

## IsoNs - IsoNs Ce

- 9 Axes with Multiprocess
- Linear-Circular-Helical Interpolation
- Tangetial Axis for Cut Machines
- Gcode Parametric
- Preview 3D
- AFC Adaptive Feed Control
- Filter N.U.R.B.S. NOISE RLS -SMOOTHING
- LOOP IF, Matematical
- > RETRACE and RESTART from block
- PLUG IN
- > OPEN SOURCE

ISO NS, allows a complete management of NG Series systems, transforming them in immediate way in powerful numerical controls. Simple and intuitive, it introduces a familiar graphical interface. All the functions are very detailed and comprehensible and can be used both mouse and keyboard, as TOUCH SCREEN systems . Thanks to 3D preview, it's possible to see the working before it's running, anticipating in this way eventual programminge errors and outside Axis. High speed in micro-straigths working renders ISO-NS particulary apt to work irregular complex profiles generated by CAD/ CAM systems. There is no limitation to theprogram memory (using the PC RAM) and tothe available number of programs (using the PC hard disk). Extended programming with cycles LOOP, IF, mathematical functions, limitless management of variable, jumps to label, working of subprograms stored in hard disk, complex M functions

**ISO NS** calculates the profile optimal speed, always guaranteeing the better timing to optimize the working cycle, reducing the speed in the critical points.

FRAMEWORK Component and COM-PACT FRAMEWORK (windows CE) Use with Visual Studio OPEN SOURCE CODE





## Specifications ISONS – ISONS Ce

| ISONS-ISONSCe             |   |
|---------------------------|---|
| NUMBER INTERPOLATION AXES | 9 Axes for 8 simultaneus Process – 4 Axes for 1 process IsoNsCe   |
| INTERPOLATION             | Linear, circolar,elicoidal, 3D  |
| ROTATIVE AXES             | Up to 9 – up to 4 IsoNsCe   |
| POSITIONS RESOLUTION      | Min <b>0.000001</b> mm  |
| FEED RESOLUTION           | Min <b>0.001</b> mm/min   |
| M FUNCTIONS               | On CN or ON PC  |
| SUBROUTINES               | YES   |
| VARIABLES                 | Type of data DOUBLE - double precision without no limit of variables  |
| MATEMATICAL               | Extended with complex functions sqrt, log, sin, cos, asin, acos, tan  |
| CYCLE IF – ELSE – END IF  | Without not limit   |
| LOOP                      | Without not limit   |
| MAX LEN GCODE             | Without not limit   |
| PLC CYCLE                 | Management I/O base from PC program Extended management from VTB with cycle 1 Ms min  |
| AFC                       | Adaptive Feed Control – Automatic redution FEED on curves   |
| TOOL OFFSET               | Diameter and heigth   |
| WORK ORIGIN               | Up To 256   |
| OFFSET ORIGIN             | Up To 256   |
| TOOLS FOR HEAD            | Up to 256 for single head   |
| TOOLS HEAD                | Up to 256   |
| BACK SLASH                | On all axes   |
| HANDWHEEL                 | On all Axes   |
| TANGENTIAL AXIS           | YES – SPECIAL INTERPOLATION   |
| GANTRY                    | On all Axes   |
| 3D INTERPOLATION          | Yes - With calculation automatic threshold edge   |
| FILTER                    | N.U.R.B.S. (Non Uniform Rational Bspline) -not available on IsoNsCe NOISE - not available on IsoNsCe RLS (Remove Len Segment) SMOOTHING |
| GO FROM LINE              | YES with graphical support without graphical support on IsoNsCe   |
| RETRACE                   | YES From <b>JOG</b> not available on IsoNsCe  |
| PREVIEW                   | 3D with outside axis<br>2D with outside axis IsoNsCe  |
| EDITOR PART PROGRAM       | Editor intellisense with help on line Editor standard on IsoNsCe  |
| WORK PLAINE ROTATION      | YES   |
| WORK PLAINE               | Settable on any pair of axes  |
| CN CONNECTION             | RS232/ETHERNET for NG35,NGMEVO – RS232 for NGQ  |
| OPERATING SYSTEM          | Windows Xp® – Windows 7® - Windows 8® - Windows CE® with FRAMEWORK or Compact Framework   |

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