



IsoCNC

GENERAL FEATURES

IsoCnc is the numeric control with all the features and performance needed to govern automations based on ISO programming.

The product interface is designed to be used on a touch-screen even without keyboard and mouse. With this in mind, the graphical style includes some very detailed parts (for example, tool and machine parametrization) in a quite stylized context (similar to the Metro interface of Windows 8).

FUNCTIONAL FEATURES

The NC potential is considerable:

- Step by step execution of the ISO listing
- Addition of parts of listing (with machine temporarily stopped) downstream of the ISO instruction where the process has stopped and restart of the next execution
- Execution start from a selected point of the listing
- Addition at any time of the execution (or not at run time) of any MDI instruction
- Tool correction on a plane (2d) and in the space (3d)
- Execution of ISO listings with 3 or 5 interpolated axes
- Possibility of explicit definition of the kinematics of the interpolating axes (especially in cases in which 5-axis heads do not use the standard rotary axes)



A single interface combines all the parts necessary for the interaction with the machine: dedicated synoptics, whole communication with I/Os and various devices, viewing and editing (also guided) of the ISO listing, graphic display of the path, parametric tools (accompanied by graphical aids), configurable call to external programs (for example to a programming CAD or just the Windows calculator). The length of the ISO programs has virtually no limits since the ISO is processed step by step and sent to the NC in continuous mode.

Parts of IsoCnc are password protected so as to be able to distinguish operations accessible by machine (or NC) maintenance operators, operations accessible by plant or system managers and operations that can be performed by machine operators.

Tool parametrics is customizable and also its fields may be password protected, both in reading and writing.

IsoCnc is a product which can be interfaced with machine 3D simulator for a complete analysis of the feasibility of the programs, both to avoid potential collisions of the machine and to estimate the processing time.

PERFORMANCE

The system has a Lookahead in interpolation up to a maximum of 4096 blocks per interpolation channel. The maximum rate of interpolation depends on the length of the ISO blocks and on the Cpu of the NC chosen for the application (on Cn2008 for example it is possible to reach up to 25 mt/min with blocks of 1 mm); the length of the program, as already mentioned, has limits only with regard to the part of supervisor pc for the management of the text file, the elaboration and execution part can be virtually infinite.