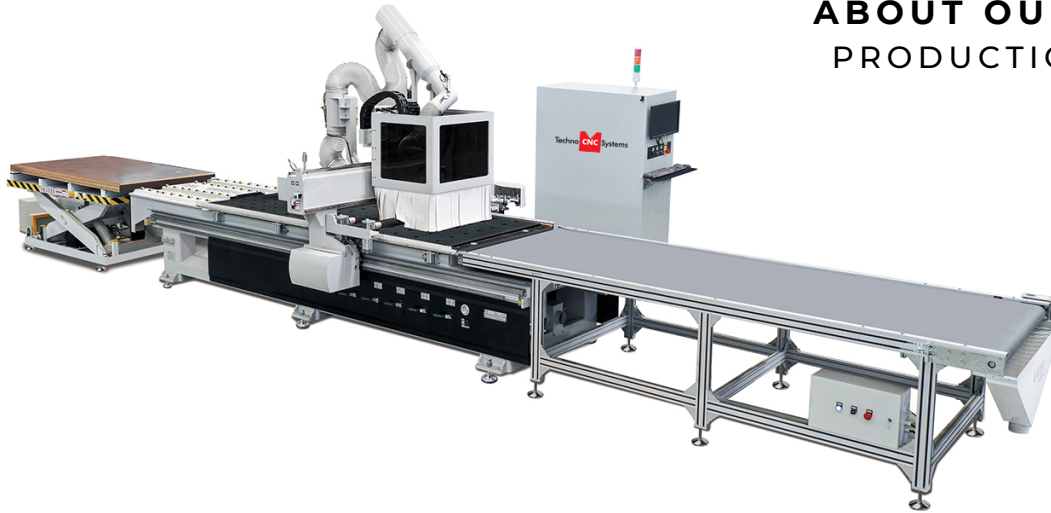


# THE Venture NESTING PRODUCTION WORK SHOP SERIES



## ABOUT OUR **VENTURE NESTING** PRODUCTION WORKSHOP SERIES

The Techno CNC Systems Venture Production work cell is designed with the high production cabinet shop in mind. The customer is able to streamline the material handling, CNC routing,

and offloading operations, seamlessly and efficiently. The Techno CNC System is G-Code based and compatible with the most popular cabinet and closet design programs.

## HOW IT WORKS

The Techno CNC Systems Venture Nesting work cell will automatically load a sheet from a pallet by way of a scissor lift located at the rear of the CNC machine and a movable gantry system equipped with suction cups. The material sheet is safely and accurately guided onto the CNC platform by the gantry using retractable guide rails and stops on the table. Once the sheet is placed, the operator turns on the vacuum hold down and starts the cut cycle for the CNC to execute. After the sheet is fully processed, it is then pushed off to a conveyor table at the front end while another sheet is simultaneously loaded from the rear of the machine again. During this whole process the residual dust, that is not picked up from the dust collector, is swept off the table and conveyor into various chutes keeping the work cell clear of dust and debris. Upon completion, the individual parts are labeled by the operator through an integrated barcode system. This facilitates clear identification of the finished parts for quick and easy assembly later on.

## IMPRESSIVE CONTROLLER FEATURES

### INCLUDES:

- ✓ Built-in editor for shop floor modifications
- ✓ Machine feed rate and spindle override control
- ✓ Continuous step jogging, or convenient hand-held pulse generator can be used to fine tune positional locations
- ✓ Mechanical homing location controls (at any corner of the machine)
- ✓ No DNC link required
- ✓ Allows for up to 10 fixture offsets
- ✓ I/O machine status display
- ✓ Skip function to return to program positions (in case of tool bit failure)

# Venture

## NESTING

### PRODUCTION WORK SHOP SERIES

#### CONSTRUCTION FEATURES

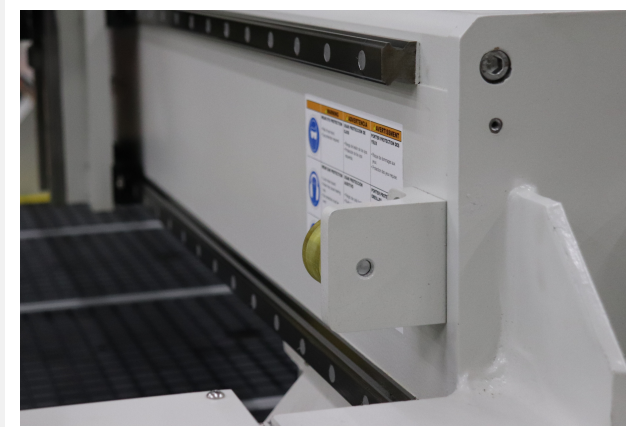
## BASE FRAME

All frames are designed using state-of-the-art CAD/CAM software which analyze stresses applied to the frame's structure, also known as Finite element analysis. This state-of-the-art leading edge technology assures the support foundation is structurally stable that will last the test of time. Each frame is stress relieved assuring long term stability in the frame structure mechanics.



## GANTRY

The gantry is constructed of tubular steel with reinforcing ribs welded throughout the length of the column which results in a steady firm beam assembly. This quality engineering and workmanship result in smooth precision cutting.



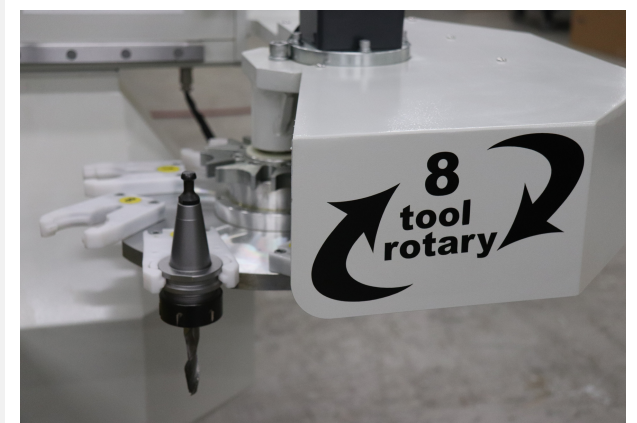
## SPINDLE

The Venture Series ME4 Production work cell comes standard with a 12HP HSD high frequency automatic tool changer. This precision spindle requires no maintenance, uses industry standard ER collets and ISO 30 tool holders. Fully programmable speeds from 6000 to 24000 RPM, and comes complete with pneumatically retractable vacuum hood.



## 8 TOOL ROTARY CAROUSEL

The Venture Production work cell includes an 8-position rotary carousel that moves with the machine while the gantry travels. The use of a carousel speeds up tool changes assuring faster cycle times increasing production capability.



CONTACT US



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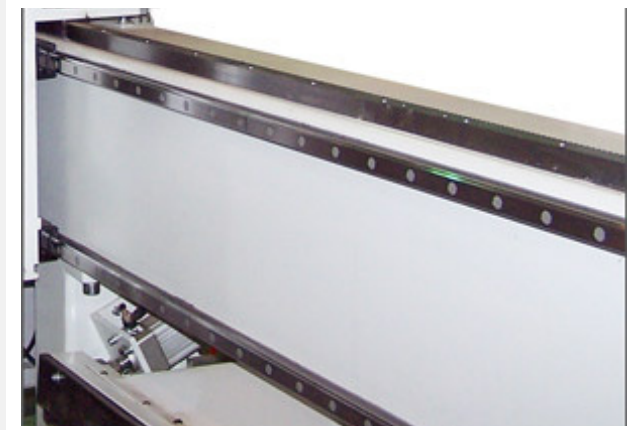
29 Trade Zone Drive  
Ronkonkoma, NY 11779



631-648-7481

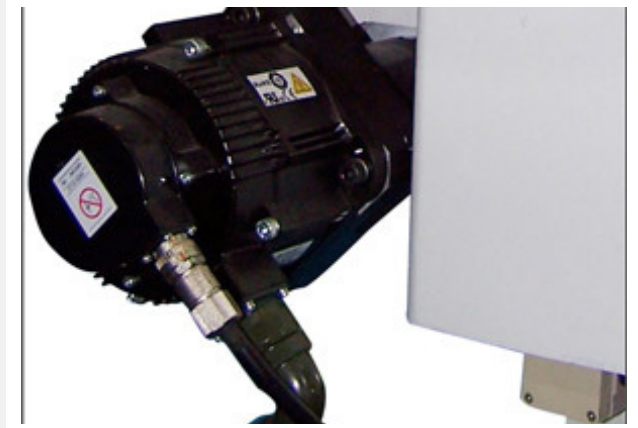
## LINEAR RACKS

The Venture Series ME4 Production work cell uses precision Helical gear racks on the X- and Y-axes. The use of Helical precision rack and pinion assures smooth precision cutting at high feed rates. In addition, the method in which the racks are mounted help reduce maintenance.



## DRIVE MOTORS

The New Venture Series Production work cell utilizes high-powered Yaskawa Digital Servo motors & powered by Delta Drives. These motors are brushless, therefore, requiring no regular maintenance, thus, reducing any maintenance downtime.



## DRIVE TRAIN ASSEMBLY

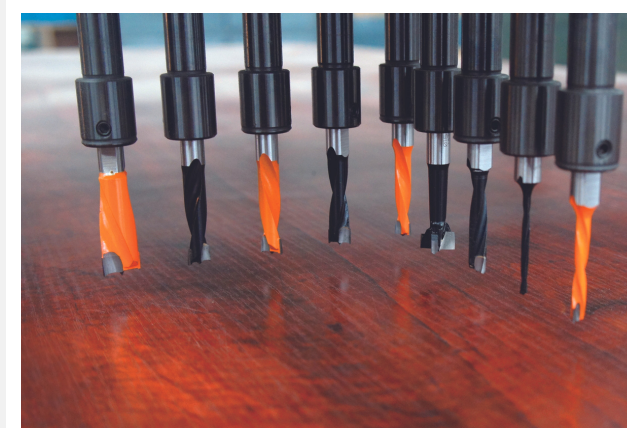
The XY Drives include a precision gearbox which is directly coupled to the Servo motor and pinion. This eliminates belt stretch inaccuracies assuring high-speed machining while the system positions the spindle accurately.



## DRILL BANK

5 + 4 Vertical

Other configurations are available upon request.





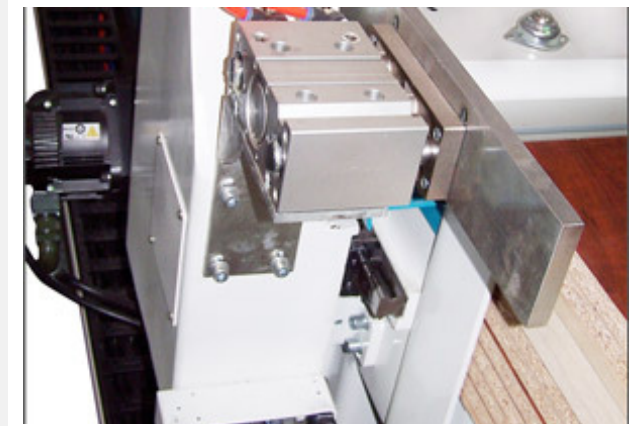
## BEARINGS

THK HSR bearings and rails are used on all three axes. These superior quality components complement the overall construction by providing smooth play-free motion. This results in superior cut quality, requires minimal maintenance, and increases the machines longevity



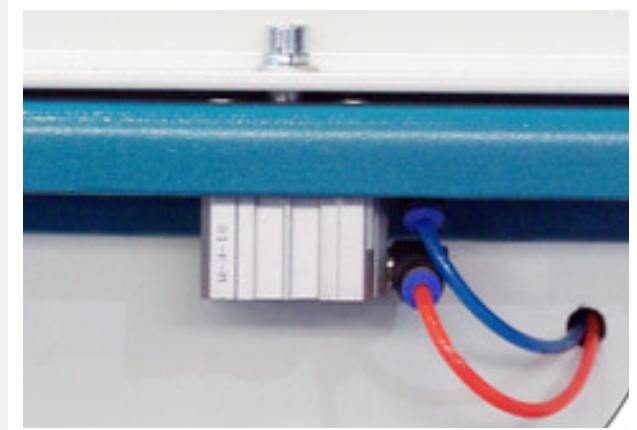
## MATERIAL ALIGNMENT SYSTEM

Venture Series Model - ME4 Production work cell machine comes standard with a material alignment system. The material is centrally aligned with the machine's origin assuring the operator does not have any intervention with realigning the machine's start origin point.



## M.A.S. POP UP SIDE RAILS

The pop up side rails keep the previous routed nest uniform as the material is pushed onto the conveyor



## SUCTION CUP LOAD SYSTEM

The rear suction cup load system attached to the Venture ME4 gantry can easily load a sheet on to the bed surface. As it loads, it automatically sweeps the deck clean of any debris assuring a clean scavenger board surface for maximum vacuum hold down as it processes each and every sheet.



## REAR SCISSOR LIFT

The automation work cell includes a rear scissor lift which supports and raises the stack of material to the machine's vacuum bed height, which is monitored with optical eye-sensing stack material height and machine bed surface.



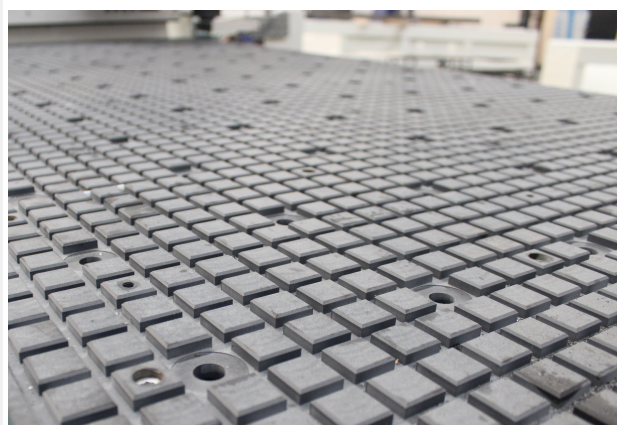
## CONVEYOR TABLE

Conveyor table is located at the front end of the machine.



## VACUUM TABLE

The vacuum plenum table surface is multi-zoned which allows the operator to easily switch from full sheet processing to smaller part processing, (which requires a smaller segmented area). Zones can be turned off easily via control valves on the side of the machine.



## AUTOMATIC LUBRICATION SYSTEM

System applies oil to the THK linear bearings and ballscrews automatically



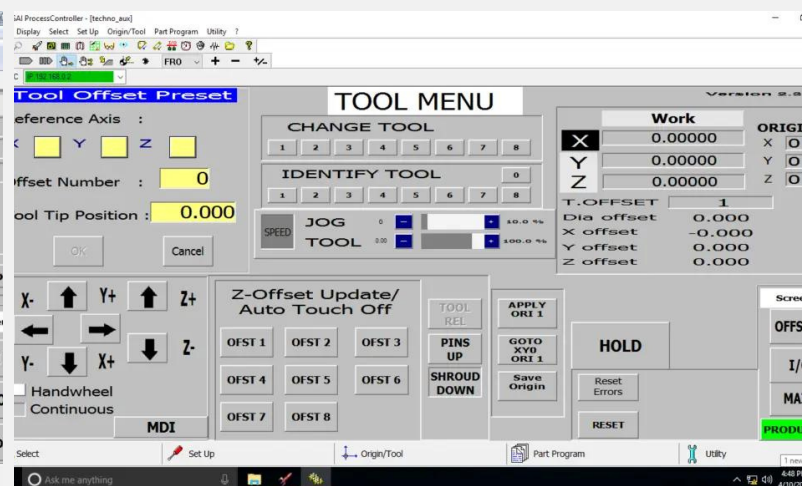
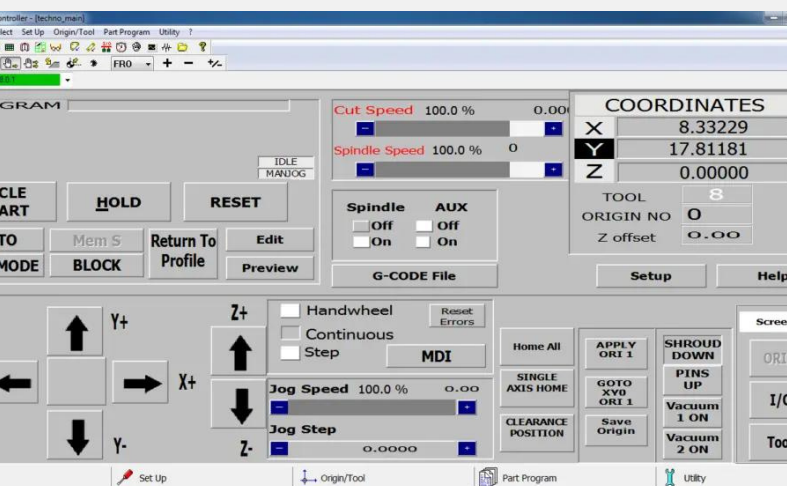
## OPTIONS

**BAR CODE PRINTER AND SCANNER  
(OPTIONAL)**



**AUTO BARCODE LABELER SYSTEM  
(OPTIONAL)**





# G-CODE INTERFACE

CNC Windows-Based G-Code Interface is included with each Venture Series Production work cell machine and is an indispensable tool in any CNC Router application. It's open architectural design accepts G-Code files from any industry standard CAD/CAM software package. The jogging buttons, speed controls and run displays are all visible on the main page. The intuitive single-screen design and functions are easy to use and remember. Customers that are new to automation find the Techno CNC Interface easy to learn and operate. Most are up and running in less than one day. Customers soon discover that just because the Techno CNC Interface is easy to use does not mean that it is not a comprehensive CNC program.

## HAND-HELD PULSE GENERATOR

The hand-held pulse generator allows the operator to maneuver around when setting up tooling.



## THE HIGH SPEED, EFFICIENT, AND ACCURATE MACHINING THAT YOUR BUSINESS NEEDS



### Professional Equipment

Use our world class, industrial grade, easy to use equipment to meet and exceed your production needs



### Free Technical Support

Call or email our live technical support team for quick technical support within minutes. Free for the life of your machine



### Always Affordable

We are always looking out for our customers needs and budget. We will work with you to build the machine of your dreams at an affordable rate

