

# DA DRA

Vol. III, Issue 1  
News and Information about Marking Systems  
*The Mark-It REPORT*

## The Other Side of Dapra Marking Systems...

### Custom-engineered solutions for turnkey direct part marking

Dapra Marking has been providing standard Dot Peen Marking solutions since 1985. Now, Dapra Marking has grown and can provide integrated and turnkey direct part marking solutions for both Dot Peen Marking and Diode-Pumped Laser Marking applications.

We have the capability to design and build custom-engineered solutions to specifically meet your needs. Whether your turnkey project is small or large, Dapra can review your requirements and provide your company with a quotation and specifications that are price-competitive. The one thing you can count on is that, as always, Dapra will provide a quality solution.

The key to our custom-engineered solutions is the combination of fixturing and material handling with either a Dot Peen or Laser Marking System. This integration of technologies ensures that

the part is secured and that production rate and marking requirements are met. In many cases, we can integrate vision systems for part orientation or to read and verify Data Matrix codes required in the Aerospace (SPEC2000) and Automotive industries.

In addition to custom-engineered hardware, Dapra offers a wide variety of standard and modified accessories. These include rotary devices for marking round parts; scribe or drag attachments for solid line marking; deep marking attachments; multiple solenoids; Autosense for automatically detecting the marking surface; and tag/label feeding attachments for marking on blank or preformatted tags.



*Dapra Marking Systems can provide a custom-engineered part marking system to meet any application needs.*



Dapra can even provide custom software, such as a special Graphics User Interface (GUI), for use at the operator level or a program to enable communication with your database to download specific information into the marking layout.

Remember: Dapra Marking is more than just standard marking systems; we are **TURNKEY MARKING SOLUTIONS!**

## New from Dapra: Compact Integrator CEG

Dapra Marking's newest product is our Compact Integrator CEG Dot Peen Marking System. Based on the proven technology of the 2068 family of Dot Peen Marking Systems, the Integrator CEG offers new parameters for integrating marking and production machinery. The Integrator CEG allows for simple installation into new machine and design applications, as well as retrofitting into existing production lines where space is at a premium.

The Integrator CEG offers all the programming features associated with the 2068 series, plus the ability to mount on multiple faces and to change the cable entry orientation. The 2" x 1" marking window allows for multiple lines of data to be marked, and the RS-232 serial and digital I/O ports enable simple interfacing to download data and for external cycle start/stop applications.

The compact, ergonomic controller for the CEG incorporates user-friendly embedded marking software to program quick

setups for different character sizes, fonts and marking forces, as well as incremental serialization and date coding. The controller design is easily adapted to the production floor, since a PC is not required for operation.

If required, the CEG can be configured to mark Data Matrix codes directly onto the work piece for improved traceability.

If your requirements are for a turnkey or complete integrated marking project, Dapra Marking can design and build to your specifications, including software modifications streamlined to your traceability needs.



*Because the Integrator CEG is light in weight, it may be easily mounted onto a robotic arm. An optional column and base enable conversion to a bench-mount design.*



# Q&A **Make the Most of Serial Communications and Eliminate Marking Errors**

## ***What type of serial communications are available?***

The 2068 Series II controller has (2) RS-232 serial ports (A and B) that can be used for many purposes. The older 2068 controller has (1) RS-232 serial port. Each system can be configured for function, baud rate, data bits and parity.

## ***Can I use the RS-232 for barcoding data into the marking system?***

A barcode scanner connected to the RS-232 can scan information from routers, work orders or other barcoded documentation, directly into the current layout. More than one line in a layout may be configured to receive barcoded data. This is a very useful tool in eliminating data input errors associated with manual operations.

## ***Can I use the RS-232 to input data from another computer or serial device?***

The standard "Select Layout" mode allows an external device to perform the following operations via the RS-232:

- Select any layout from any group.
- Replace any variables in the current layout with new data.
- Mark the current layout.

Select layout is a powerful mode and can be used in a wide variety of situations.

## ***Can I send "batches" of information to be marked using the RS-232?***

Batch mode allows a remote device to send a batch of data to the controller. Each item specifies a layout name and the contents of any variables in that layout. The items are held in a first-in, first-out queue that can hold up to 64,000 characters. Items can be added to the queue without overwriting previous items. The queue contents are maintained even when the power is switched off.

## ***Can I send marking information out of the serial port to a remote device?***

The serial output mode allows data to be transmitted from the serial port at any point within a marking layout. This mode is useful when interfacing to serial printers and similar devices.

## **New Class 1 Laser Marking Enclosure Facilitates Marking Around the Diameter of Components**

Dapra Marking now offers an additional enclosure for Class 1 Laser Marking applications. This design can be used to retrofit the original-style 5W, 10W or 20W diode-pumped laser. The new design allows the use of programmable Z-axis and rotary marking capabilities for marking around the diameter of components.



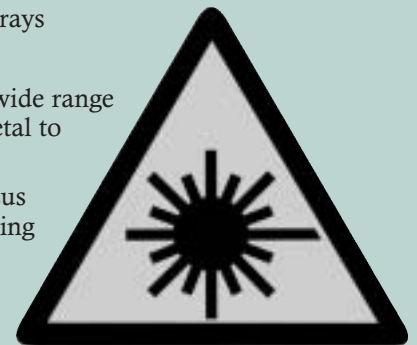
A two-position sliding table can be retrofitted to allow marking of multiple parts in batches. The table can be positioned automatically or manually.

Other new features include:

- increased, lockable storage space
- interlocked rear access door to marking chamber
- rear access door to laser controller and computer
- internal sliding door for main marking chamber access, available with auto-opening feature
- workholding table, with side-facing monitor, can double as a keyboard station

Dapra's Diode-Pumped Laser Marking Systems combine state-of-the-art laser marking technology and our 18 years of experience in offering quality industrial marking solutions. Our Laser Marking Systems provide:

- cost-effective, high-efficiency marking and long-life diode arrays
- fast marking times
- versatility to mark a wide range of materials, from metal to plastic
- increased uptime versus traditional laser marking solutions
- ease of integration through use of a compact laser source that doesn't need a cooling source



# HandHeld a Welcome Addition to Steel Manufacturer's Operations

## The ability to control illegible marks is now at their fingertips

In 2002, a domestic steel manufacturer began to investigate the feasibility of installing portable marking units in its shear, flame cut and heat treat test areas. These units would replace the hand-stamping of test coupons. Due to the location and setup of the shear area, as well as the volume of test coupons that pass through, it was determined that this portion of their manufacturing process would serve as the beta location to test the installation of a new marking system. The goal for this project was to provide a portable, cost-effective, low-maintenance system that would improve the quality of their marks, eliminate errors and be user-friendly.



*A robust, lightweight design allows the HandHeld to be used in a wide range of manufacturing environments. A high-resolution LCD screen enables the user to easily view the information to be marked. A simple interface means integration into already-established workflows is quick and simple.*

Many marking units were evaluated for portability, maintenance, durability, ease of setup and, most importantly, stamping quality. Operators were involved in the evaluation testing from the beginning and they quickly eliminated all units requiring air. The operators felt that the quality of air needed to power pneumatic systems, as well as the potential difficulties with "winter freeze," would create unnecessary problems. From the remaining electromagnetic systems, the Dapra Marking HandHeld unit was selected.

Once the HandHeld unit (consisting of a controller with keyboard, portable marking unit and barcode reader for data input) was delivered, a variety of setups were tested. Various customizable settings, including speed, font size, marking force and direction, were adjusted to optimize the readability of the marks. Many samples were reviewed by the operations and plate technology staff and the chosen sample's settings were programmed. Custom software was developed to display the data scanned into the marking system from the barcode reader – this preview allowed the test operators to verify data prior to marking.

The steel manufacturer was extremely pleased with the reliability of Dapra Marking's HandHeld unit – they are now in the process of purchasing additional systems for integration into other areas of operation. The positive feedback from the operators, combined with the HandHeld's ease of use and ability to easily interface with their original setup, has made it a success.

The steel manufacturer was extremely pleased with the reliability of Dapra Marking's HandHeld unit – they are now in the process of purchasing additional systems for integration into other areas of operation. The positive feedback from the operators, combined with the HandHeld's ease of use and ability to easily interface with their original setup, has made it a success.

### Steel Manufacturer's Steps to Perfect Marking with HandHeld

1. Barcodes are scanned into HandHeld system from printouts
2. Scanned information is reviewed on LCD screen for accuracy
3. Marking head is positioned on plate, start button pressed and high-quality information is marked into the steel



## A "Who-to-Call" Guide Key Contacts at Dapra Marking Systems

This list of key contacts should simplify the process of contacting the member of Dapra Marking's staff who can best assist you.

All of the following can be reached by calling our Bloomfield, Connecticut, office at either **(800) 442-6275** or **(860) 286-8728**:

Department	Contact	Extension
General Manager	Rick Pentz	244
Customer Service	Sue Machowski	254
Service/Repair	Richard Tatem (supervisor) Carl Williams	226 238
Custom Software Solutions	Kermit Bierut	234
Custom Engineered Solutions	Manny Cardoso	241

For Sales, choose the Territory Manager for the area in which you are located:

Territory	Manager	Phone
Southeast (FL, GA, TN, NC, LA, AR, SC, AL, MS, VA)	Mike DiBenedictis	(704) 655-8401
Midwest (OH, MI, IN, KY, IL, WI, NE, IA, MO, KS)	Jim Price	(765) 386-6590
Northeast/Mid-Atlantic (CT, MA, RI, VT, NH, ME, NY, NJ, MD, DE, PA, WV)	Ray Boudreau	(800) 442-6275 x251
West (CA, OR, WA, AZ, NV, NM, CO, WY, ID, MT, UT)	Ray Boudreau	(800) 442-6275 x251
Northern Midwest (MN, SD, ND)	David Olson Sales Curt Olson	(800) 365-4910
Southwest (TX, OK)	Rick Pentz	(800) 442-6275 x244