

CITIZEN

Miyano

GN4200

High Precision CNC Lathe



# Machine specifications

| Items  |                          | GN-4200                         |
|--|--------------------------|---------------------------------|
| <b>Machining capacity</b>  |                          |                                 |
| Max. Diameter of collet chuck  | Fine precision air chuck | 45 mm Dia.                      |
|  | Pull type collet chuck   | 40 mm Dia. (Stationaryφ35mm)    |
| Max. Machining length  |                          | 80 mm                           |
| <b>Spindle</b>   |                          |                                 |
| Number of spindle  |                          | 1                               |
| Spindle nose   |                          | Special flat                    |
| Through hole diameter  |                          | 26 mm Dia.                      |
| Inner diameter of draw tube  |                          | 15.4 mm Dia.                    |
| Max. spindle speed   |                          | 8,000 min <sup>-1</sup>         |
| <b>Slide</b>   |                          |                                 |
| Number of tool platens   |                          | 1                               |
| Type of slide  |                          | Horizontal gang tool post       |
|  | X-axis                   | Dovetail slide                  |
|  | Z-axis                   | Dovetail slide                  |
| Control axis   |                          | 2 - axis (simultaneously X, Z)  |
| Slide travel   | X-axis                   | 300 mm                          |
|  | Z-axis                   | 250 mm                          |
| Rapid feed rate  | X-axis                   | 12 m/ min                       |
|  | Z-axis                   | 12 m/ min                       |
| <b>Tools</b>   |                          |                                 |
| Shank size of square turning tool  |                          | 10, 12, 16 mm Sq.               |
| Diameter of drill shank  |                          | 20 mm Dia.                      |
| <b>Motor</b>   |                          |                                 |
| Spindle drive  |                          | 3.7 kw                          |
| <b>Coolant</b>   |                          |                                 |
| Tank type  |                          | Separate type                   |
| Tank capacity  |                          | 125 L                           |
| <b>Machine dimensions</b>  |                          |                                 |
| Machine height   |                          | 1,695 mm                        |
| Floor space  |                          | W 1,350 x D1,325 mm             |
| Machine weight   |                          | 1,500 kg                        |
| Power supply   |                          | AC 200V ±10%                    |
| Electrical capacity  |                          | 11 KVA                          |
| <b>Loader specifications (Optional)</b>  |                          |                                 |
| Type of loader   |                          | 2 - axis gantry loader (2 hand) |
| Max. work piece size   |                          | 40 x 40 mm Dia.                 |
| Max. weight capacity   |                          | 250 g                           |
| Control system   |                          | PMC axis control                |
| Control soft   |                          | Flexible loader control         |
| Drive system   | Right and left operation | Rack & pinion                   |
|  | Upper and lower sides    | Rack & pinion                   |
| <b>Options</b>   |                          |                                 |
| Spindle air blow, High pressure coolant, Coolant level switch, Counter, Signal tower, Coolant mist collector, Automatic power shut off, Chip conveyor, Chip Box. |                          |                                 |

| NC Specification   |   |
|--|---|
| NC unit  | FS 0i-TD  |
| Controlled axis  | X, Z, with loader 2-axis (E,Y)  |
| Min output increment   | X-axis: 0.00005 mm (Radius value)   |
|  | Z-axis: 0.0001 mm   |
| Parts program storage capacity   | 512Kbyte  |
| No of registered programs  | 400   |
| Spindle function   | Directly specified spindle speed (G97)  |
|  | Constant cutting speed control (G96)  |
| Cutting feed   | Feed / min (G98), Feed / rev. (G97)   |
| Rapid feed rate override   | F0,10, 20, 30, 40, 50, 60, 70, 80, 90,100%  |
| Cutting feed rate override   | 0-150% (16step)   |
| Interpolation  | G01, G02, G03   |
| Threading  | G32, G33, G34, G92  |
| Canned cycle   | G90, G92, G94   |
| Coordinate system setting  | Automatic system setting or G50   |
| Tool compensation  | 64 pieces   |
| Tool selection and work coordinate settings,   | Taabbaa at the specified position for each turret tool wear and tool wear compensation is selected by bb. |
| Direct input of tool position  | by measured MDI   |
| Data input and output function   | RS-232C, USB memory interface, PC card slot   |
| Automatic operation  | Single cycle automatic operation,   |
|  | Single block, Block delete, Machine lock, Optional block skip, Dry run, Feed hold                         |
| <b>Others</b>  |   |
| 8.4" color LCD, Circular interpolation by R programming, Programmable data input (G10), Multi-language display, Manual pulse generator, Memory protect, Spindle orientation, Alarm display |   |
| <b>NC option package</b>   |   |
| Chamfering/Corner R, Direct drawing dimension programming, Canned cycles for drilling  |   |
| Custom macro B, Multiple repetitive canned cycle (G70-G76), Extended part program editing.   |   |
| Background editing, Operating time/Parts No. display, Clock function, Spindle rigid tapping, Tool nose R compensation, Tool life management system,  |   |
| <b>NCoption</b>  |   |
| <b>Cs-axis control</b>   |   |

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