BenchDot

Marking Windows
100mm x 100mm
150mm x 150mm
300mm x 150mm

Component heights up to 375mm

Market leading, precision benchtop dot peen marking machine.

Standard 4000 embedded controller provides full range of marking and control features. Powerful PC based software package enables customised operator interface, password control, integrated vision systems, component traceability and networking.

Optional large marking areas, automatic part sensing and adjustment of marking gap ensures fully repeatable mark depth, quality and size. Verification cameras can be integrated for 1-step marking, validation and verification.

STANDARD FEATURES (MCYBD1010E)

- 4000 Embedded Controller
- I/O card for 8 inputs, 6 outputs
- Electromagnetic solenoid driven Dot Peen marking
- 100mm x 100mm marking area
- Flat, machined base for easy fixture mounting
- 90° stylus, 100mm long, 4mm diameter, carbide tip
- Emergency stop built into controller
- LED lighting integrated under head cover

APPLICATIONS

- Aerospace, including specific marking and verification standards, e.g. JES131, MIL-STD-130, ISO16022
- Automotive, Rail, Oil & Gas
- High precision marking
- Safety critical components
- Machine readable marking with 100% verification check
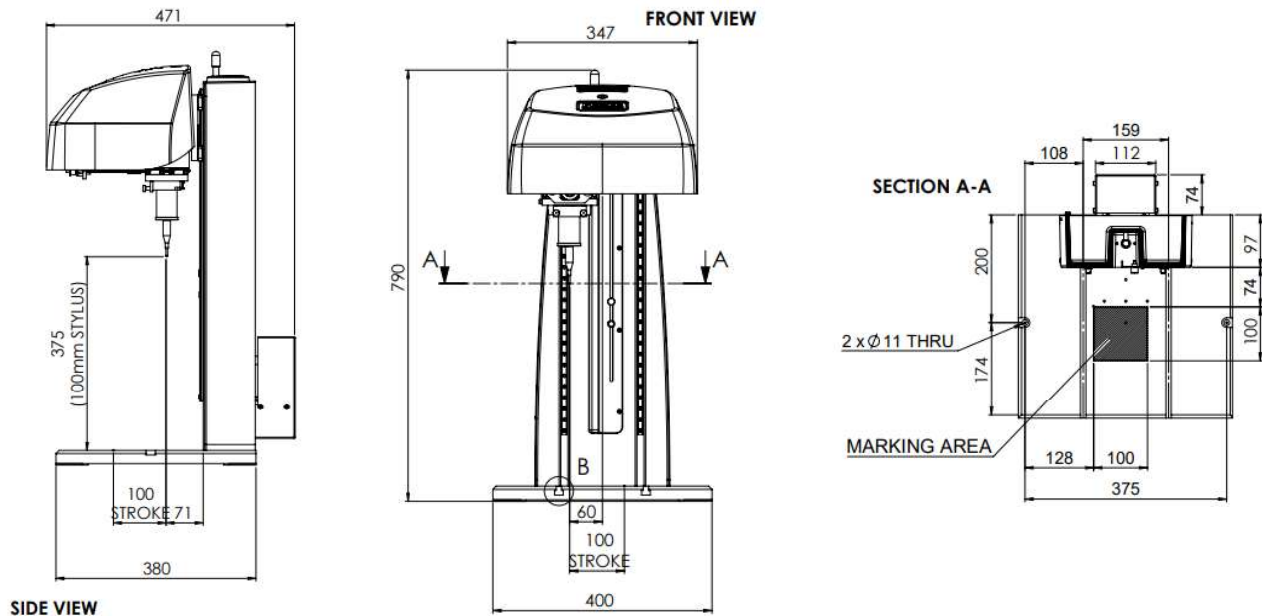- Larger, flat components

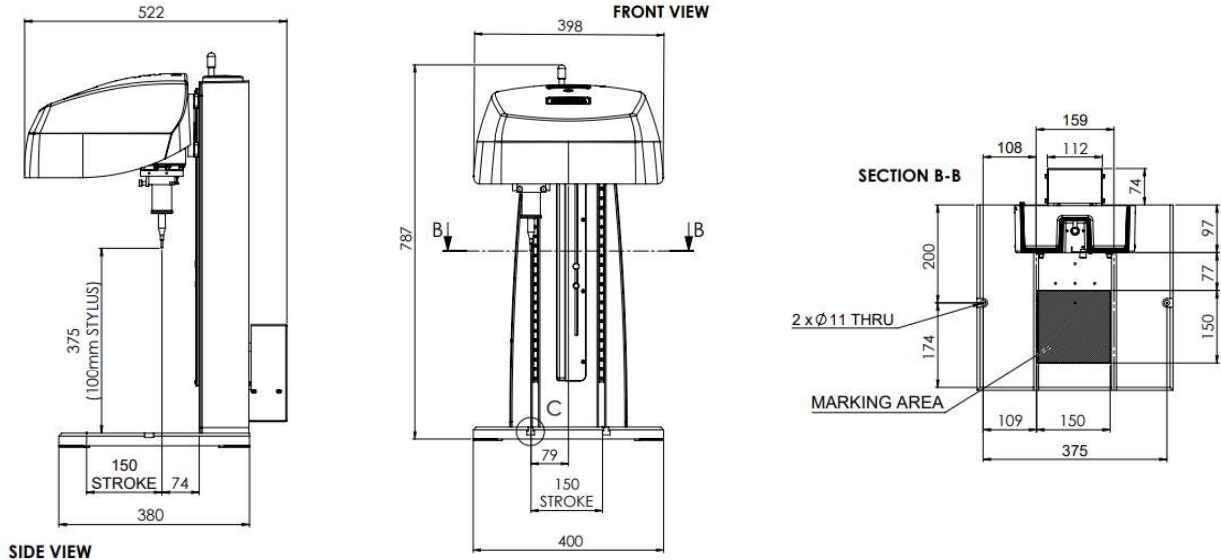| OPTIONAL VERSIONS	Benefits / Requirements	Option code
Powered Z-axis, Autosense	Programmable height gives precise, repeatable marking force	OPTBDZA
150 x 150mm marking area	Larger marking head for increased markable area	MCYBD1515
300 x 150mm marking area	Larger marking head for increased markable area.	MCYBD3015
PC based software control	Drag and drop editor, user admin rights, connectivity	OPTM2019A
Column extension – 110mm	Increases column height and maximum component height by 110mm	OPTBDCE110
Column extension – 200mm	Increases column height and maximum component height by 200mm	OPTBDCE200
Alternate nosepiece / stylus	Wider / shallower tip angle, IAQG spec, longer	-
Integrated camera	Verification of mark quality; requires PC and software Automatic alignment of mark against existing features	OPTVISRS/VS

TECHNICAL DATA			● Standard ○ Optional	Product / Option Code
Marking area	100mm x 100mm; 375mm max component height		●	MCYBD1010
	150mm x 150mm; 375mm max component height		○	MCYBD1515
	300mm x 150mm; 365mm max component height		○	MCYBD3015
Weight	>40kg, depending on size and options		●	-
Dimensions	W: 400mm, H: 790mm, D: 380mm		●	MCYBD1010
	With digital z-axis W: 400mm, H: 790mm, D: 471mm		○	OPTBDZA
	Note: 300x150 head cover is wider than the base: W: 515mm		○	MCYBD3015
Controller/supply requirements	**Controller** 4000 Controller USB-PC	**Supply requirements** 230V 50Hz / 110V 60Hz 230V 50Hz / 110V 60Hz	● ○	MCYBDxxxxE MCYBDxxxxU
Nosepiece & stylus	Electric Solenoid - 100mm long, 4mm diameter, 90° stylus tip, carbide Various alternatives available		● ○	-
Construction	Cast aluminium column and base, metal internals and plastic cover		●	MCYBD1010
	As above		○	MCYBD1515
	As above, metal cover		○	MCYBD3015
Operating temperature	0°C - 80°C (32°F – 176°F)		●	-
Workpiece hardness	Max. 62 HRC (800HV)		●	-
Marking type	5 x 7, 7 x 9, Varidot, Angled, Arc, logos, Data Matrix, Serial numbers, Reverse marking, Variables, etc.		●	-
Character sizes	0.15mm – 300mm in 0.15mm increments, depending on marking head		●	-

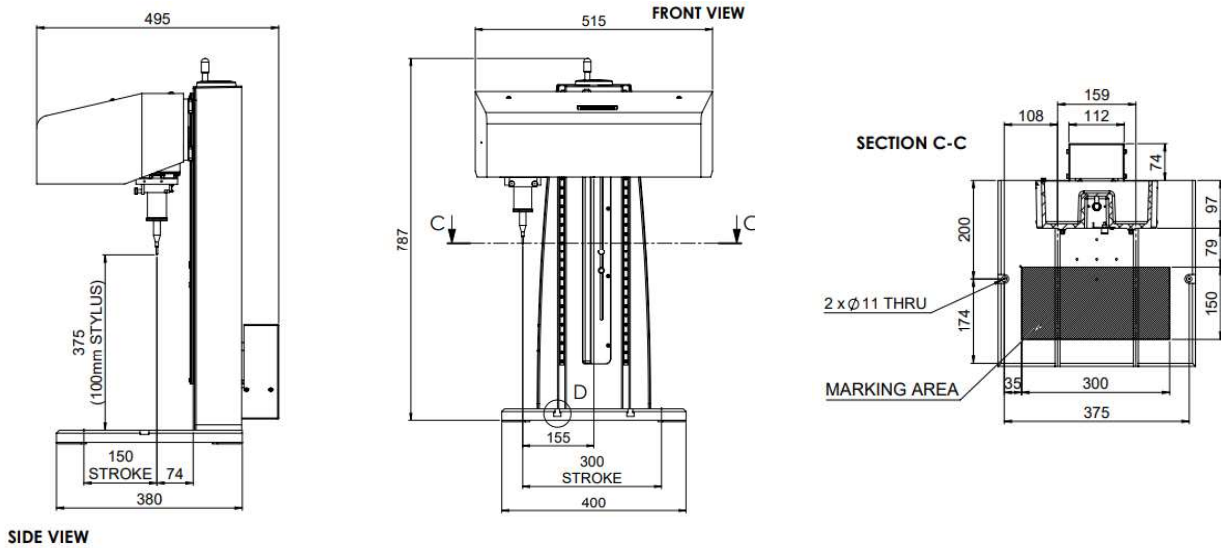## BenchDot 100-100

SIDE VIEW

FRONT VIEW

SECTION A-A

MARKING AREA

BenchDot 150-150

BenchDot 300-150

All measurements in millimetres unless otherwise stated

COMPATIBLE ACCESSORIES	Description	Product Code
T-slotted base - extruded	For attaching fixtures to the base; extruded aluminium 45mm pitch	ACCBDTB01
T-slotted base - machined	Solid, machined base with 2 slots, 158.7mm pitch	ACCBDTB02
Single label fixture	For right angled labels/parts 35-100mm x 20-75mm x 0.5-2.0mm	ACCBDFX
Magnetic clamp	For flat parts. Area 184mm x 100mm. Holding force 80N/cm^2	ACCBDMC
Magnetic V shaped clamp	Cylindrical parts diameters 5-70mm, includes machine base adaptor	ACCBDMV
Circumferential axis - Standard	Marking round circumference, part diameter up to 76mm with homing sensor	ACCBDCA01
Circumferential axis - Medium thru bore	Marking round circumference, 26mm thru bore. Max weight 25kg depending on inertia of mass. Out-riggers may be required	ACCBDCA02
Circumferential axis – Large, thru bore	Marking round circumference, 54mm thru bore. Max weight 25kg depending on inertia of mass. Out-riggers may be required	ACCBDCA03
Electric label feed	For flat, burr free labels 25-110mm x 25-75mm x 0.8-3.0mm thick	ACCBDELF