

## IsoUs - Ultimate Step

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



ISO US, 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 programming errors and outside Axis. High speed in micro-straights working renders ISO-US particularly apt to work irregular complex profiles generated by CAD/ CAM systems. There is no limitation to the program memory (using the PC RAM) and to the 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 US** calculates the profile optimal speed, always guaranteeing the better timing to optimize the working cycle, reducing the speed in the critical points.



## **Specifications ISOUS**

ISO US	
NUMBER INTERPOLATION AXES	9 Axes for 8 Simultaneous Process
INTERPOLATION	Linear, circular, Helicoidal, 3D
ROTATIVE AXES	Up to 9
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
MATHEMATICS	Extended with complex functions sqrt, log, sin, cos, asin, acos, tan
CYCLE IF – ELSE – END IF	Without limit
LOOP	Without limit
MAX LEN GCODE	Without limit
PLC CYCLE	Management I/O base from PC program Extended management from VTB with cycle 1 Ms min
AFC	Adaptive Feed Control – Automatic reduction FEED on curves
TOOL OFFSET	Diameter and height
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)  NOISE  RLS (Remove Len Segment)  SMOOTHING  MILD
GO FROM LINE	YES with graphical support
RETRACE	YES From JOG
PREVIEW	3D with outside axis with Mesh
EDITOR PART PROGRAM	Editor intellisense with help on line
WORK PLANE ROTATION	YES
WORK PLANE	Settable on any pair of axes
CN CONNECTION	RS232/ETHERNET for NGWARP,NGMEVO – RS232 for NGQ
OPERATING SYSTEM	Windows 7® - Windows 8.1® - Windows 10® with FRAMEWORK

Promax srl

Via Newton, 5G

50051 Castelfiorentino (FI) ITALY

Tel: +39 0571 684620 Fax: +39 0571 658720

www.promax.it info@promax.it