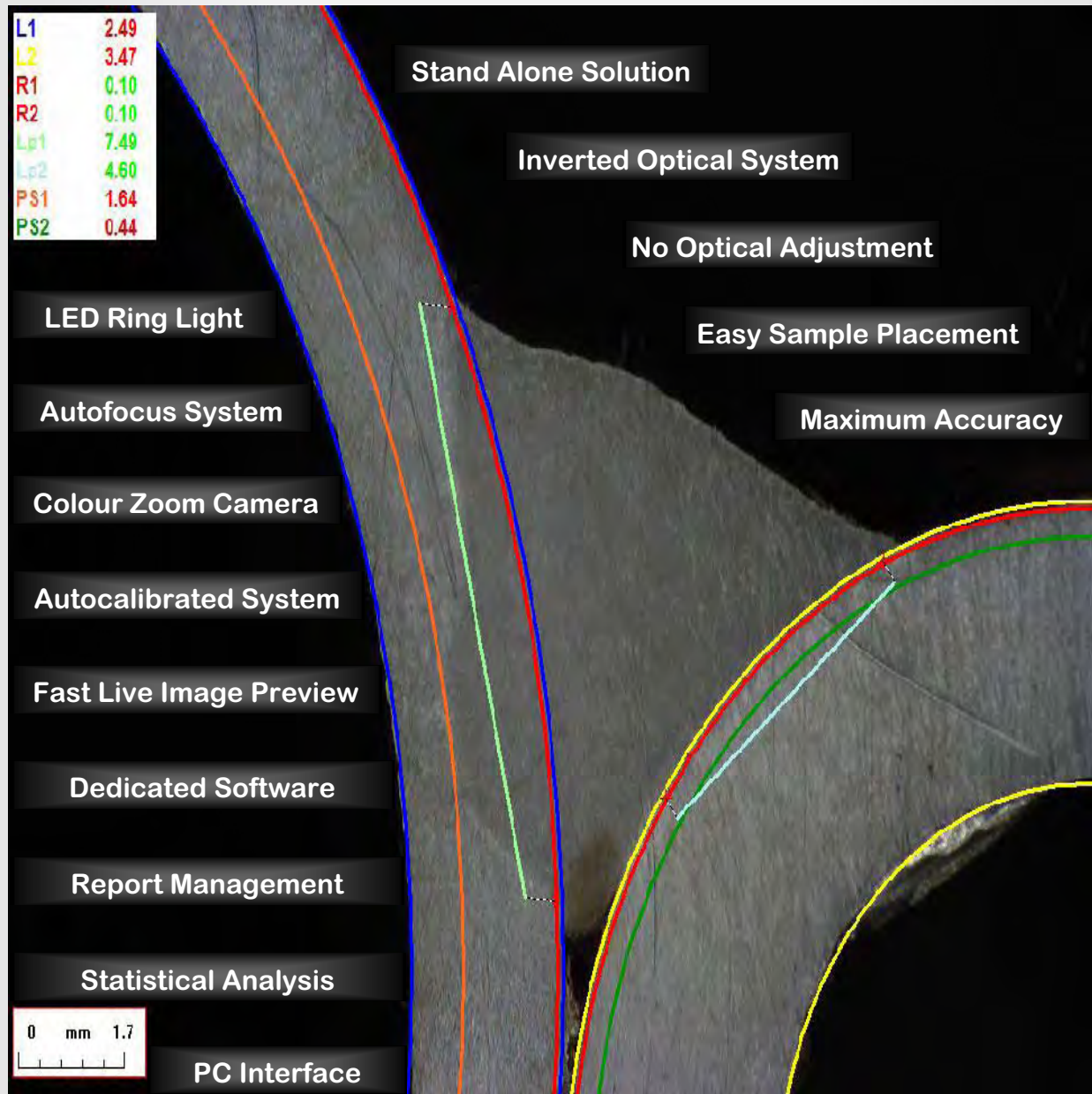


Clara Vision - France

Welding Expert

REVOLUTIONARY IMAGING STATION
for
WELD BEAD MEASUREMENT



To - The - Point measurement system, offering what is needed and expected by QC - FA Welding Professionals; ensuring quick and reliable measurements with 100% Accuracy and Reproducibility.

Superior Design with User Friendly Functionality !

Stand Alone Solution

Unique design of Welding Expert offers an all in one Smart solution as alternative to:

Stereo Microscope

CCD Camera

Image Analysis Software

Inverted Optical System

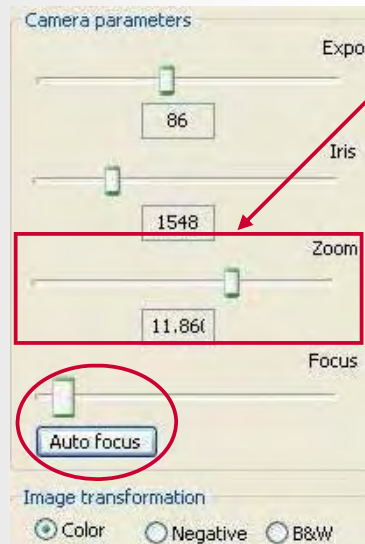
Easy Sample Placement

Inverted optical system with flat glass surface on the top is distinguishing feature of Welding Expert. Thereby eliminating Tedious Positioning of the sample under the Stereo Microscope using clay or etc. Just put polished sample on the flat glass surface.



No Optical Adjustment

Inverted Optical System intends to eliminate UP / DOWN movement (like microscopes); which means Welding Expert performs automatically regardless of sample height.



Digital Magnification Selection

Welding experts offers Digital Magnification-selection over conventional Manual Magnification selection. Claravision offers Magnification as per application needs:

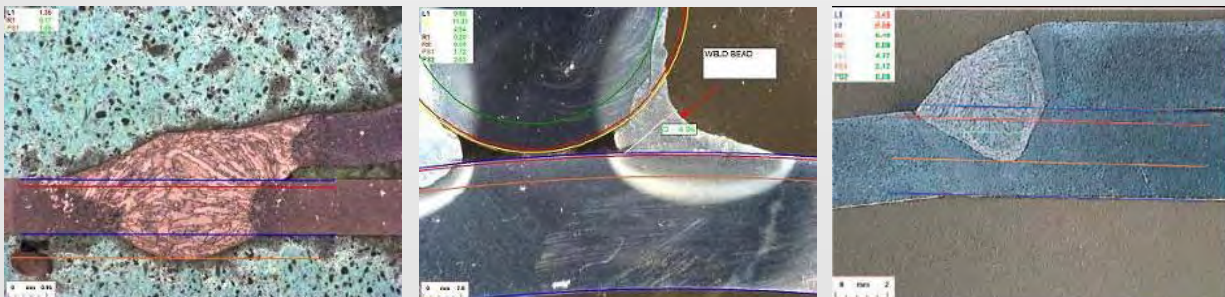
1.5x to 25x (fov: 40mm to 8mm)

2.15x to 50x (fov: 15mm to 4mm)

Autofocus System

Colour Zoom Camera

In-Built High Definition colour zoom camera with superior clarity & High Resolution. Genuine Images with Desired contrast & excellent sharpness; which means guaranteed Authenticity.



New Era Technology Entrusts Exceptional Performance !

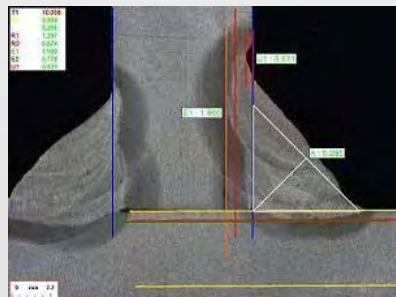
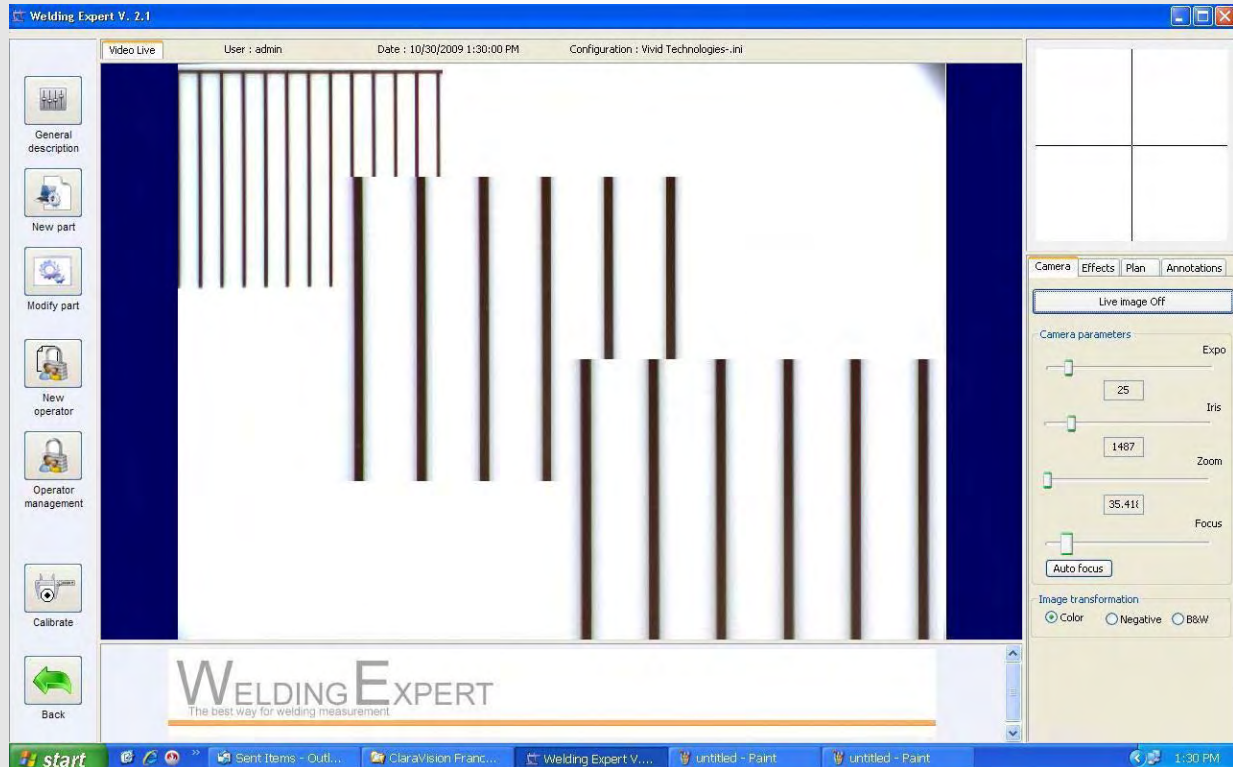
LED Ring Light



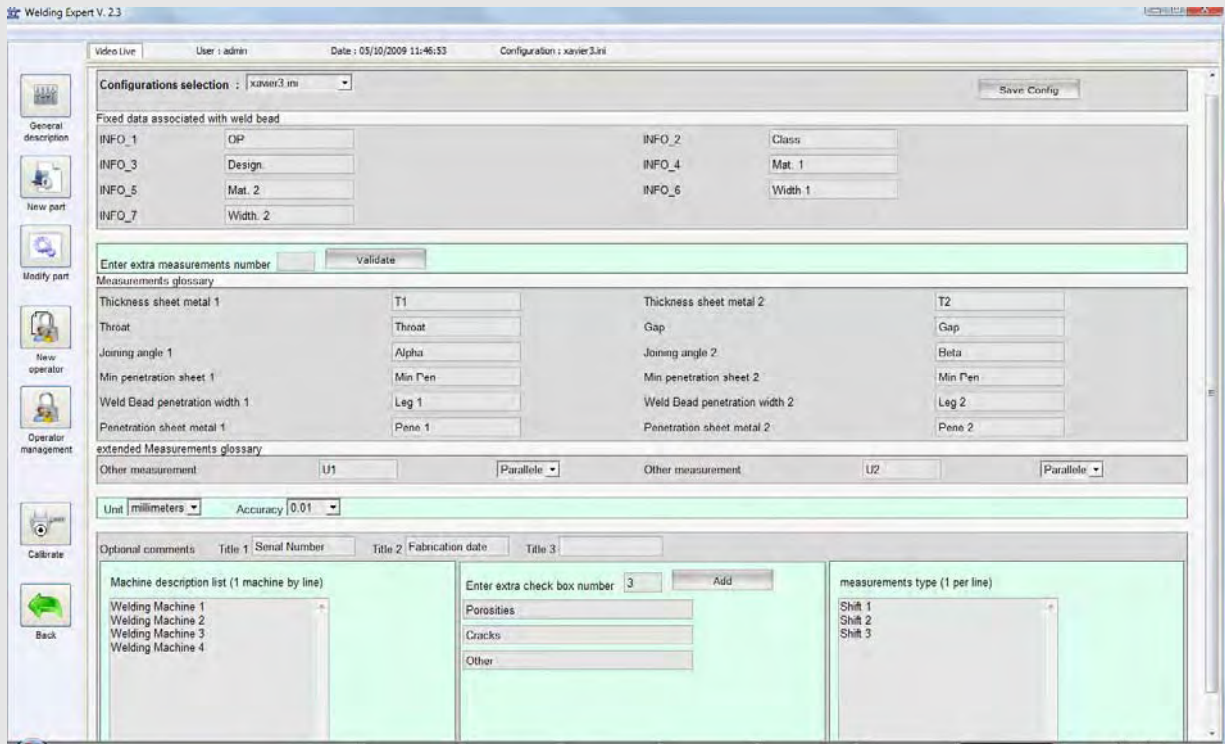
The optimized ring light not only ensures high contrast image but also very bright illumination to the sample surface. Also provision of adjusting the intensity of LED Ring Light with sliding knob, is of great utility when dealing with different kinds of components. The most distinct advantage is 10,000 hour life of LED Ring Light.



One pass Auto-Calibration throughout entire Zoom Range !



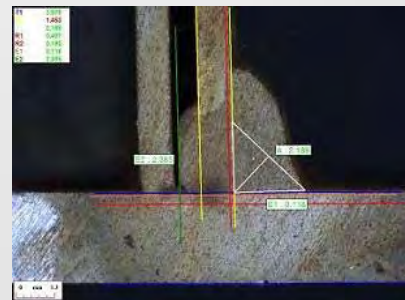
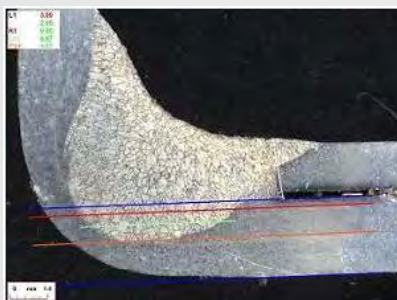
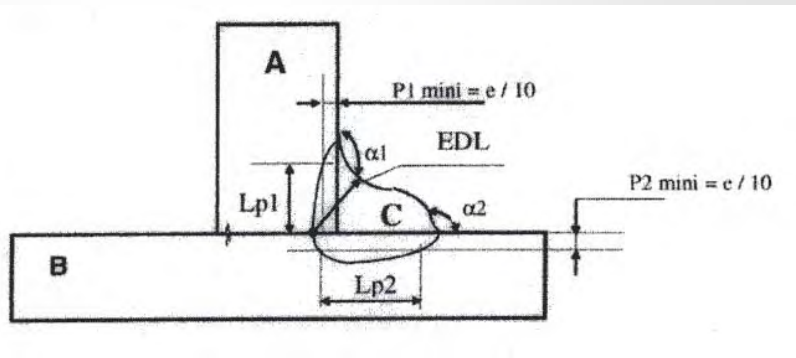
Dedicated Software with User Friendly Interface !



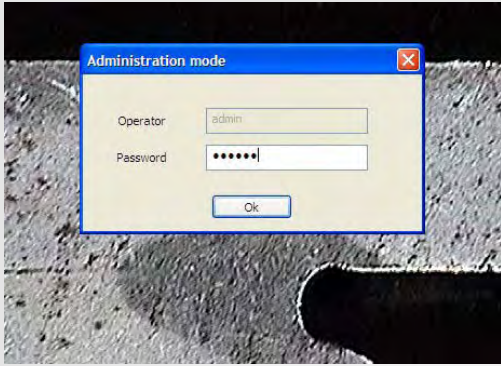
Welding Expert software is straight forward & intuitive. A description of each part and its acceptance criteria are input into a simple form. When a part is ready for measurement, its parameters are automatically loaded. Once measured, data from the selected part is stored and becomes immediately available for a report or future statistical analysis.

For the first time “A Complete Imaging Solution” for Weld Bead Analysis, which offers following Standard Measurement Tools:

1. Thickness of Sheet - Metal 1
2. Thickness of Sheet - Metal 2
3. Throat Thickness
4. Gap between metal sheets
5. Joining Angle 1
6. Joining Angle 2
7. Minimum Penetration Sheet 1
8. Minimum Penetration Sheet 2
9. Weld Leg Length (Penetration Width) 1
10. Weld Leg Length (Penetration Width) 2
11. Penetration in Sheet - Metal 1
12. Penetration in Sheet - Metal 2



Password Protected Administration Mode for Part & Weld Bead Creation !



A complete description of the welding part and the weld bead acceptance criteria are registered and protected by password. All parameters are automatically loaded and processed during measurements achieved by operators. Linear, Circular, Angular, etc. types of measurements can be preset.

-  ← Software General Settings
-  ← Part & Weld Management
-  ← Modify Existing Parameters
-  ← Create Authorised Operator
-  ← Modify Authorised Operators
-  ← Automatic Spatial Calibration

	L1	L2	G	b	Alpha 1	Alpha 2	R1	R2	W1	W2	P1	P2	Off Axis left	Off Axis right
Sel.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Min.	7.85	7.8	6	0	125	0	0.78	0.78	10	5	0.78	0.78	0	0
Max.	8.15	8	6.5	0	130	0	0.81	0.81	12	7	3	3	0	0

Thickness 1	Thickness 2	Minimum penetration 1	Minimum penetration 2
<input checked="" type="radio"/> Lines measurements <input type="radio"/> Circular measurements <input type="checkbox"/> Full shape	<input type="radio"/> Lines measurements <input checked="" type="radio"/> Circular measurements <input type="checkbox"/> Full shape	<input checked="" type="radio"/> Relative <input type="text" value="10"/> <input type="radio"/> Fixed <input type="text" value="1"/>	<input checked="" type="radio"/> Relative <input type="text" value="10"/> <input type="radio"/> Fixed <input type="text" value="1"/>
<input checked="" type="checkbox"/> Thinnest penetration			

Part selection : FAU 45 734 Weld bead selection : C1 Machine selection : SAF 01 Type :

	L1	L2	G	Alpha 1	R1	R2	W1	W2	P1	P2
Min.	7.85	7.8	6	125	0.78	0.78	10	5	0.78	0.78
Measurements	8.15	8	6.5	130	0.81	0.81	12	7	3	3
Max.	8.15	8	6.5	130	0.81	0.81	12	7	3	3

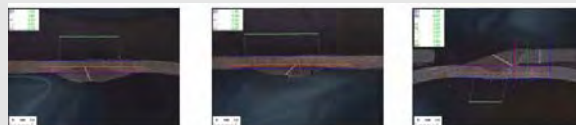
Merge drawings Merge measurements Merge scale bar
 Bad penetration Porosity Crack
 Default

Measurements results are viewed as Red or Green - Quickly indicating welds that are in or out of tolerance.

During measurement, a handy viewer window is available where an image of the part drawing can be displayed - to eliminate the external documentation. Also Administrator access & password authorization control for all users.

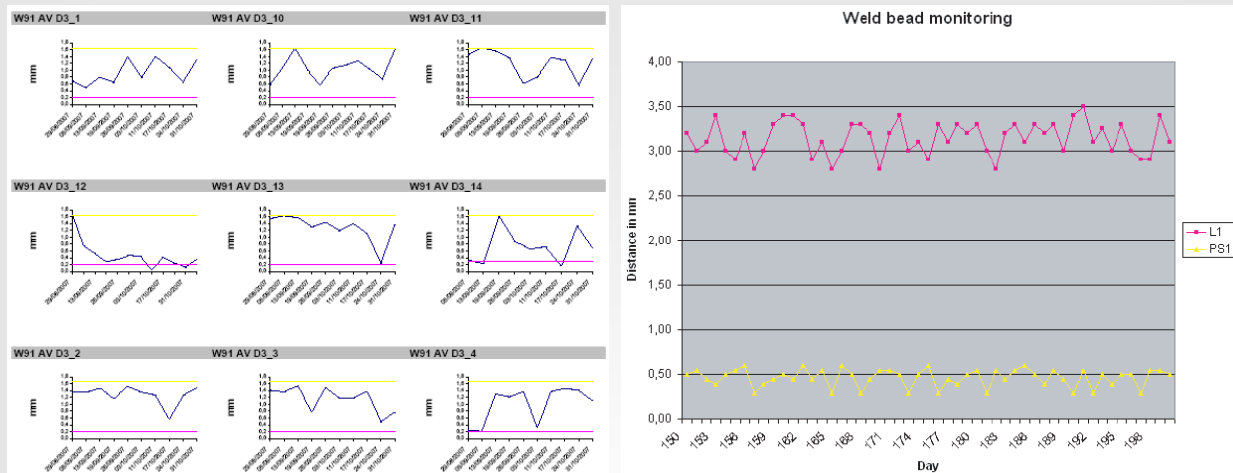
Report Generation

For single as well as multiple weld beads, Report can be created with option for an image with the measurements to be included. Either standard HTML Report or Excel Report can be exported. All parts measurements are saved into global files for statistical purpose.



Report Management & Statistical Analysis !

Welding Expert includes an Excel Macro command module for the qualitative monitoring of weld beads & parts: Evolution of weld bead in time, distribution, variance, standard deviation, etc. Statistical tools are provided to ensure a complete tracking of the welding process.



Technical Data

System Includes

- Welding Expert bench top console with internal camera
- Remote Zoom control lens
- Power Adjustable LED Ring Light
- Weld Bead Measurement and Report Software
- Calibration Slide & 5 Glass surfaces
- 2 USB Interface Cables
- 1 USB Protection Dongle

System Dimensions

Height = 13 inch
Width 10 inch
Weight = 3 Kg

Power Requirements

Voltage = 110 / 220 V
Frequency = 50 / 60 Hz

Computer Recommendations (*Computer is not supplied with system)

Current IBM style PC with 1GHz Processor, 1Gigabyte RAM, Display card with 64 Megabytes of on board memory (1280X1024 display capacity) with Windows 2000 / XP / Vista Operating System.

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