

4000 BenchDot™



Marktronic™ Bench-Top Dot Marking Range

BenchDot 60-60E / BenchDot 100-100E / BenchDot 150-150E / BenchDot 300-150E
BenchDot 60-60EZA / BenchDot 100-100EZA / BenchDot 150-150EZA / BenchDot 300-150EZA
BenchDot 100-100EZAV / BenchDot 150-150EZAV / BenchDot 300-150EZAV
BenchDot 60-60DP / BenchDot 100-100DP / BenchDot 150-150DP / BenchDot 300-150DP

SPEC2000



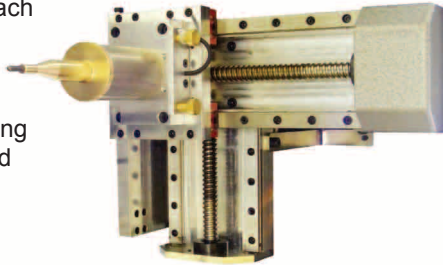
intelligent marking solutions

Marktonic™ BenchDot™ Range

BenchDot™ series are robust dot marking machines designed for accuracy, speed, power and reliability. All models include a high quality ball screw mechanism with unique twin linear rails and twin linear bearings on each axis and a rigid cast column and base.

Wide range of marking windows

BenchDot™ series are available with standard marking windows of 60x60mm, 100x100mm, 150x150mm and 300x150mm.



Mark using rotary axis and BenchDot™ series machine

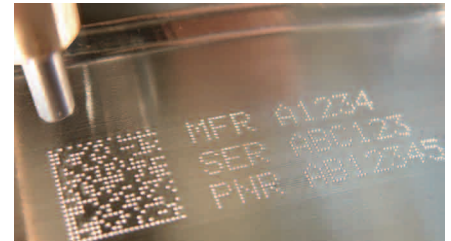


BenchDot™ E series: Electromagnetic dot marking

- Runs on standard mains current – no air supply required
- High consistency of marking depth
- Fully controlled number of dots per character and dot location
- Quieter than pneumatically operated machines

Models:

60-60E 100-100E 150-150E 300-150E



Data matrix code using BenchDot™ series machine



BenchDot™ EZA series: Electromagnetic dot marking, digital Z axis with AutoSense™

- Based on “E” series
- Powered programmable Z digital axis (marking head height adjustment)
- AutoSense™ system allowing self adjustment to variation of part batch height with the best precision, repeatability and consistency (especially well suited to Data Matrix marking)
- Mark different part levels with no manual adjustment

Models:

60-60EZA 100-100EZA 150-150EZA 300-150EZA



AutoSense™ Unit



BenchDot™ EZAV series: Electromagnetic dot marking, digital Z axis, AutoSense™ and VeriSmart™

- Based on “EZA” series
- Integrated in-process Data Matrix verification system (VeriSmart™)
- International standards: AS9132, JES131, AIM-DPM-Guideline, MIL-STD-130, ISO15434, ISO16022
- 5 mega-pixel sensor allows the verification of a wide range of codes
- Mark2Verify™ Windows© software provides simple traffic light feedback to the operator, verification results and advanced features

Models:

100-100EZAV 150-150EZAV 300-150EZAV



Traffic light feedback screen in Mark2Verify™

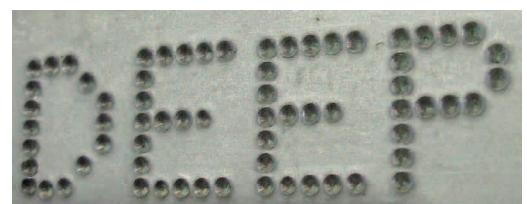


BenchDot™ DP series: Deep Pneumatic dot marking

- Pneumatic very deep marking: up to 1.5 mm in mild steel

Models:

60-60 DP 100-100DP 150-150DP 300-150DP



Deep mark with BenchDot™ DP series machine

Dot Marking Technology

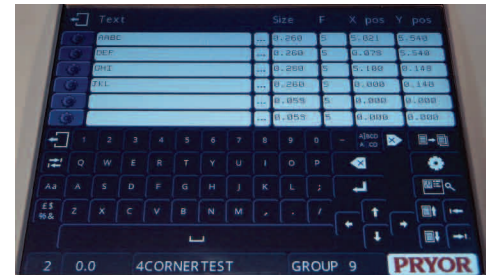
Dot marking creates the mark by indenting a series of dots into materials to form alphanumeric characters, logos or 2D Data Matrix codes.



Marks Using BenchDot™ with 4000 Controller

Marking software features

- Multilingual user interface
- Straight, angled, arc & reverse marking
- Programmable character height and width: 0.15mm to 99.9mm in increments of 0.15mm
- Adjustable marking force (marking depth)
- Basic range of machine fonts (5x7, 7x9, Varidot + OCR versions) on embedded systems and full range of installed True Type fonts available in Traceable-IT™ PC Systems)
- Time and Date marking in various formats
- Variable and serial number marking
- Data Matrix coding
- Vector graphics & logos (.plt file format on embedded systems and .plt & .dxf on Traceable-IT™ PC Software)



4000 series controller

Applications

- Permanently mark almost all engineering materials up to 62 HRC (cast iron, stainless steel, aluminium and titanium alloys, plastics...)
- Serial numbers, date codes, product reference, company logo, shift code, material batch...
- Identify small to large batches of components
- Marking on flat to uneven surfaces
- Circumferential marking device available (see options)

4000 Controller and interface

- No need for a PC
- 10.4" color touch screen
- Easy editing
- Live preview
- High power motor drivers
- Expandable and improved I/O
- Password protection
- Impact resistant
- Capable of being used with gloves
- Animated demonstrations
- Preview improved
- Optional USB keyboard can be connected

Traceable-IT™ PC software (Optional)

Optional Windows© based software. PC connected to 4000 controller.

Among extensive features:

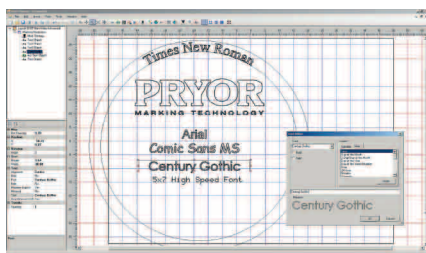
- Drag and drop graphical interface
- Advanced trial run
- Graphics tools
- Vector graphic/logo import facility (.hpgl/.plt & .dxf)

Traceable-IT™ Advanced (Optional)

- Supports all Windows true type fonts
- Database connectivity for marking data queries
- Database connectivity for duplicate data checking
- Security Password features
- Data logging for marking report generation



BenchDot™ systems are extremely versatile with the ability to mark almost any shape part



User interface in Traceable-IT™ (Advanced) software

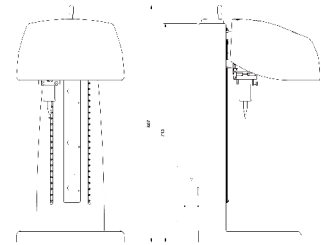


TECHNICAL SPECIFICATIONS

For more technical details, please visit our website at www.monode.com

Weight	Marking head/table/column: 34kg Controller: 10kg
Electrical Supply	220v 50Hz, 110v 60Hz
Marking Area	60x60mm / 100x100mm / 150x150mm / 300x150mm

Max. stylus pin
to base distance
is 415mm
(Using 50mm stylus)



Options and Accessories



Stylus options:

Solid carbide stylii, with 50, 100 & 150mm lengths and tip angles of 60, 90 & 120 degrees as standard. All stylii are available with sharp tips for standard set-ups or with custom radius to minimise stress on materials and comply with IAQG standards. Other types & sizes can be made to order if required.

Circumferential (Rotary) axis:

Rotary attachment to allow marking around shafts, tubes and other circular components.

Automatic tag/plate feeder:

Electric or pneumatic fixture for automatically loading, clamping, marking and ejecting name plates and labels.

Standard Label Fixture:

Simple manually operated label fixturing.

Magnetic Bed Fixture:

Manually activated magnetic base plate, for holding ferrous items.

Data Matrix readers and verifiers:

hand held, modular or station readers and verifiers complying to all established standards of data matrix coding



Bar-code reader:

For retrieving marking information or commands from bar-codes. Directly connected to 4000 controller on embedded systems or PC when using Traceable-IT™.

Cold colour foil feeder:

For high contrast coloured marking on plastics & other suitable materials

T-slotted tables:

Extruded or machined aluminium T-slotted base

TCP/IP Ethernet connection:

10 BASE-T Ethernet port for connection to networks & PLC systems over long distances.

Traceable-IT™ Windows© software:

Traceable-IT™ Advanced Windows© software (see inside)



Also available from Monode Marking:



PortaDot™ Series



InDot™/InScribe™ Series



Laser Series



Electro-Chemical Etch Series



Manual and Press Marking



When identification is critical for traceability or product impact, a quality mark is required. Monode combines creative engineering with a full range of marking solutions to meet your needs. Over a half-century of progress as a trusted "parts marking problem solver" ...that's Monode!



**Quality Marking Equipment with
Integrated Machine Vision Solutions**