



5 Axis Desktop CNC Mill XSL-V3 Pro

Fit for personal inventor, digital education and low cost production. The Pocket 5 axis CNC can be used everywhere on the table, low cost quick design to production

Pocket NC is 5 axis digital machine tool. Controlled by Windows system, use CAD or CAM to mill. Pocket NC support G code control as well. As pocket size, five axis motor main axis have speed 0-24000rpm, enough for professional designer basic application.

Upgrade version use No.57 servo motor, normal motor movement speed within 2.5m/min, and servo speed can be within 12m/min, servo no noise, high reaction, positioning accuracy, warning with no steps.

Desktop NC support to mill material as common plastics, Al alloy, Wood, Copper, Gold, Silver, Wax, different materials can use different tool bit, without use wrench, easy operation.

Tech Specs

| | | | |
|--|--|---|---|
| Total dimension | 750×400×450mm | Table dimension | 140×130mm |
| Total weight | 45Kg | Max table weight | 10kg |
| X, Y, Z axis effective movement | X160×Y200×Z125 | A, B rotating effective movement | A: ±110°, C: 360° |
| Effective Machining area | X150×Y150×Z125 | A, B axis rotating data | 1:50 grinding worm reducer and cross rolling rotating bearing |
| Three axis ball screw | X&Z: 1204 C7, Y:1605 C7 | Linear guide | X: Hiwin MGN12, Y: Hiwin MGN15, Z: Hiwin HGH20 |
| Frame | 6061T6 aviation Al + stressed parts steel No.45 | Machining speed | 2500mm/min (different material different speed) |
| Main axis Type | 65mm Ø800W electrical axis 24000r/min | Parts fixture | Steel fixture, reservation hole er50 fixture stand, 63 80 |
| Dustproof | Organ dustproof + oil seal dustproof (rotating table waterproof) | Tool dimension | ER11 0-7mm |
| Material | plastics, Al alloy, Wood, Copper, Gold, Silver, Wax, etc. | | |

**Detailed parameters**

| | X Axis | | Y Axis | | Z Axis | |
|-----------------------------------|--|----------------------|---|-----------------------------------|---|----------------------|
| Max speed | 236 ipm (inches per minute) 6000mm/min | | 236 ipm 6000mm/min | | 236 ipm 6000mm/min | |
| Resolution | 0.00024in 0.001mm | | 0.00024in 0.006mm | | 0.00024in 0.006mm | |
| Max movement | 6.57in (-2.95 ~ 3.62in) 167mm(-75 ~ 92mm) | | 8.38in (-3.54 ~ 4.44in) 213mm(-90 ~ 113mm) | | 8.46in (-0 ~ 0.1in) 215mm(-0 ~ 8.46mm) | |
| Homing reset repeatability | ±0.000039in 0.001mm | | ±0.000039in 0.001mm | | ±0.000039in 0.001mm | |
| Repeatability | load: 0% | ±0.0011in ±0.03mm | load: 0% | ±0.0011in ±0.03mm | load: 0% | ±0.0011in ±0.03mm |
| | A Axis | | B Axis | Main Axis | | |
| Max speed | 41.6°/s | | 41.6°/s | Main axis speed | 0-24,000 rpm | |
| Resolution | 0.08° | | 0.08° | Output | 800W | |
| Max movement | ±110° | | 360° | Tool change | 3mm hexagon spanner | |
| Homing reset repeatability | ±0.03° | | ±0.03° | Electrical motor frequency | 400Hz | |
| Repeatability | 0%Laod ± 0.03° | | 0%Load± 0.03° | Tool | ER11 tool fixture, max 7mm | |
| Jump | < 0.02 " | | < 0.02 " | | | |
| Machine control | | | | | | |
| Software For Pocket NC | | | Tool software: including post processor Autodesk Fusion360 (recommended) Support Poermill | | | |

Product Feature

V3 is upgrade of V2 version, improve to machining copper and Al, stressed parts change to Steel No.45, rotating axis bearing change to cross rolling bearing, machining reserve position holes, easy adjustable. Y axis change to bigger guide screw. Main axis change from 400w no power to 800w electrical axis. Less noisy and less heat, bigger power and speed. Under V3 version, Al machining can use 6mm milling cutter 0.2~0.3F1500, present V2 version only 3mm 0.2F1000, more efficiency and performance, five axis change from V2 120mm*90 to V3 150mm*125mm, rotating axis is waterproof (oil seal waterproof), can be used as spray cutting processing, more suitable for metal and jade.