

# **PhantomST**<sup>TM</sup> SHAPE CUTTING CONTROLLER

The PhantomST brings to you the performance of a cutting edge CNC that is built on more than 40 years of experience in the motion control and cutting industries. This CNC is designed for multiple axis cutting machines and features the latest advances in CNC technology on a proven platform engineered to increase productivity, reduce costs and enhance your profitability. Our software provides you with flexibility, ease of use and technologies that put our experience and expertise in your operators' hands, resulting in extremely good cut quality and high productivity.

The PhantomST is the latest advancement from the leader in PC-based motion controls. The PhantomST features a PC-based platform combined with 2 or 3 axis drives and a plasma-focused operators console mounted within a single integrated cabinet. The PhantomST incorporates the latest CNC technology on a proven platform engineered to increase productivity and reduce costs.

Utilizing Windows<sup>®</sup> XP Embedded, the PhantomST motion control software produces extremely precise and repeatable cut parts. The system contains many software features not found in comparable, numerical controls such as true multitasking and DXF file conversion. The operator's console contains a user-friendly interface for full plasma functionality. Optional functionality can be added to allow for additional plasma stations (2 max) and oxy-fuel cutting operations (2 max). The PhantomST controller can operate any cutting machine and interface with virtually all plasma systems. It is available as an upgrade to existing machines or can be delivered on a new machine.



#### **HARDWARE PLATFORM:**

- Interface: 10.4 in. (264 mm) TFT with USB Touch Screen
- Processor: 2.0GHz Intel<sup>®</sup> Celeron<sup>®</sup>
- Memory: 1 GB DDR3 RAM
- Storage Space: 40GB or Larger (SATA) industrial grade solid-state hard drive for robust performance
- Operating System: Windows<sup>®</sup> XP
  Embedded
- Connectivity Options: USB, Network Ready (optional)
- Physical Controls: 8 Direction Keypad, Start, Stop, Go To, Reverse, and Feed Rate Potentiometer
- Operators Console Functions for:
   1 Plasma
  - 1 Additional Plasma (option)
  - 2 Oxy-Fuel Gas (optional) (manifold gases, preheat, and oxygen functions only)
- Drive System and Accessories
  - 2 or 3 axis 250 watt DC drives
  - 2 or 3 axis 400 watt AC drives
  - External drives version available
  - DC and AC motors
  - High accuracy gearboxes
  - Drive system cables
- Physical Dimensions (H x W x D): 19 x 17.6 x 16.5 in. (482.6 x 448 x 419 mm)
- Weight: 60 lbs (27.3 kg)
- Input Power Requirement: 115/230 Auto Switching at 50/60 Hz
- Operating Environment: 32 to 122°F (0 to 50°C) 95% humidity (non-condensing)
- Partial List of Operating Languages: Swedish, French, Russian, Spanish, Chinese, Italian, Norwegian, German
- Warranty: 1 year on controller
- CE Compliant

CE

## **STANDARD FEATURES**



#### Bright Touch Screen Interface

With a 10.4 in. (264 mm) industrial-grade touch screen, the PhantomST provides an extremely user-friendly machine interface. The wide viewing angle and high resolution graphics generate a bright display even in the harshest shop floor environment, allowing operators to easily and effectively move through the menus and guide the cutting machine.

#### **Touch Screen Interactive Display**

Eliminate dry runs and confirm the part program before cutting them with the PhantomST full color graphic display. View the cut path in real-time and monitor cut progress – especially important with underwater plasma. Use the zoom tools to verify part spacing and eliminate wasted or unusable product.

#### **Quick Plate Alignment**

Quickly compensate for a plate that is not aligned properly on the machine. The PhantomST rotates the part program for proper placement on the true plate position. With a few simple screen prompts the PhantomST rotates the part program for proper alignment with the plate. Virtually drop the plate and cut. This saves material and wasted time moving the plate into the correct cutting position.

#### **Expandable Shape Library**

Commonly used standard shapes can be designed right at the control. Touch the screen to input the required dimensions and follow a simple logical prompting process. Shapes are graphically displayed with dimension lines to assist the numeric entry process. A dynamic display draws the shape, which reduces guesswork. Now even complex shapes can be made consistently and accurately.

#### **True Multi-tasking Environment**

Increase operator productivity by performing many different tasks within the Windows<sup>®</sup> XP Embedded environment. Load a new part program, create or edit a part program, choose a new part program from the shape library, create or edit a program nest, check production messages, fill out productivity sheets or monitor consumables life – all at the same time and all while the machine is cutting!

#### **Monitor and Track Consumables**

The PhantomST tracks torch consumable usage and can alert the operator when a consumable change is required. This feature will maximize consumable life and torch life. In addition, cut quality and part accuracy can be held to the highest levels.



Interactive User Interface





Shapes Library





Process Wizard



Plasma



Oxyfuel



## **STANDARD FEATURES**

#### **Fast DXF File Conversion**

The PhantomST accepts direct downloads of CAD/CAM DXF files, which reduces the expense of third-party post processing software. Furthermore, the PhantomST can automatically assign Lead In/Lead Out positions – or the operator can make these assignments manually.

#### Go To (Job Interrupt)

Interrupt the current cutting routine to cut a new part, move ahead multiple pierce points, recover from cut loss, recover from power loss, change torch consumables, interrupt a long nest, jump to the end of a part or nest or reverse the cutting path – all quickly done at the touch of a button without losing machine position and without scrapping valuable material!

### **OPTIONAL FEATURES**

#### Advanced Plasma Process Control (Plasma Process Wizard)

The Advanced Plasma Interface integrates automatic gas regulators and secondary height control boxes (such as Spirit<sup>®</sup> and INOVA<sup>™</sup>) into a streamlined, state-of-the-art software package. Instead of walking to the plasma supply, just choose your material, thickness, and consumable type right on the CNC control. Once selected, send your cut chart data to the plasma and cause the plasma supply, to change gas pressures and amperage. This interface will bring an end to paper charts and the industry one step closer to near perfect cut quality.



# **OTHER ADVANCED FEATURES**

- Networking via Wireless or Fiber
- Remote Diagnostics
- Automatic DWG/DXF CAD file conversion
- 10-minute Quick System Recovery
- Job Interrupt and Power Loss Cut Recovery
- Standard Shapes Library

#### Other Windows® XP Embedded Features

The PhantomST utilizes Windows<sup>®</sup> XP Embedded, which provides the ability to take advantage of several productivity tools including remote desktop and USB (Universal Serial Bus) devices. Remote desktop provides the ability to access and operate a remote computer from the PhantomST while USB memory devices provide easy program transfer at the fastest download speeds available.

Programmable Laser Offset for Fast

Easy to Configure Mappable I/O

Load other 3rd party program/application

Part Alignment

software

#### **True Shape Nesting (optional)**

Take advantage of our newly designed "on-board" true shape embedded nesting program to further reduce individual part cost and improve plate utilization. This nesting module offers the machine operator a Wizard-based interface along with an integrated CAD editor that makes nesting on the controller easier and more efficient than competitive controllers.

#### **Remnant Digitizing (optional)**

Reduce remnant inventory by giving your operator the ability to trace remnants via the CNC and nest parts into partially used plates.

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The PhantomST control platform comes ready to optimize hole cutting with minimal operator intervention when paired with the UltraSharp<sup>™</sup> cutting technology. A completely integrated platform consists of CNC/Height Control/Software & Plasma System for a reliable and single sourced cutting solution.

Our 40 years of shape cutting experience helps us produce the industry's most consistent hole quality for mild steel and stainless steel at various thicknesses. This advanced technology requires no operator expertise or intervention to get the UltraSharp quality holes.

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Designed and manufactured in the U.S.A. To experience the ease of use and advanced features available in our software, contact our local sales representative for a demo version.

#### CUSTOMER ASSISTANCE POLICY

The business of Burny Kaliburn is manufacturing and selling high quality cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Burny Kaliburn for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular application. Accordingly, Burny Kaliburn does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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