



## seelector/CAM educational package

Visualize welding processes - for more efficient teaching and training



Ideal for live demonstrations

Shows processes, interrelationships and sources of errors during welding

# Exclusively for educational institutions and training companies



leading technologies



### Show your future welding specialists what matters!

#### Digital learning made easy: Live display of welding processes

Welding processes have a major influence on the quality of the workpieces produced. At the same time, until now it was hardly possible to show pupils, students and trainees in a simple and understandable way how the individual steps of the welding process should ideally look and how to recognize deviations. For this purpose, hema electronic has developed the seelectorICAM educational package. It puts on display

- weld seam
- weld pool
- feed wire
- welding flame

and can be used in teaching as well as for comprehensive experiments and research. For this purpose, a camera records live images of the welding process and displays them with high contrast and best resolution on a monitor.

The educational package consists of:

- seelector/CAM HD4 camera with remote sensor head in full industrial package
- software package
- robust camera housing
- light and flexible gooseneck mounting kit
- leather cover tube

It is ready for immediate use and can be attached to any handheld welding torch. The camera is mounted at a distance of 10 cm to 20 cm from the flame and is nevertheless optimally protected. The welding process can then be viewed in real time via a monitor. In addition to the supplied C-mount lens with a focal length of 16 mm, other optics with a focal length of 35 mm or 50 mm can also be used.

Due to its high dynamic range of 170 dB, the camera creates extremely high-contrast images, even in very bright and very dark areas. It is suitable for the visualization of all welding processes such as

- MAG, MIG and laser welding
- plasma, TIG welding
- electron steel welding processes

With the help of the software, which is part of the educational package, the camera can be preset on a Windows PC. In addition, welding processes can be recorded via the program and used for training and documentation purposes. For a quick start, hema includes a Quickstart Guide.

Extremely high contrast welding videos for live analysis, teaching, exam preparation etc.





technologies



## **Choose the perfect equipment**

Package "Basic"	Package "Premium"	" Package "Premium Plus"
<b>seelector</b> <i>ICAM</i> HD4 in a full industrial package	seelector/CAM HD4 in a full industrial package	seelector/CAM HD4 in a full industrial package
robust camera housing	robust camera housing	robust camera housing
clamp hose kit with gooseneck	clamp hose kit with gooseneck	clamp hose kit with gooseneck
leather cover hose	leather cover hose	leather cover hose
VGA connection for external monitor	31.5 inch HDR monitor Top Deal	extra large 65 inch HDR screen
<b>6.670,00€</b> <sup>1)</sup>	<b>7.070,00€</b> <sup>1)</sup>	1) <b>7.657,00€</b> 1) plus VAT at the statutory rate.
High-quality components for educational use:		
seelector/CAM HD4 clamp hose kit wi gooseneck	th leather cover hose	31,5 inch HDR monitor / 65 inch HDR screen for high contrast display
You can find videos of various welding processes at hema.de		
		hema

#### Your task:

#### Train welding efficiently ...

... our service: Live-visualization of the process!

As if all participants were welding themselves, with perfect representation of:

- welding flame
- electrode
- molten pool
- seam
- weld gap
- solidifying melt

With the **seelector**/*CAM* you can optimally visualize the welding process, even at positions difficult to access and for many spectators. The observation takes place comfortably on the external monitor.

Video recordings enable the best possible transfer of know-how, even more precise analyses and conclusions from the process to the workpiece.

#### Features:

- brightness dynamics up to 170 dB
- frame rate approx. 30 frames / second
- direct VGA connection: display on monitor
- network connection via Ethernet

#### The software tool ICAM view ...

... intuitive operation, detailed analysis

The ICAM view software tool displays the acquired image on the monitor. The image can be analyzed and various information can be retrieved:

- automatic brightness adjustment
- variable camera resolution
- image mirroring horizontally and vertically
- superimposition of a crosshair
- scene-dependent contrast switching
- single image and video recording
- playback of recordings

#### **Highlights:**

#### Suitable for industrial use::

- compact and robust
- extended temperature range
- Iow power consumption

#### Flexible:

user-friendly

#### Versatile:

- comfortable user interface
- extensive software options

You can find sample videos on our website:

Ready for new insights? Order your educational package by e-mail now:

sales@hema.de







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seelector/CAM weld 10/20 Changes and errors excepted!