

Technical Specification

Venture 6490 CNC	
X, Y & Z Measuring Range	640mm(25.19") x 900mm(35.43") x 250mm(9.84")
Workstage Area	714mm(28.11") x 1200mm(47.24")
Max Work Piece Load	75 Kg
Drive Type	Servo CNC with Joystick
Stage Bearing	Air Bearings
Max Drive Speed	350mm/sec
Camera Type	2048 x 1590 Pixel, Colour USB2 Camera with 8 x 9 chip & dynamic latch
Optics	6.5:1 Detent manual zoom lens
Lighting	Fully programmable software controlled white LED segmented surface lighting head with understage and through the lens (TTL) lighting as standard
Scale Resolution	0.0001mm
Accuracy	2.4 + 0.4 / 100 Volumetric
Max Field of View (FOV)	8x6mm at Min Mag
Magnification approx.	27x to 175x (with digital zoom enhancement to over 1200x)
Min Pixel Size	0.8µm (Max Mag)
Touch Probe	Renishaw TP20 or SP25
Temperature Comp.	Temperature Compensation fitted as standard
Optional	
Optics	6.5:1 CNC zoom lens or 12:1 CNC zoom lens
Touch Probe	Renishaw TP20 or SP25
Auto Change Rack	Renishaw 6 port (either TP20 or SP25)

Zoom Lens Magnification Spec

6.5:1 Zoom Lens (6X Lens)

Zoom	Effective Mag	Pixel Size	Field of View		
			X Axis	Y Axis	Diagonal
MIN	37	3.9	8.0	6.0	10.0
1	50	2.9	6.0	4.4	7.4
2	72	2.0	4.2	3.1	5.2
3	110	1.3	2.7	2.0	3.4
4	154	1.0	1.9	1.5	2.4
MAX	194	0.8	1.5	1.2	1.9

12:1 Zoom Lens (12X Lens)

Zoom	Effective Mag	Pixel Size	Field of View		
			X Axis	Y Axis	Diagonal
MIN	25	4.8	9.9	7.4	12.3
1	33	3.7	7.6	5.7	9.4
2	46	2.6	5.4	4.0	6.7
3	65	1.9	3.8	2.9	4.8
4	92	1.3	2.7	2.0	3.4
5	130	0.96	1.9	1.5	2.4
6	180	0.68	1.4	1.0	1.7
MAX	220	0.56	1.1	0.9	1.4

Physical and Environmental Specifications/Requirements

Electrical Supply Voltage –

- 13A(Max) 240v AC single phase (Baty recommends a UPS is only required where the power supply fluctuates or is prone to disruption)

Operating Environment –

- Site Location should be clean and dry.

Site access –

- Minimum opening size is 1200(W) mm x 1900(H) mm with flat access to final site suitable for standard pallet truck.

Machine footprint –

- As per drawing below, the required m/c footprint area is 1200 x 1350 mm.
An additional workstation is required to one side (recommended size 600(D) x 800(W) mm.
- Overall installed footprint approx. 1350(D) x 2000(W) mm.

Operating Air Pressure –

- A clean, dry air supply of 55psi / 4 bar classification Class 3 (ISO 8573.1)

Air Consumption –

- 50L/min (at 55 psi)

Operating temperature –

- 0 – 40 °C

Temperature specification range –

- 16 – 26 °C

Humidity –

- 30 – 80% non – condensing

Vibration –

- System must be installed at a site, whose measured floor motion shall not exceed 10mm/sec – sec RMS acceleration in a frequency range from 2-10Hz and shall not exceed 20mm/sec-sec RMS acceleration at frequencies above 10Hz.

Paint Colours –

- RAL 9005 jet black and gloss titan silver

Machine Weight –

- 242 kg (without ancillaries)

Approx. Packed weight and dimensions –

- Machine: 340 Kg & 1240 X 1020 X 1200 mm
- Stand: 173 kg & 1240 x 1020 x 800 mm

Machine Dimensions

