CSB5-300-4



5 AXIS CNC CONTINUOUS SUPER BUFFER



Complete with heavy duty, vibration dampened, structural steel floor-standing housing including (4) integrally mounted 2 kW (1.5 HP) buffing spindles producing a speed range of 300-3,000 rpm on a 300 mm diameter buff. Movement flexibility is provided through two independent 5-axis (X, Y, Z, X2, and C) actuator systems with closed-loop servo motors on all axes for smooth reliable motion and encoder feedback for accurate position, velocity and acceleration. Precision ball screws are used on all axes for linear motion with minimal friction. Force feedback system using standalone X axis (X2) and PID loop control to maintain consistent polishing wheel pressure on the enclosure. Dust and particulate resistant aluminum way covers with stainless steel shielding for cloth buffing applications. Combustible dust management system including automatic machine enclosure humidification. Automatic lubrication system for certain contaminant prone linear actuators. High pressure

liquid buffing compound spray system complete with electronic metering, independent compound tank feeding 4 guns, one machine each, full enclosure with door interlocks, and quick disconnect, mechanical chuck style fixtures for securing parts during processing. 380 V / 50Hz electrical system.



Closed Loop Pressure Control with Force Feedback

STANDARD FEATURES

- (4) independent 5-axis CNC servo motor control systems capable of processing
 4 enclosures at a time
- Precision ball screws on X, Y, Z, X2, & precision rotary actuator on C axis for linear and rotary motion with minimal friction
- Closed-loop encoder feedback for accurate position, velocity, and acceleration
- Force feedback system using standalone X axis (X2) and PID loop control to maintain consistent polishing wheel pressure on the enclosure
- Dust and particulate resistant aluminum way covers with stainless steel shielding for cloth buffing applications
- High pressure liquid buffig compound spray system complete with electronic metering and pumping system with centralized compound tank
- Combustible dust management system including automatic enclosure humidification.
- Automatic buffing spindle speed adjustment based on wheel wear to maintain consistent SFM
- Quick disconnect, mechanical chuck style fixtures (4) for securing either large or small enclosures during processing
- Auto lubrication system (certain linear actuators)
- Rotary (C) axis for multiple buffing wheel orientations
- Full enclosure with door interlocks
- Vortex style compound cooling system
- · Special dust control measures

CSB5-300-4 - 5 AXIS CNC CONTINUOUS SUPER BUFFER

TECHNICAL DATA CSB5-300-4

Number of Work Stations 4

Fixtures per Work Station 1

Number of Spindles 4

 Spindle Power
 2.0 kW (1.5 HP)

 Spindle Speed
 300-3000 RPM

X-Axis Power / Stroke 200 Watt Mitsubishi Servo Motor / 300 mm (12")
Y-Axis Power / Stroke 400 Watt Mitsubishi Servo Motor / 300 mm (12")

B-Axis Power 750 Watt Mitsubishi Servo Motor

Z-Axis Power / Stroke 400 Watt Mitsubishi Servo Motor / 300 mm (12")

X2-Axis Power / Stroke 200 Watt Mitsubishi Servo Motor / 30 mm (1.2")

C-Axis Power Oriental Hollow Rotary Actuator — Stepper Motor

Repeatability 0.025 mm (0.001")

Position Accuracy $\pm 0.05 \, \text{mm} \ (\pm 0.002 \, \text{mm})$ from center of station Buffing Wheel $300 \, \text{mm} \ (12'') \, \emptyset \ (\text{max}) \, 200 \, \text{mm} \, \emptyset \ (8'') \, \text{min}$

CPU System Mitsubishi C70 series CNC controller

Interface 10.4" Color touch screen display (English / Chinese) – 2 each

Power 380 Volts, 50 Hz

Overall Dimensions 2638.10 mm (103.86") L \times 2035.17 mm (80.125") W \times

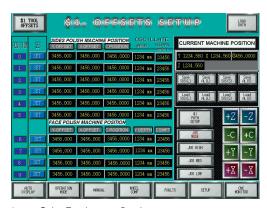
2028.83 mm (79.875") H

Weight 2163 kg (4,760 lbs)

Paint Color Lapmaster Blue (RAL 5005 Signal Blue)



Controls



Large Color Touchscreen Display

Quick change coupling



Compund Delivery System



Compound cooling system



LAPMASTER WOLTERS

501 West Algonquin Road • Mount Prospect, IL 60056-5705, USA Phone: +1 (877) 352-8637 • sales@lapmaster-wolters.com

