

# WELDING EXPERT

INNOVATIVE IMAGING STATION  
FOR WELD BEAD MEASUREMENT



# WELDING EXPERT SYSTEMS

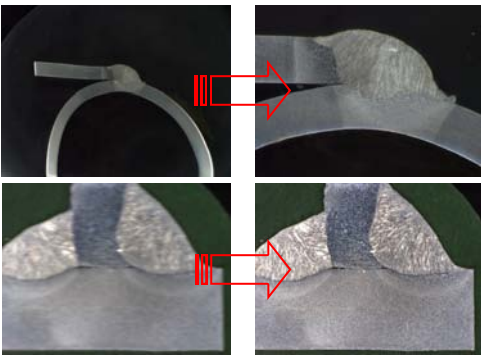
## Achieving Optimum Weld Bead Control

Welding Expert is a groundbreaking welding quality tool for fast and highly accurate weld bead analysis. Just a few clicks and get image capture, measurements, archiving and complete quality control reports.

## Easy sample placement

An inverted optical system is a unique feature of Welding Expert.

This eliminates time-consuming positioning of the sample under the stereomicroscope using modeling clay,....Just put polished sample on the glass surface.



## No optical adjustment / Full PC control

The built-in digital camera & motorized optical zoom provide an easy to use system, eliminating manual magnification selection and manual focusing.

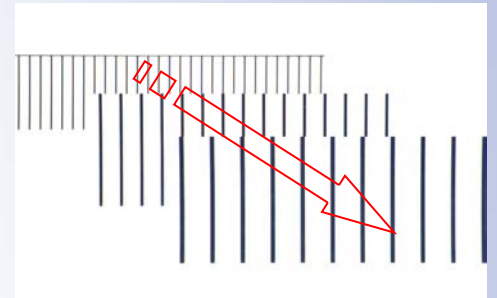
Digital magnification selection & autofocus are PC controlled.

Place the sample, call the appropriate weld bead program and instantly get the sharpest image at the proper magnification.

## One-click automatic calibration

Welding Expert offers a one pass automatic calibration procedure throughout the entire zoom range.

The calibration is loaded automatically with the set magnification, which guarantees maximum accuracy.



## CHOOSE FROM TWO SYSTEMS FOR A WIDE RANGE OF APPLICATIONS

	WELDING EXPERT HR II	WELDING EXPERT HR HM
Main applications	Mig/Mag Welding / Spot welding...	Laser Welding / Electron beam welding...
Magnification	2.5 X to 50X *	20 X to 240 X *
Field of view	80 mm to 4.5 mm	8.27 mm to 0.68 mm
Accuracy	Up to 0.4 µm	Up to 0.06 µm
Output	USB 2.0	2 * USB 2.0
System includes	Welding Expert HR II imaging system / Welding Expert software / Calibration slide / 5 glass windows / Power supply cable / USB2.0 cable / 1 USB protection dongle	Welding Expert HR HM imaging system / Welding Expert software / Calibration slide / 5 glass windows / Power supply cable / 2 *USB2.0 cable / 1 USB protection dongle
Dimensions	Height*Width*Depth : 35cm*24.5cm*22cm (13.8"*9.6"*8.7") - 4 Kgs 110V/220V 50Hz/60Hz	Height*Width*Depth : 39cm*24.5cm*20.5cm (15.3"*9.6"*8.0") - 5 Kgs 110V/220V 50Hz/60Hz
Computer	Windows XP / Windows 7 32 & 64bits 2 Ghz Processor / 2 GB RAM / 1280*1024 graphic card minimum Excel 2003 Pro Edition or better	Windows XP / Windows 7 32 bits (only) 2 Ghz Processor / 2 GB RAM / 1280*1024 graphic card minimum Excel 2003 Pro Edition or better

\*These magnifications are based on a 19" LCD monitor. A tolerance should be considered.

# WELDING EXPERT SOFTWARE

Professional software for welding quality assurance



## SYSTEM ADMINISTRATION

Welding Expert software is 100% dedicated to weld bead measurements and can be easily configured to match the most advanced welding quality standards.

A complete description of the welded part and the weld bead acceptance criteria are registered and protected by password.

All needed measurement tools are available : sheet thickness, penetration depth, minimum penetration depth, leg length, throat, theoretical throat, undercut...

All parameters are automatically loaded and processed during measurements achieved by operators.

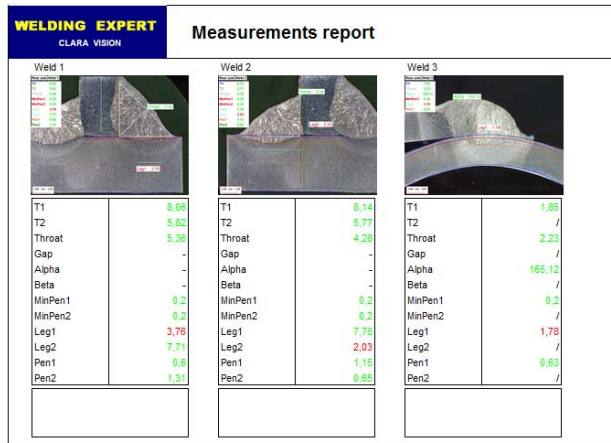
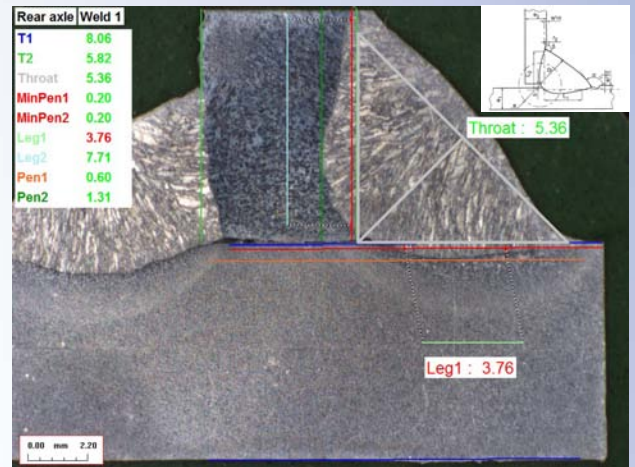
## FAST & ACCURATE MEASUREMENT

Easy to learn and use, weld bead measurements have never been so fast with Welding Expert software.

Measurement results are viewed as red or green (pass/fail), quickly indicating welds that are in or out of tolerance.

During measurement, a handy viewer window is available where a schematic image of the part can be displayed helping to eliminate the need for external documentation.

Images, measurement results and comments are automatically saved into Excel spreadsheets.



## EASY GENERATION OF PROFESSIONAL REPORTS

Welding Expert provides exceptional reporting, filtering and data mining capabilities.

A wide range of reports are available and can be customized with your own logo and information.

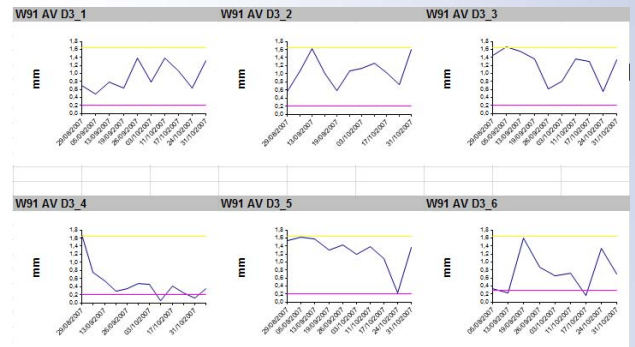
All results can be filtered by date, part, batch number, shift, .....

For the most advanced users, Excel macros are totally open allowing complete report customization.

## EVOLUTION PROCESS AND MEASUREMENT ANALYSIS

As an option, Welding Expert software can be provided with an extra Excel macro module for the qualitative monitoring of welds beads and parts.

One mouse click allows you to follow the welding process evolution, And easily check measurements which are in or out of set acceptance criteria...



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## AMONG WELDING EXPERT REFERENCES

The biggest names in the industry rely on Welding Expert systems for their welds quality assurance : Automotive manufacturers, Automotive sub suppliers, ...

Please contact us to get Welding Expert's reference list.



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