also be interfaced with Electronic Unit to get Hard copy print outs of balancing results.

Efficient fault diagnostics are available to provide instantaneous display of errors for prompt rectification. Some special facilities such as display of rotor RPM prior to display of unbalance values and no suppression of unbalance or zero error problems allow even untrained and unskilled operators to use the machine with minimal exposure. If a rotor is balanced within user-specified tolerance levels the machine displays "BALANCED" to indicate to the operator that no further correction is required. Special software routines for automatic compensation of adapter eccentricity and remount errors come as standard facility.

