

## PRECISE • EXPANDABLE • DRIVERLESS

The RAPTOR XPR is a 5th **Generation CNC Router** designed for speed, factory profitability, and ease of use for the woodworker.

#### **QUICK LINKS**



See the RAPTOR XPR in action on Youtube

## **Würth Louis and Company**



**www.wurthmachinery.com** 



**800-442-4389** 

**SEE THE RAPTOR IN 360°** 



#### **Inclusions:**

- Lifetime Technical Support
- CNC University Certification
- 1 Vacuum Pump

### **Features:**

- 12HP ATC air-cooled spindle
- No machine homing or alignment
- Driverless mobile control center
- 8-tool rotary with rapid 8-second tool change
- Robotic cleaning & unloading
- Zoned dual-layer, high-flow vacuum table
- Robotic material alignment ready
- Fast cutting speeds upto 1200 IPM & 2200 IPM rapid travel
- Auto tool length, pressurized lubrication & robotic switching dust extraction
- Robotic material loading ready
- 5th Generation Helical Rack & Pinion
- Plug & play add-ons

#### **Built-in Software Options:**









## **ABOUT US**

CNC Factory, Inc., located in Southern California, USA, began over 20 years ago as a one-man business with a clear goal and dedication to helping companies embrace CNC automation.

This vision is core to our legacy as we design and manufacture high-quality, precision CNC routers and machining centers, to meet the urgent business needs of our customers. At CNC Factory, we understand since inception, that providing the fastest, most accurate and dependable CNC Machines and supporting products is only the beginning of meeting our customers' needs— we never leave them all by themselves. Together with our German, Italian and worldwide support partners, world-class machining capability is truly just the beginning.

With us at the back of (sometimes beside) our customers, their businesses have grown and we've meet their needs from quality and efficiency to the bottom line. We think beyond machine building. We also grant access to factory direct support and training before and after installation for our customers.

# THE MOST IMPRESSIVE SERVICE AND SUPPORT WARRANTY IN THE USA



**Lifetime Support** included with every Raptor Machine Center



**20-Month Warranty**, the longest in the industry



Virtual Support to help guide your staff at the machine level



Advance Exchange Program on major components



On-Site Support options available



**On-Site Installation** and training available





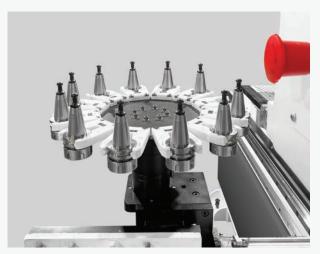
## STANDARD FEATURES



#### **ROBOTIC UNLOADING AND CLEANING**

Robotic material unloading boosts the driverless technology of the Raptor XPR. The days of stopping the CNC to mark parts, unload and manually clean the spoilboard are a thing of the past. The Raptor XPR performs this robotic unloading and spoilboard cleaning in 30 seconds with no human intervention.

Loading of material has never been easier with material alignment pins that automatically retract before running a program. The Raptor is designed to be loaded from all four sides, including rear-integrated material moving wheels.



#### **8-TOOL SERVO ATC**

Servo-controlled, rotary ATC 8-tool carousel performs tool changes under 8 seconds. Mounted on the gantry for at-the-location tool changes compliments the rapid travel of 2200 inches per minute; your Raptor will complete the most complex multi-tool tasks efficiently. Upgradable to 12 tools.



### PRESSURIZED OIL LUBRICATION

It's integrated with a lubrication system to deliver oil to critical lubrication points automatically... so there's no forgetting to lubricate all areas; minimizing the risk of damage to your equipment and performance.

Unlike other brands who use *centralized* lubrication, the Sidewinder's is *pressurized*, so you only get lubrication to areas that need it— avoiding overlubrication which can cause oil leaks to your materials.



#### 12HP AIR-COOLED ATC SPINDLE

Raptor XPR is built with a 12HP air-cooled ATC spindle (1,000-24,000 RPM) and performs with precision and speed. Designed for the wood and plastic industry, ISO 30 Tools changes can be done automatically or by hand with a push of a button on the spindle. Installed Delta invertor ensures variable speeds and on-board protection. The spindle is a key component of the Sidewinder machine center and is protected by the CNC Factory advance exchange program, ensuring constant operation and lifetime support.



## STANDARD FEATURES



## 5TH GENERATION HELICAL RACK & PINON

5th generation helical rack and pinion powers the Raptor XPR with absolute positioning at all times. Even with no power, the Raptor knows its position at all times. The new CNC Driverless technology takes away frustrating machine homing and multiple alignment switches. Integrated anti-backlash 5th generation servo & uniform load distribution produce constant gear contact among several axes—increasing, speed, life and accuracy.



## WIRELESS HANDHELD REMOTE WITH CNC SIMULATION

The driverless remote and MPG Controller allows for effective at-machine management including manual control of all axes with selectable speed controls. The MPG simulation wheel allows to scroll through a live program, forward and backwards, to ensure accuracy and CNC performance.



### **SMART V300 VACUUM PUMP**

Driverless vacuum technology makes the need for a seasoned operator a thing of the past with constant vacuum hold-down communication with the Raptor XPR operator.

- Electric phase protection
- Thermal protection
- New energy-saving 5.5kw rotary vane technology
- Wireless on/off
- Automatic vacuum flow on and off, during material cycling and unloading



## **OPTIONAL UPGRADES**



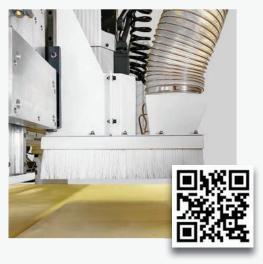
#### **12-TOOL SERVO ATC UPGRADE**

Add 4 more tools to your servo-controlled, rotary ATC carousel (for a total of 12 tools). Performs tool changes under 8 seconds. Mounted on the gantry for at-the-location tool changes, and to continue allow material loading on all 4 sides.



#### **DRILL BLOCK UPGRADE**

Optional 9 head drill block produces 5 drills in both directions— boosting production speeds for drilling and boring operations. A must for aggressive drilling and boring, the Raptor XPR is scalable to your growth. The optional drill block can be installed anytime but already has pre-installed, drill block mounting, power and data.



## ROBOTIC MATERIAL SENSING DUST HOOD UPGRADE

This patent-pending game changing optional upgrade keeps your shop clean and employees safe. With 5G CNC, the Raptor can automatically detect the thickness of the material and the corresponding height of the tool being used. This "sensing" allows the dust hood to hover at the perfect spot over your material, creating a seal to prevent dust from escaping without bending the dust brush, whether you are switching from thin to thick materials, or are using short or longer tools.

SCAN FOR VIDEO



Holds up to 4 Deluche Vision Marking tools so you can stamp 4 different markings/colors of post-production instructions on your cut parts. The Raptor is pre-wired for this upgrade so you can just plug & play the marking block when you need it.



The Deluche Vision Marking tool is sold separately.



## **OPTIONAL UPGRADES**



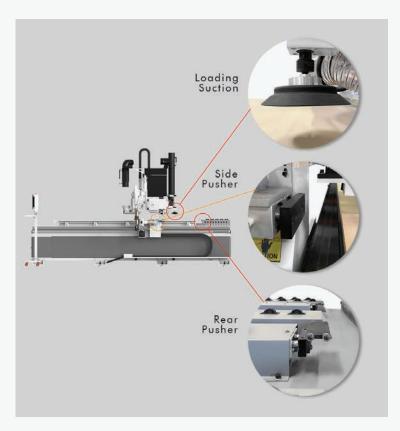
#### **UNLOADING TABLE UPGRADE**

Driverless technology allows the conveyor to unload processed material to match the pace of your operator. It has material sensing that automatically stops the conveyor when there is material at the edge of the conveyor. Also comes with a gravity-fed dust collector. The Raptor is pre-wired for this upgrade so you can just plug & play the unloading table when you need it.



#### **HYDRAULIC LOADING TABLE UPGRADE**

Robotic material loading that saves you from back-breaking work. You can load it with 30-40 sheets at a time and use a foot switch to operate. Operates in manual and automatic mode and has an integrated height sensor that automatically raises the material. The Raptor is pre-wired for this upgrade so you can just plug & play the loading table when you need it



## ROBOTIC LOADING & ALIGNMENT UPGRADE

Loading of material has never been easier with loading suctions that pick up the material from the loading bed. It also has rear & side pushers and material alignment pins that align your materials perfectly and automatically retract before running a program. The Raptor is designed to be loaded from all four sides, including rear integrated material moving wheels.



## **OPTIONAL TOOLING KITS**

All Deluche Tools are lifetime guaranteed so you can buy with confidence and get a replacement any time, for whatever reason, up to a 50% discounted price. Getting new tools every time your old one is close to wearing out saves you the effort from calibrating your CNC Router for tool wear, plus you always get precise cuts.



#### **CNC CABINET START UP TOOL PACKAGE**

Our recommended tool kit for cutting cabinets.

#### Includes:

- 5 pcs. Deluche 3/8" ICE Compression bit
- 2 pcs. Deluche 3/8" ICE Down Cut bit
- 3 pcs. Deluche 1/4" ICE Compression bit
- 3 pcs. Deluche 1/4" ICE Down Cut bit
- 2 pcs. Deluche 1/2" ICE Compression Bit
- 2 pcs. Deluche 5mm 3 Flute brad-point drill bit 70mm Length
- 1 pc.1.5" Deluche 3-Head Fly Cutter
- 4 pcs. 1/4" ER32 Collet
- 2 pcs. 3/8" ER32 Collet
- 5 pcs. 1/2" ER32 Collet
- 2 pcs. 3/4" ER32 Collet
- 1 pc. ER32 10mm Collet
- 1 pc.ISO 32Cleaning Rod



#### **CNC CABINET & DRILL BLOCK TOOL PACKAGE**

Our recommended tool kit for cutting cabinets with a drill block.

#### Includes:

- 5 pcs. Deluche 3/8" ICE Compression bit
- 2 pcs. Deluche 3/8" ICE Down Cut bit
- 3 pcs. Deluche 1/4" ICE Compression bit
- 3 pcs. Deluche 1/4" ICE Down Cut bit
- 2 pcs. Deluche 1/2" ICE Compression Bit
- 8 pcs. Deluche 5mm 3 Flute brad-point drill bit 70mm, Right
- 6 pcs. Deluche 5mm, 4 Flute brad-point drill bit 70mm, Left
- 2 pcs. Deluche 8mm, 4 Flute brad-point drill bit 57mm, Right
- 2 pcs. Deluche 8mm, 4 Flute brad-point drill bit 57mm, Left
- 1 pc.1.5" Deluche 3-Head Fly Cutter
- 4 pcs. 1/4" ER32 Collet
- 2 pcs. 3/8" ER32 Collet
- 5 pcs. 1/2" ER32 Collet
- 2 pcs. 3/4" ER32 Collet
- 1 pc. ER32 10mm Collet
- 1 pc.ISO 32 Cleaning Rod



## **FEATURES**

#### **NO MACHINE HOMING OR ALIGNMENT**

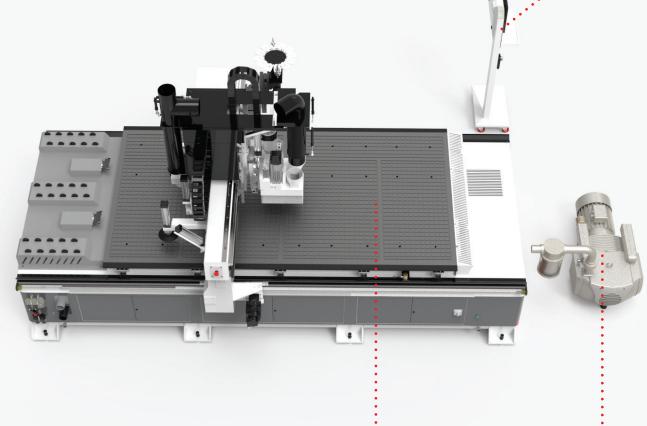
Machine homing and aligning is a thing of the past with the Raptor XPR. With driverless technology and 5th generation CNC control, your Raptor will know its location at all times. Simply turn on and you're ready for operation.

## 21" TOUCH SCREEN CONTROLLER

It's new user-friendly interface allows designing at the machine. With WiFi, ethernet and USB (4 ports) connectivity.

## **ONBOARD AIR CONDITIONING/COOLING**

Heat extraction with digitally-set air movement installed directly inside the Raptor onboard control center provides a constant, high air flow and pressure. This helps stabilize the control cabinet operations in the most demanding environments and protects critical components over years of operation.



## **VACUUM PUMP AND MATERIAL HOLD DOWN**

The Raptor XPR includes one (1) Smart V300 rotary vane vacuum pump hold down system for 4' x 8' and 5' x 10' tables, including dual vacuum hook ups when needed. Driverless vacuum technology makes the need for a seasoned operator a thing of the past with constant vacuum hold-down communication with the Raptor XPR operator. It includes the advanced, dual-layer, phenolic vacuum grid table with over 100 vacuum access points, giving you an increased hold down over standard single layer systems. The Raptor will alert the operator if vacuum hold down falls to an unsafe level before running a program. The Raptor automatic vacuum flow control allows continuous machine production and an increased material cycling rate.





TECHNICAL SPECS Speeds	1200 inches per minute cutting, 2200 inches per minute rapid movements
Spindle	12HP ISO-30 air-cooled ATC spindle with manual release
Carousel ATC	<ul> <li>8-position ISO-30 servo controlled rotary carousel ride-along ATC tool changer (8 seconds)</li> <li>Eight (8) ISO ER-30 tool holders and ER wrench included</li> <li>Auto tool length measurement sensor included</li> </ul>
CNC Controller	<ul> <li>5th Generation 21" touch screen industrial control center with handheld controller and easy button operation.</li> <li>Built-in continuous operation file saving and production override with speed control</li> <li>G-Code compatible with virtually every CAD and woodworking software.</li> <li>Tool wear history with built-in alarm stops, USB, WiFi, ethernet, work coordinates and on-screen programming</li> </ul>
Cooling	On-board integrated air conditioner
Network Communications	Windows 10 front end with ethernet ready connection and WiFi compatible, virtual support, on-board CNC digital camera
Software Installed	KCD Software and V-carve. The Raptor is compatible with virtually all G-code
Servo System	Yaskawa 5G encoding system with self-adjusting servo operations
Repositioning	Acceleration and deceleration working and repositioning within +/001"
Vacuum Pump	One (1) Smart V300 rotary vane energy-saving 7.5kw with 270 meter/hour hold down 220V
CNC Voltage and Air	208-240 Volts, 3-Phase 30amp. 120psi, 8 bar, 9 cfm.
Dust Collection	Minimum of 2500 CFM. Single 6" dust port on top of machine

<sup>\*</sup> G-code from other software requires posts generated by them. Call to see if we have posts in our library.
\* Electrical requirements may change if there are additional electrical components, transformers and or pumps.



## **PLUG & PLAY GROWTH**

As your shop grows, your Raptor XPR will grow with you. With cost savings and production-boosting plug & play upgrades, your CNC machine center will grow as you grow.

You can simply connect to your Raptor XPR an autosensing unloading conveyor, hydraulic loading table, robotic material loading, drill block, marking block, material alignment or additional vacuums. That's 5th generation CNC Power.

Upgrade at anytime; the Raptor XPR is ready when you are!



## **PRICING PER PROCESS AREA**

Every Raptor XPR order comes with CNC University Certification & Lifetime Support.

\$47,900	Raptor XPR 4' x 8'
\$49,900	Raptor XPR 4' x 10'
\$51,900	Raptor XPR 5' x 10'
\$54,900	Raptor XPR 5' x 12'
	*Single-phase option available

## **ANYTIME UPGRADES**

\$5,900	9-Position drill block
\$2,400	Robotic material height-sensing dust hood
\$2,950	4-Port Robotic Marking Block
\$679	Deluche CNC Vision Marker Tool
\$4,600	Robotic Material Alignment & Robotic Loading Arm
\$4,900	Hydraulic automated loading table (add \$500 for 5x10 and 5x12)
\$4,900	Unloading conveyor with material sensing (add \$500 for 5x10 and 5x12)
\$6,900	Additional V300 Rotary vane vacuum pump

## **TRAINING OPTIONS**

Free	CNC University Training
\$3,500	Additional 3-day onsite installation & training



## **FOOTPRINT**

 Processing Area
 Table Size
 4' x 8'
 4' x 10'
 5' x 10'
 5' x 12'

 X-Axis Width
 49"
 61"
 61"

Y-Axis Length 97" 121" 121" 145" Z-Axis Height 11.5" 11.5" 11.5"

Z-Axis Clearance Up to 4.5" clearance with unloading arm

Up to 7" clearance without unloading arm

Footprint 4' x 8' Table

99.5" x 152" x 101"H

7200lbs.

4' x 10' Table

99.5" x 176" x 101"H

7600lbs.

5' x 10' Table

111.5" x 176" x 101"H

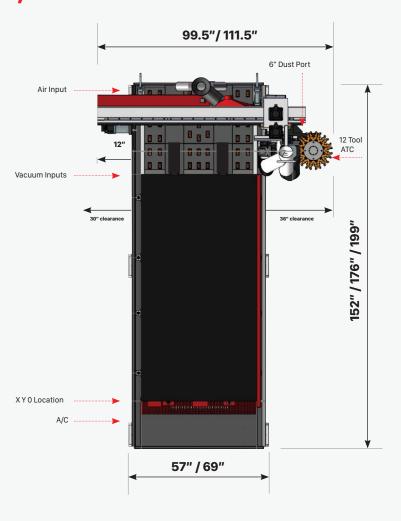
7800lbs.

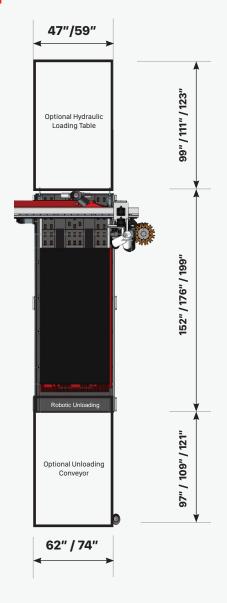
5' x 12' Table

111.5" x 199" x 101"H

8500lbs.

## 4x8, 5x10 and 5x12 TOP VIEW WITH EXPANSION





## **INSTALLATION NOTES**

**AC - CNC Machine:** 208/220/240 Volt, 3-Phase, 60 hertz. 30amp **AC - Vacuum Pump:** 208/220/240 Volt, 3-Phase, 60 hertz. 50amp

Air Pressure: (3/8" inlet) 8 bar (120psi) 9 CFM

**Dust Collection:** Min. of 2800 CFM. Single 6" dust port on top of

machine 97" height



## **RAPTOR DRIVERLESS CONTROL & SOFTWARE**



Our Driverless controller has one of the smallest footprint in the industry.

The model here stands at 5'6".

Digital camera for remote access and diagnostics

Large 21" touch LCD screen with Play/Pause button operations & remote vacuum start

- Driverless with virtual, WiFi and at-the-machine operations
- Wireless CNC hand-held controller
- On-board CNC air conditioning
- Pick and choose cabinets and cutting from pre-installed software or install your own as your needs grow
- Raptor is virtually compatible with all cabinet and CAD/CAM software
- Vacuum hold-down communication and material unloading at a touch of a button
- Material alignment pins, automatic vacuum flow with integrated sensor communication
- Robotic unloading, including pressurized dust hood and spoilboard cleaning
- Tool measuring, spoilboard surfacing, spindle warmup, MPG controller and feed rate overrides

## **RAPTOR DRIVERLESS SOFTWARE**



V-Carve Professional provides a powerful but intuitive software solution for creating and cutting parts on a CNC Router. V-Carve Pro gives you the power to produce complex 2D patterns with profile, pocket, drill and inlay toolpaths - plus gives you the ability to create designs with V-carving textures as



well as import and machine unlimited Vectric 3D clipart or single model files. The 'Pro' edition gives you unlimited jobs and toolpath size, true shape nesting & job set-up sheets, ideally suited to a production environment.



## **RAPTOR DRIVERLESS CONTROL & SOFTWARE**



KCD Cabinet and Closet Software is integrated\* into the new Raptor XPR driverless technology with a machine library and operations, including design for manufacturing software tools, for residential and commercial casework. KCD Software takes you from Design to CNC machining, and will generate detailed, dimensional drawings, elevations, floor plans, 3D renderings, material requirements, cut lists, and estimates and proposals. KCD Software is recognized as the leading software for ease of use, growth and support

#### Pricing and Bidding

Generate instant estimates, proposals and contracts for accuracy in job bidding and closing sales.

- Detailed Dimensional Drawings to Scale
   Easily combine, organize and display your professional drawings to your contractors and shop.
- Quality Renderings
   Impress your next potential client with your presentations and win more projects.
- Accurate Cut Lists
   Reduce production time and eliminate waste when your cut lists are right the first time.
- Online Knowledge Center
   Free access to KCD Software's extensive training video library, documentation and much more.
- Software with Free Live Support
   Get the phone support you need with extraordinary customer service.

The power of the machine center gives you direct machine capabilities rightfrom your mobile control center. Paired with KCD Software, this is an easy way to communicate with your Raptor XPR. Whether making a single cut or multi-sheet project from KCD Software, your Raptor XPR center can automatically process your parts, eliminating the extra costs of a dedicated programmer.

- KCD tailored for the Raptor XPR
- Basic Individual DXF Import
- Integrated Label Reports
- Integrated Reporting
- Check Sheet Sizes to Fit Machine
- Pattern Diagram Print Outs
- Automatic Tooling and Tool Path Generation
- Pocketing of Rectangles and Circles
- Basic Toolpath Simulation
- Ability to Control Lead-In/Out Offsets
- Linked Part Outline (Bridge) Nesting
- Intelligent Small Part Handling (Tabs, Onionskins, Return Onionskins)
- Combine Operations on Part Edge with Part Outline







<sup>\*</sup>Must be pre-qualified for the KCD Software 6-month CNC Commander trial. Contact KCD Software for details. 508-760-1140 or sales@KCDSoftware.com



## **TERMS & INSTALLATION**

#### **Terms of Payment**

Terms of payment offered, or any terms agreed upon, are subject to credit approval if needed. This offer is subject to CNC Factory General Terms and Conditions of Sale. This order is subject to prior purchase of the equipment. Quote expires in 30 days. Price quoted is for the machine as described above and is subject to change with notice or if the specifications for the machine are changed at the request of the buyer.

#### **Shipment**

Shipment is subject to delay should changes be made to meet the requirements of the purchaser from CNC Factory's design specification stated herein.

#### **Tooling**

- Tooling is not included. Upon request, we can supply a quotation on the most suitable tools required for use on this machine.
- Eight (8) ISO30 tool holders and ER wrench are included in this order.

#### **Installation, Training, Support and Conditions**

Installation, when purchased, will be performed by a CNC Factory-trained service technician or Certified Dealer Technician. Installation is to be understood as the assembly of the machine to the "ready to run" state. It does not include floor, masonry work, machine leveling, the running of electrical, pneumatic or dust extraction services to the site. Training will be on the machine operations only. Software training, if any, can be done before or after installation by CNC Factory University training services. Training will be conducted on site by the service technician after installation has been completed.

CNC Factory is committed to maximizing your production time. Your machine may contain built-in safety/ operational messages. You can contact CNC Factory Support Department at 714-581-5999 if you receive a machine message.

## **Warranty and Lifetime Support**

CNC Factory is proud to give you a lifetime of machine support and warrants the machinery will be free of defects in workmanship and materials for a period of 20 months beginning on the date of delivery. This warranty does not include parts consumed during normal operation (wearable) or maintenance required in the ordinary course of operation.