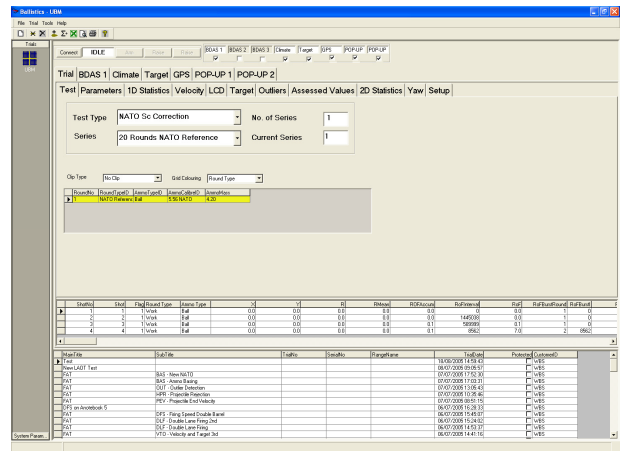


BALLISTICS CONTROL SOFTWARE - BallisticsDB

All of the measuring equipment produced by the Company has an integral microprocessor. This enables the units to communicate digitally by cable, radio or other telemetry link to the Range Processor.

The MSI Ballistic Control Software – BallisticsDB - is developed in-house for the control of all sensor systems produced by the Company.

Each system has its own associated control Tab on which the unit's setup parameters can be configured. Data received from the unit is displayed on the tab along with all statistical analysis. Printouts may be obtained and calibration functions applied.



Column	Visible	Printout	Width
Extreme Spread (mm)	<input type="checkbox"/>	<input type="checkbox"/>	900
Group Size (mm)	<input type="checkbox"/>	<input type="checkbox"/>	1065
Mean Radius (mm)	<input type="checkbox"/>	<input type="checkbox"/>	1380
Mean Radius (mils)	<input type="checkbox"/>	<input type="checkbox"/>	930
R 50% (mm)	<input type="checkbox"/>	<input type="checkbox"/>	1170
R 100% (mm)	<input type="checkbox"/>	<input type="checkbox"/>	1125
Group SD (mm)	<input type="checkbox"/>	<input type="checkbox"/>	1545
Group SD (mils)	<input type="checkbox"/>	<input type="checkbox"/>	1545
Group Circle (mm)	<input type="checkbox"/>	<input type="checkbox"/>	1545
C-X (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	900
C-Y (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	825
Dev X (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1035
Dev Y (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1020
Mid X (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	885
Mid Y (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	960

The software is customised prior to shipment to provide an integrated 'Trial' Tab specific to customer requirements. As each shot is fired, all possible data is recorded automatically, ensuring that there is minimal risk of transcription error. As a result, an individual record can contain a considerable amount of data. Data fields in the trial table can be switched on and off for the purposes of simplifying screen displays and printouts, however all data is still recorded to disk in standard formats, typically the Microsoft Excel or Access format.

This common data format allows the user to undertake 'desktop' trials on historical data, thus reducing the need for costly and time-consuming live-firing trials.

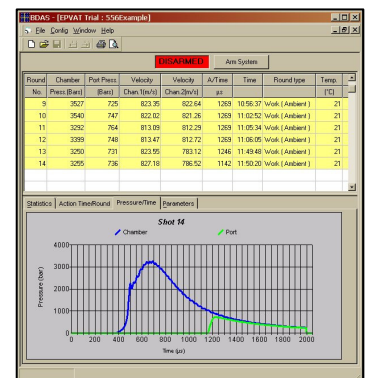
The software is provided with a wide range of data analysis functions as standard, and additional functions are available as options e.g. extreme range and forensic analysis utilities.

The statistical functions may be sub-divided according to various groupings. For example, the fall of shot of ball and tracer firings may be displayed in different colours on the graphic display. Similarly the shot pattern from individual barrels of a multi-barrel weapon can be shown and the data analysed separately.

The Ballistic Data Acquisition System (BDAS), can also be controlled by the software. The BDAS control Tab displays Pressure-Time curves and Action-time from Piezoelectric and other transducers fitted to the standard test barrels. These barrels are fitted to the Universal Receiver, which is also provided by the Company.

Meteorological and environmental data relevant to the trial may be recorded using the Company's range of solid-state monitoring systems. Data from these units are recorded on a shot-by-shot basis.

As many of the systems use GPS, every event is synchronised, which improves the integrity of the data by eliminating false triggers.



A simplified sub-set of the complete software is available for Velocity and Rate-of-Fire systems. This software is known as KINETIC.