

# BURNY<sup>®</sup> 2.5 Plus

## CNC CONTROL



### Performance Benefits

The new BURNY<sup>®</sup> 2.5 Plus CNC Control provides an economical shape-cutting solution for x-y axis drive shape-cutting machines that is much more than standard. It is compatible with cutting processes using oxy-fuel, plasma, laser or a router. The BURNY 2.5 Plus is part of the BURNY Products family of Cleveland Motion Controls, internationally recognized for providing shape-cutting control solutions that improve productivity while reducing costs.

The BURNY 2.5 Plus provides users numerous opportunities to reduce costs and to increase productivity. Users can count on faster set-up, precision tolerances, consistent accuracy, increased productivity, the elimination of templates, and reduced scrap.

It is available with new machinery, as a retrofit for older machines, and in upgrade kits for older BURNY 2.5 CNC Controls, upgrading the BURNY 2.5 CNC Control with "plus" capabilities in less than an hour.

### Design Features

The BURNY 2.5 Plus CNC Control has all of the same standard features as the BURNY 2.5 CNC plus much more.

The BURNY 2.5 Plus incorporates a new processor that is 80% to 90% faster. It has 512K of part storage with non-volatile backed RAM—over four times more memory storage than the BURNY 2.5.

The BURNY 2.5 Plus uses FLASH memory instead of EPROMS, enabling users to easily connect a laptop computer and download new software or new part programs. Plus, as with later versions of the BURNY 2.5, it can actually control a third axis of motion (the X-Y, X-X, or W axis).

The BURNY 2.5 Plus comes complete with almost all software features standard—including Part Rotation, Plate Alignment, Mirror Imaging, Scaling, etc. It is available in 10 languages.

## CNC CONTROL

Provides cost-efficient shape-cutting control for x-y axis drive shape-cutting machines. Standard control plus.

- Provides 80% to 90% faster processing speeds than BURNY 2.5 CNC
- Kerf calculation that is over 4 times faster
- Software and part program downloading over 4 times faster
- Over four times the memory—512K
- Reduces costs and increases shape cutting productivity
- 50 standard shape library
- Kits available for easily upgrading BURNY 2.5
- Most features standard
- Performance-proven in applications around the world





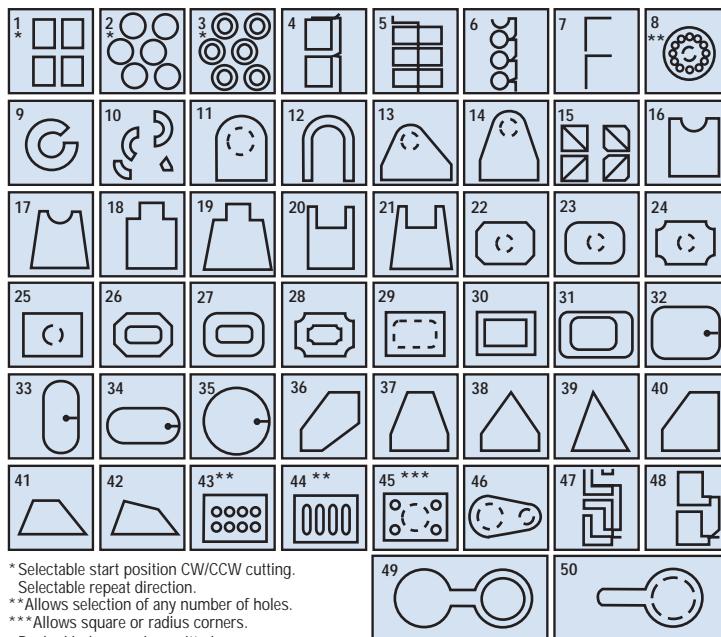
## Faster Processing. Faster Downloading and Kerf Calculation

While maintaining the same performance-proven capabilities that have made the BURNY 2.5 CNC the most widely used shape-cutting control in the world, the new BURNY 2.5 Plus has processing speeds that are over four times faster. Kerf calculation and downloading (of part programs or software) are over four times faster, increasing productivity even more.

## 512K Memory. BURNY 50 Shape Library

The BURNY 2.5 Plus CNC comes standard with 512K of non-volatile part storage memory and a built-in library of 50 commonly used shapes, i.e., circles, rings, rectangles, gussets, flange with bolt holes, etc. Each shape is easily

selected from the front panel and then programmed for its specific dimensions. The chart displays those shapes and details standard cutting options available for various shapes.



\* Selectable start position CW/CCW cutting.  
 Selectable repeat direction.  
 \*\* Allows selection of any number of holes.  
 \*\*\* Allows square or radius corners.  
 - Dashed holes may be omitted.  
 Corner radius may be set to 0 for sharp corners.

## Numerous Features. Most Standard

Numerous standard features include selectable kerf compensation, automatic lead-in and lead-out, chain cutting, step-and-repeat and template teach. Create/Edit (MDI) programming with program scaling, mirror imaging, rotation, automatic plate alignment, and

RS 232/422 serial communications are also available.

## For New Machinery. Retrofit. Or as an Upgrade

Retrofit upgrade kits are also available. Existing BURNY 2.5 CNC Controls can be easily upgraded with cutting edge speed and capabilities within an hour.

## STANDARD DESIGN AND CONSTRUCTION FEATURES

- Two-axis control standard (three-axis optional)
- CNC-Microprocessor-based system
- Executive operating program stored in non-volatile FLASH memory
- State-of-the-art displays:
  - Full ASCII vacuum fluorescent display
  - High intensity LED indicators
- 50/60 Hz 115/230 VAC power requirement
- State-of-the-art ICs, LSI and VLSI
- TENV cabinet
- 110 degree F ambient
- Sealed digital feedback encoders (0.0005 is sampling increment)
- Membrane keyboard
- Non-volatile part storage:
  - No part storage memory loss if input power fails
  - Battery backup
- Self check on power up
- Audio indication for key pushed
- Multi-level EMI protection systems

## STANDARD OPERATIONAL FEATURES

- Prompting
  - User-friendly in one of 10 languages
  - 16 character readout displays prompts
- BURNY 50 Shape Library
  - Direct front panel selection
  - Chain cut or selectable step and repeat
  - Selectable start point on some shapes

- Selectable repeat direction on some shape
  - Selectable automatic lead-in/ lead-out dimensions
  - Built-in strip mode
- Inch/Metric operation selectable.
  - Choice of automatic, manual and test run with manual entry of:
    - Selectable preheat time with override capability and selectable pierce ramp speed
    - Purge delay time for plasma systems
    - Selection of number of parts to be cut
  - Displays
    - Absolute dimensions
    - Machine status
    - Program status
    - Cutting status
    - Digital cutting speed
    - Part library
    - Preheat/Purge delay time
    - Memory status
    - Amount of memory remaining
    - Program size in part storage memory (individual)
  - Automatic accel/decel on corners:
    - Slowdown ramp and accel time selectable
    - Plasma height sensor disable contact activates during slowdown
  - Return to pierce point or start position (home)

- Automatic "cut row" count.
- Full back up along programmed path
- Automatic or manual lead-in ability—Allows interlocking lead-in to be used to minimize plate warpage
- Automatic return to cutter path from jog position (useful when cleaning torch tips)
- Dynamic repositioning ("Move Over") during test run or single step mode
- Test run mode: Part is executed but all cutting functions are suspended
- Single step mode: Block by block verification of the program path
- Extensive built-in diagnostics and calibration
- Template teach (digitizing)
- Selectable kerf compensation
- 512K Part storage memory—non-volatile
- Create/Edit program (MDI front panel)
- Teachable preheat

## OPTIONS

- Program scaling (.001 to 65)
- Automatic plate alignment
- Program mirror imaging (x/y axis mirror)
- Program rotation in .01° increments
- Foreign language prompting—Consult factory
- Plasma interface—Hardware option
- RS 232/422 serial communication with:
  - Standard upload/download capability
  - Enhanced "Program call-down" capability
- Transmission isolation/short haul modem
- Programmable kerf and feedrate

Note: In an effort to keep our controls updated with the latest technological advancements, we reserve the right to change or modify the specifications above without notice. Please consult the factory before ordering.

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