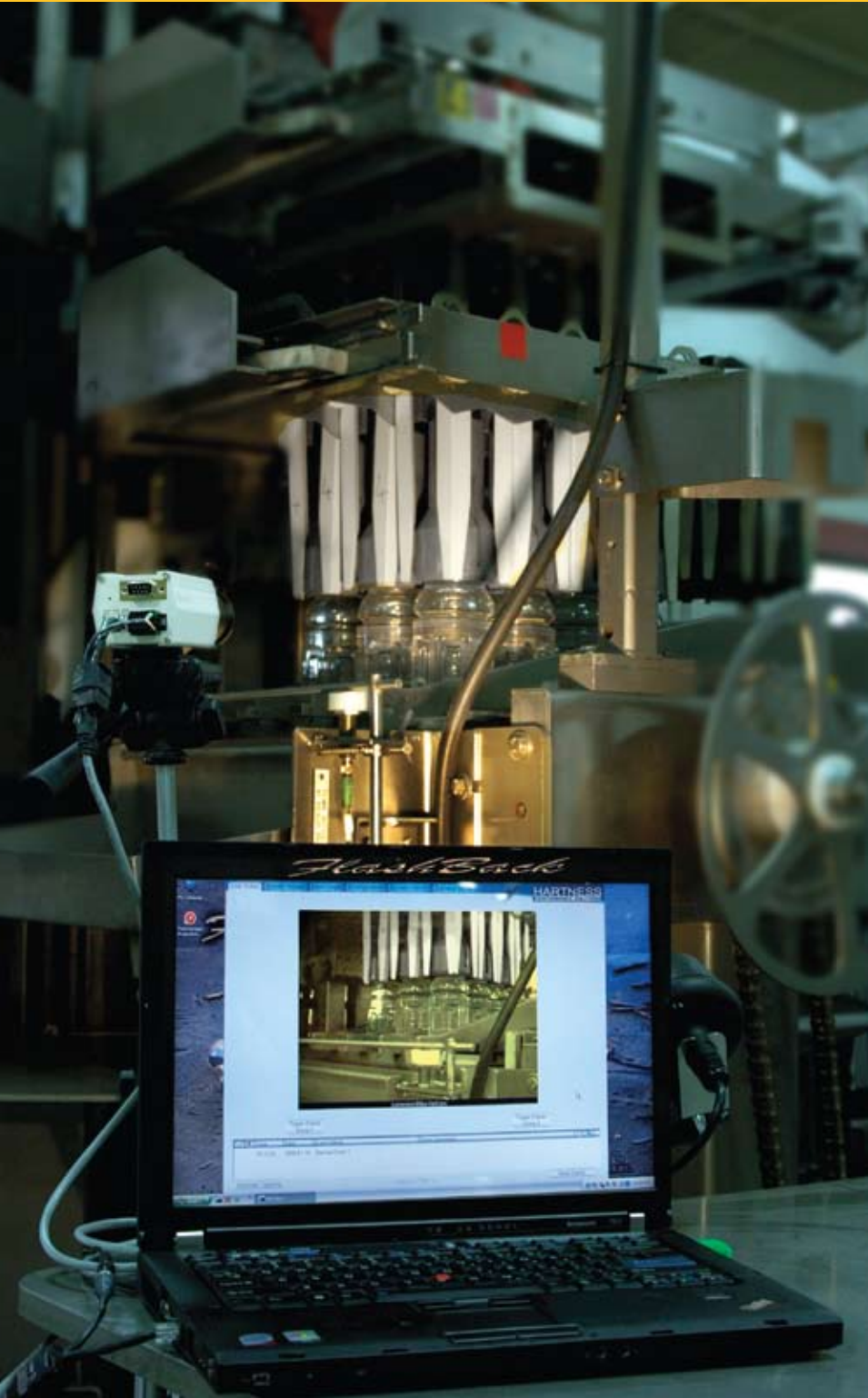




 **FlashBack**

**Get Ahead
by Looking Back**

HARTNESS
PERFORMANCE SOLUTIONS



Increased efficiency, enhanced training programs, and sustainable solutions are goals of most manufacturing companies.

In a world of faster equipment, more complex processes and greater expectations, these goals can be difficult to achieve. **FlashBack** is a cutting-edge, high speed video solution that helps manufacturers accomplish these goals by taking the guesswork out of manufacturing problems. By analyzing the motion of production equipment and manufacturing processes, **FlashBack** allows you to quickly identify the root cause of a problem and enables you to take quick, decisive and accurate action to remedy the problem.

Place the high speed camera at potential fault points or inaccessible areas in the manufacturing process and walk away. Once a fault or stoppage occurs, the system “flashes back,” recording up to 4 minutes prior to the occurrence, the event itself, and then up to 1140 minutes after the occurrence. Unlike competitive systems that require you to “scroll” through the video to find the fault, the unique value of the **FlashBack** system is that even though the camera is continuously recording, it only saves a video clip of the fault itself. Once captured, you can view the clip in slow motion or even frame by frame, enabling you to quickly determine the root cause of the stoppage. Once identified, the issue can be quickly rectified.

In addition to troubleshooting, **FlashBack** video clips are perfect for training operators and maintenance personnel. The **FlashBack** system is also a good vendor management tool and can reduce OEM service trips. Clips are simply edited and quickly e-mailed around the globe. The system provides great value for companies and OEMs who conduct business in countries who speak languages other than their own. **FlashBack** speaks the universal language...video.

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FlashBack is extremely portable. The **FlashBack** laptop is fully compatible with most personal software; thus, there may be no need to carry a second laptop. The entire portable system weighs 23 lbs and includes one high resolution 60 fps camera, lighting and mounting kits, a tripod and laptop computer with a convenient, durable carry-on case, making it perfect for service personnel or project managers who travel from plant to plant. Several options are available including a two 60 fps camera system and a single 200 fps camera system.

 **FlashBack**





Optional Extras

FlashBack can be supplied with the following additional options.

Description	Advantage
Memory upgrade	Increased pre-event recording time
Stack Light Trigger	Allows remote triggering without electrical knowledge
Magic arm mount	For easy position of cameras in difficult to reach locations
Trigger video recording from plant outputs	Any contact which closes when the problem occurs can be used to start the video recording
Trigger video recording from a PLC on a network	Any data point in a PLC that goes true when the problem occurs can be used to start the video recording
Cameras can be supplied in wash-down and dust-tight housings	Can be used in areas where cameras have to be positioned near equipment where splashing is a problem
System hardening available to minimize security risks	Provides extra security when the FlashBack system is left connected and unattended for extended periods of time
Longer cables to camera	Allows laptop to be position further away from the camera
High speed camera - 200 frames per second	Essential for capturing very fast moving objects

Technical Specifications

Camera: 640 x 480 full color at 60 fps

Light: High Power Cool LED

Laptop: CPU – Centrino Core 2 Duo, RAM – 1GB (2GB optional), Hard Drive-120GB, Advanced Graphics Card, Display 14" WXGA

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