

CVe Monitor® V2

Ultimate flexibility
in tracking mold activity



DME
Every step of the way

CVe Monitor®

General Description

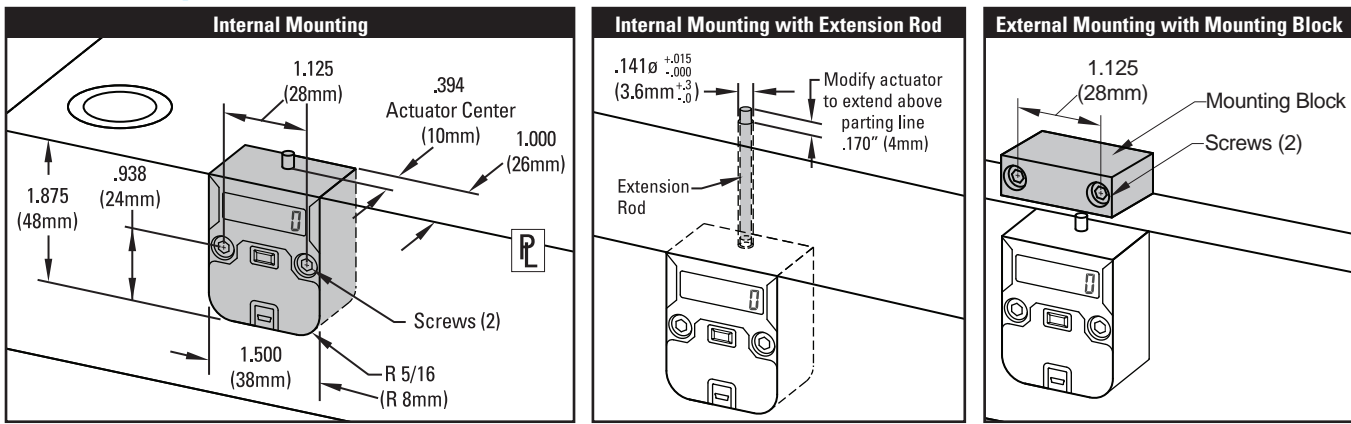
Expanding beyond the capabilities of the Counterview R-Series and 100/200 Series, the new CVe Monitor v2 tracks mold activity, allowing users to view the data on the display or from comprehensive reports using OnDemand software or the new CVe System.



Benefits

- 7-digit LCD display with a push button to move through the display modes
- 4GB flash drive for file storage and 4+ year battery life
- Water resistant with an ingress protection rating of IP52
- Maximum temperature: 190° F (90° C)
- Dimensional compatibility with mechanical CounterViews
- Mini USB (with cable) connectivity for data retrieval sold separately

Mounting Options



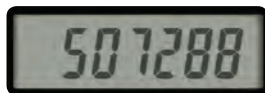
How to order:

- For installation below parting line (i.e. rails as shown in center drawing above), order (1) CVENTID or CVENTMD
- For installation outside of the mold (right drawing) order (1) CVEMBID or CVEMBMD

ITEM NUMBER	DESCRIPTION	MOUNTING STYLE	SCREWS (2)	REPLACEMENT PARTS
CVEPLID	CVe Inch	Parting Line	#8-32 x 1" SHCS	ITEM NUMBER
CVEPLMD	CVe Metric	Parting Line	M4 x 25mm SHCS	DESCRIPTION
CVENTID	CVe Inch (with 8" rod)	Extension (Includes 8" rod)	#8-32 x 1" SHCS	CVEINT
CVENTMD	CVe Metric (with 203mm rod)	Extension (Includes 203mm rod)	M4 x 25mm SHCS	Internal Extension Rod (8"/203mm) including a hex key for CVe Monitor set screw removal
CVEMBID	CVe Inch (with Mounting Block)	Parting Line	#8-32 x 1" SHCS	CVEXT
CVEMBMD	CVe Metric (with Mounting Block)	Parting Line	M4 x 25mm SHCS	External Mounting Block including #8-32 x 1" SHCS (2)
				CVEXT2
				External Mounting Block including M4x25mm SHCS (2)

On-Mold Display Modes

Each device is provided at -25 cycles to allow for mold setup and initialization of the CVe Monitor. Once it reaches zero, all timers and data will reset on the monitor. During production, users can press the button on the front of the monitor and review the following information on the display:



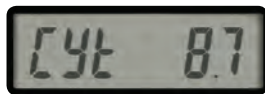
Cycle Count

Total cycles for the life of the mold is presented on the main screen of the CVe Monitor.



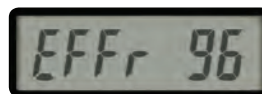
Efficiency Percentage

The percentage of time that the mold has been actively cycling vs being idle.



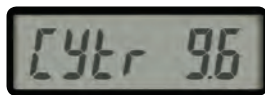
Cycle Time

Since the first production cycle, the cycle time is shown in seconds for the life of the mold.



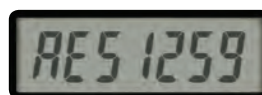
Efficiency Percentage - Recent

The percentage of time the mold has been active in the past 25,000 cycles.



Cycle Time - Recent

Cycle time for the past 25,000 cycles.



Cycle Count Reset

A separate counter that can be reset to zero for interim monitoring of cycles when pressed and held.



Users can utilize the 4GB flash drive on the CVe Monitor by connecting the device to a PC using an industry-standard mini USB cable (see next page). Users press the button to get to the flash drive mode and then the storage area is represented on the PC by a new drive letter.

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CVe Monitor

Alert Mode

Once data is initialized using the OnDemand software, users will be alerted to different modes on the device:

Preventive Maintenance

During initialization, the initial preventive maintenance point and the PM interval is entered and saved onto the CVe Monitor. Then, when the PM is within 10% of the initial point, the display will flash "PM Due" as shown at right. Users can then 'snooze' the alert by holding for 2 seconds, returning it to Total Cycles.



When a PM is performed using OnDemand software and noted as such, the date/time will be written to the CVe Monitor and then the alert is stopped until reaching 10% of the next PM point. If no PM is performed, the CVe Monitor will continue to alert the user until snoozed or the PM is ultimately recorded.

Low Battery

The CVe Monitor has a battery life of approximately 4.5 years in typical molding environments where temperatures are controlled. When the battery is within 6 months of its expected end of life, the display will flash as shown at right. Users can then 'snooze' the alert by holding for 2 seconds, returning it to the Total Cycles. The alert will appear every 30 days as a reminder to transfer the stored data to a new CVe Monitor.

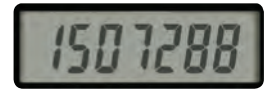
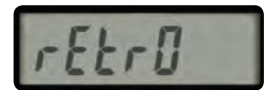


Retrofitting and Removal

Users can view additional data by double-clicking the button on the monitor:

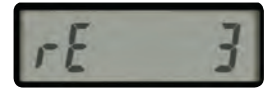
Retrofit CVe for CounterView Tools

During initialization, users can start the cycle count with the tool's actual cycle count from an existing CounterView or known cycles from maintenance records. Once entered, the user can see the total cycles for the tool, which includes the count of the cycles from the counter and those run with the CVe Monitor. In the screen at right, the tool had 1,000,000 cycles on it originally, but ran 507,288 cycles after the CVe Monitor was installed.



Removal Monitoring

When the CVe Monitor is removed from the tool for any reason (i.e. cleaning) the pins on the back of the device will record an event of its removal. After viewing the retrofit number above, the display will move into the screen shown at right, designating the number of times the monitor was removed from the mold.



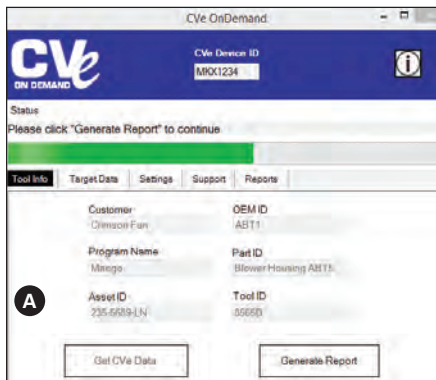
OnDemand Activity Log [Software Version 2.0/2.0.1/2.2]													
CVe Initialize Date	May 27, 2013	June 20, 2013											
Device ID	MKX1234	MKX1234											
Tool ID	8565B	8565B											
Blower Housing	Blower Housing												
Part ID	ABT57	ABT57											
Program Name	Mocha	Mocha											
Customer	Crimson Fan	Crimson Fan											
Target Efficiency %	N/A	94%											
Target Cycle Time	N/A	7.5											
Initial PM Point	50000	50000											
Target PM Interval	100000	100000											
Cycles Prior to CVe Installation*	0	0											
CEM ID	N/A	ABT1											
Asset ID	N/A	0356-5686											
Reason for connecting CVe Monitor													
Date/Time	Battery	Cycles	OD User	Conn. By	Company	Destination	REV	MR	REP	USE	REW	REASON	Notes
April 7, 2014	OK	507,288	INJECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	N	Y	N	N/A	0	Replaced damaged cone pin in cavity 4
April 7, 2014	OK	506,524	INJECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	N	Y	N	N/A	0	Data Full
March 23, 2014	OK	491,274	INJECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	N	Y	N	N/A	0	Pulled from production for mold operational issues. It is being sent for evaluation and repair.
March 19, 2014	OK	482,567	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Full PM: Cavity #2 was shut off	
December 30, 2013	OK	364,001	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	1	Full PM	
December 2, 2013	OK	314,856	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Full PM	
October 30, 2013	OK	260,002	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Full PM: Cavity #2 was shut off	
October 6, 2013	OK	211,563	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Full PM	
September 23, 2013	OK	193,268	INJECT1	Blake Fitz	Injection Tech	Crimson@crimson.com	N	N	Y	N	N/A	0	3 cavities are shutdown. Pulled for evaluation and repair.
August 11, 2013	OK	106,235	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Full PM	
July 14, 2013	OK	58,725	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Full PM	
June 20, 2013	OK	9,265	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	Y	N	N/A	0	Initial mold inspection. There is no wear or damage to mold following initial run. Targets are set. Mold is released for production.	
May 27, 2013	OK	0	MOLDHOU1	Chuck Louie	Mold House	Crimson@crimson.com	N	N	N	Y	N/A	0	Mold is completed and released for sampling.

Above: OnDemand software allows users to view data and keep a record of reports run, outlining the reason for the report generation including PM, general queries, revision changes, and repairs. Notes can be included and OnDemand records the person generating the document for accurate history.

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CVe On Demand

Drive comprehensive reporting using data from the CVe Monitor when running the OnDemand software is available at no charge from CVeMonitor.com.



OnDemand software enables the user to generate Adobe Acrobat (.pdf), Excel (.xls), and encrypted (.enc) reports to share with customers and other colleagues with these metrics:

A: When the CVe is initialized, users can identify their tool and align with the device serial number which is tracked on reports utilizing different field options.

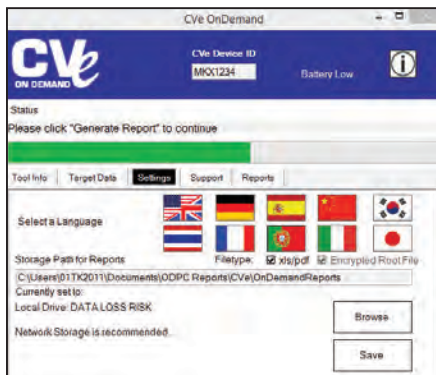
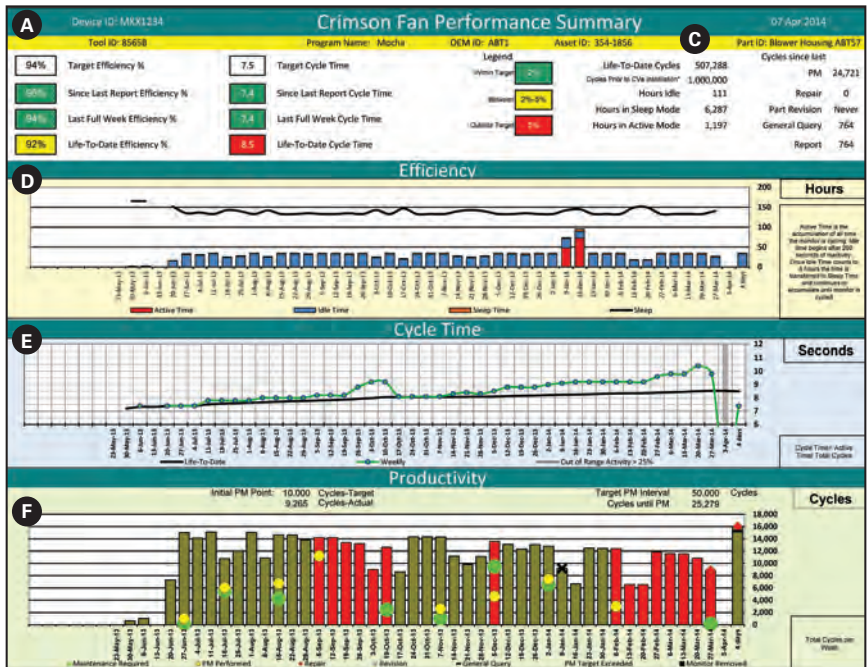
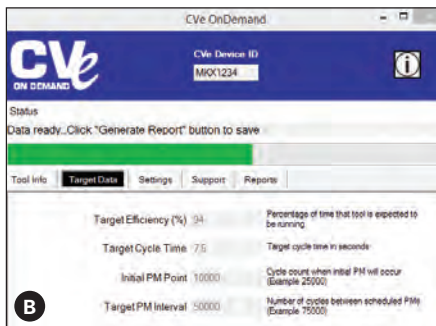
B: The target cycle times and efficiency percentages can be entered. OnDemand also supports 10 languages: English, German, Mandarin, Spanish, French, Italian, Japanese, Korean, Portuguese and Thai. Reports, generated in the chosen language, compare actual values to targets, providing a quick view of any variances.

C: Statistics are provided to show quantity of total cycles and inactivity for the life of the tool.

D: Weekly sessions are presented graphically to show production efficiency levels.

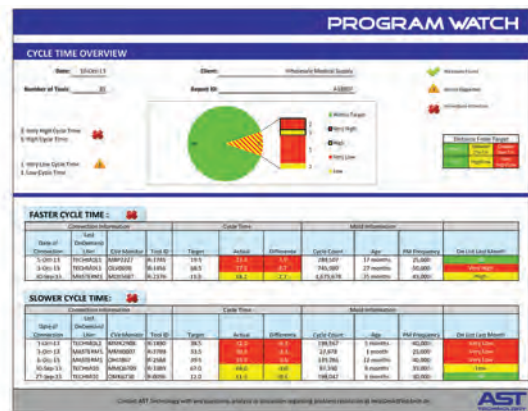
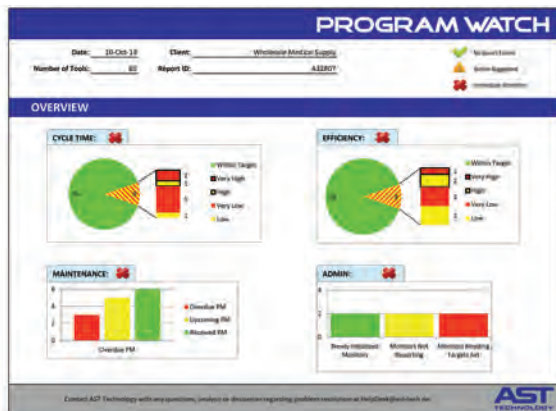
E: Weekly cycle time tracking identifies tools with variances over the past year.

F: The productivity portion of the report takes the target preventive maintenance (PM) points set by the molder and compares them to actual maintenance.



Program Watch™

OEMs and tool owners can view details and variances on their tools within a program by purchasing Program Watch from AST. For more information, contact your territory manager, customer service, or email [AST directly at orderdesk@ast-tech.de](mailto:orderdesk@ast-tech.de).



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CVe Live

For real-time monitoring of tools, AST provides hardware and website access for OEMs and molders utilizing the CVe Monitors.

Features:

- Utilizes FCC and CE certified internal components
- Press Modules act as a node on a network, reducing the distance required in the plant for data submission to the Gateway
- Radio Frequency (RF) antennas are interference-free in typical molding environments
- Designated website for data collection, reporting, and file storage



Press Module

- 1 per press connects to the CVe Monitor via cables
- Power supply (US/International) included
- Sends data to the Gateway continuously
- Serves as a node on the network for tool running with a CVe Monitor

Gateway

- 1 per facility collects data from all press modules installed via RF transmissions
- Power supply (US/International) and CAT5 Ethernet cable included
- Accesses the internet, and AST technicians will work with the IT departments for installation
- Sends data to the website every 15 minutes

CVe Live Website

- Secure access for OEMs and molders is set up at the time of installation of the CVe Live hardware
- The dashboard gives information at a glance and allows for drill down into specifics on each tool
- User can mark favorites and also save searches for monitoring specific programs or suppliers
- Graphs for cycle times, efficiencies, and also preventive maintenance can be shown and saved
- Administration and security levels are controlled by the user, and access can be given to subcontractors to upload information or to initialize the CVe Monitors to begin submitting data

The file cabinet system is designed to store reports, tool and part drawings, and setup sheets can be utilized by customers with the Live system installed or those using OnDemand who are looking to have or give global access to tool information.



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DME Company Today

Since innovating the standard mold base in 1942, DME Company has evolved to become an essential resource for molders, moldmakers and mold designers around the world. Today DME offers the broadest range of mold technologies from mold bases and components, hot runner systems, control systems and moldmaking equipment and supplies to metalworking components, die casting equipment and a complete line of industrial supplies for facility management.

Businesses around the world rely on DME's global resources, including standard-setting quality, exceptional customer support and technical service. Capitalizing on its status as a Milacron company and with locations, operations, and strategic relationships around the globe, DME truly is a global partner that is determined to help you succeed in today's worldwide economy.

And when your operational needs extend beyond our direct offers, DME is posed to help by reaching out to other Milacron companies for the expertise, innovation and best-in-class solutions you need to address your greatest challenges.



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