

WeldWatch™ Video Monitoring System



V2014-Z Ultra-Dynamic-Range™ Welding Camera & Software

Overview

The WeldWatch Video Monitoring System is a complete solution for your weld monitoring and viewing needs. It is composed of the V2014-Z 10x zoom color welding camera with our proprietary WeldWatch Software. The V2014-Z camera has Ultra Dynamic Range specially designed for live viewing of arc welding. The WeldWatch software is tightly integrated with the camera providing close control to get the maximum performance from the hardware. WeldWatch performs extensive image processing, in real time as well as digital recording and playback of weld video and still images.

Benefits

- See the arc, electrode, puddle and joint before, during and after the weld.
- View and record industrial weld processes for real-time monitoring and quality control
- Record and review welds in the lab or in welder training
- Create marketing and instructional videos
- Big-screen support to project welding to a group

WeldWatch System Features

Camera

- Full Color, resolutions up to 640 x 480
- 140 dB dynamic range (10,000,000:1)
- Up to 30 fps (frames-per-second) at 640x480
- Built-in Lens with 10x optical zoom
- Filter-less allowing arc anywhere in the frame

Factory ready

- Solid aluminum case
- Replaceable spatter-shield
- Optional Air-cooled case
- 2 bright LEDs for setup
- Powered over USB-2
- Compact 2" x 3" x 3.8" (50mm x 75 x 95)
- Lightweight 24 oz. (680 g)

WeldWatch™ PC software (included with cameras)

- Low Latency Digital Image Processing
- Proprietary Log Rendering
- Rotate, flip the image
- Integrated Recording and Playback
- Digital zoom 1x – 10x (1x to 100x total)



V2014-Z Color Zoom Video Camera



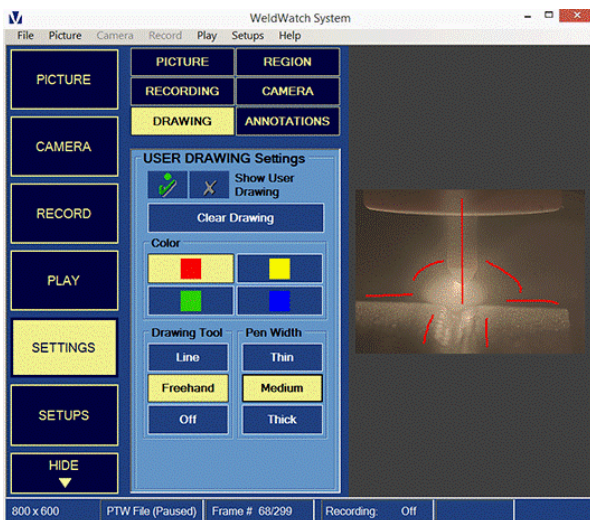
Camera with laptop and weld goggles

Applications

- Monitor weld or cladding machines
 - Away from smoke and danger
 - Improve ergonomics and safety
- Develop and debug new welding processes
- Produce marketing videos with high quality imaging for MIG, TIG and LASER welding
- Record weld processes for quality improvement
- Add a new dimension to training with recording and close-up views; provide “aha” learning.
- Observe welds in tight spaces
- Use optional goggles to weld-by-camera



V2014-Z Screen Shot – TIG on Aluminum



WeldWatch Software Interface

Technical Details

Built-in Lens

- 10x Zoom (4.9mm – 49mm)
- FOV (60° -wide - 7° -zoom)
- f /2.1 – wide, f /3.2 - zoom
- Automatic Iris
- Remote focus
- Focus distance to object 6“ to 600”

VGA and HDMI video outputs support small monitors to giant 60-inch LCD screens and video glasses.

Recording

- Standard AVI files for viewing or email
- Flexible playback: fast, slow, single step, forwards or backwards
- High-quality JPEG images
- Exclusive auto-record
 - Start record 5 sec before arc
 - Stop record up to 15 sec after arc

PC requirements:

- Windows 7 or 8
- Intel I5 or I7 processor
- 4 GB RAM

Options and Accessories

- Replacement spatter-shield
- Video goggles for weld-by-camera
- Remote control pendant allows adjusting zoom and focus up to 15 feet from PC

In addition to our standard cameras and systems, we offer OEM and custom solutions.

For more information and sample weld videos:

Visit: www.VisibleWelding.com