



# PYTHON XPR

**FDMC**  
*EDITOR'S CHOICE*  
*Best CNC of 2020*



## TECHNICAL SPECIFICATIONS

### QUICK LINKS



See the PYTHON XPR in action on Youtube

**SEE THE PYTHON IN 360°**

**SEE FINANCING OPTIONS**

**GET A QUOTE**

 [www.CNCfactory.com](http://www.CNCfactory.com)

 [714-581-5999](tel:714-581-5999)

 [sales@cncfactory.com](mailto:sales@cncfactory.com)

### 5G CNC Inclusions:

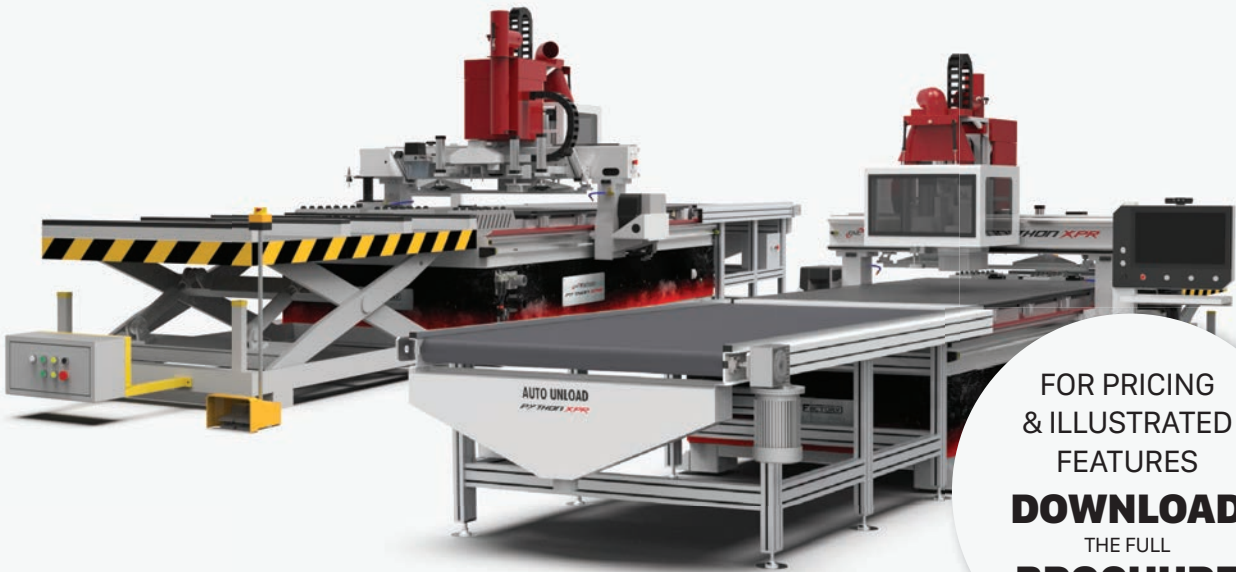
- Robotic CNC Machine Center with automatic loading & unloading tables
- 12HP ATC HSD air-cooled spindle
- Driverless servo system with helical rack & pinion
- No machine homing or calibration
- 12-tool rotary carousel with rapid 8-second tool change
- Driverless mobile control center with 21" touch screen, wireless remote & HD Camera
- Automatic material alignment pins, loading arm & wheels
- Robotic cleaning & unloading
- Zoned dual-layer, high-flow vacuum table
- Automatic vacuum communication
- Auto tool length, pressurized lubrication & robotic material sensing dust hood
- Space-saving integrated robotic wiring
- On-board air-conditioning
- 12 ISO-30 tool holders & 1 ISO tool changer
- Pre-wired for Plug & Play add-ons

### Support & Warranty

- Lifetime machine support
- 18-month parts and components warranty
- 5-year advanced exchange program
- CNC University training

Pre-installed software option:

**KCD**  
software



FOR PRICING  
& ILLUSTRATED  
FEATURES  
**DOWNLOAD**  
THE FULL  
**BROCHURE**



## TECHNICAL SPECS

Speeds	1500 inches per minute cutting, 2500 inches per minute rapid movements
Spindle	12HP <b>HSD</b> (9kw) ISO-30 air cooled ATC spindle with manual release
Carousel ATC	<ul style="list-style-type: none"><li>• 12-position ISO-30 servo controlled rotary carousel ride-along ATC tool changer (8 seconds)</li><li>• Twelve (12) ISO ER-30 tool holders and ER wrench included</li><li>• Auto tool length measurement sensor included</li></ul>
CNC Controller	<ul style="list-style-type: none"><li>• 5th generation 21" touch screen industrial control center with handheld controller and easy button operation</li><li>• Syntec electrical control with PC front end</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
Software Installed	KCD Software option. The Python 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"

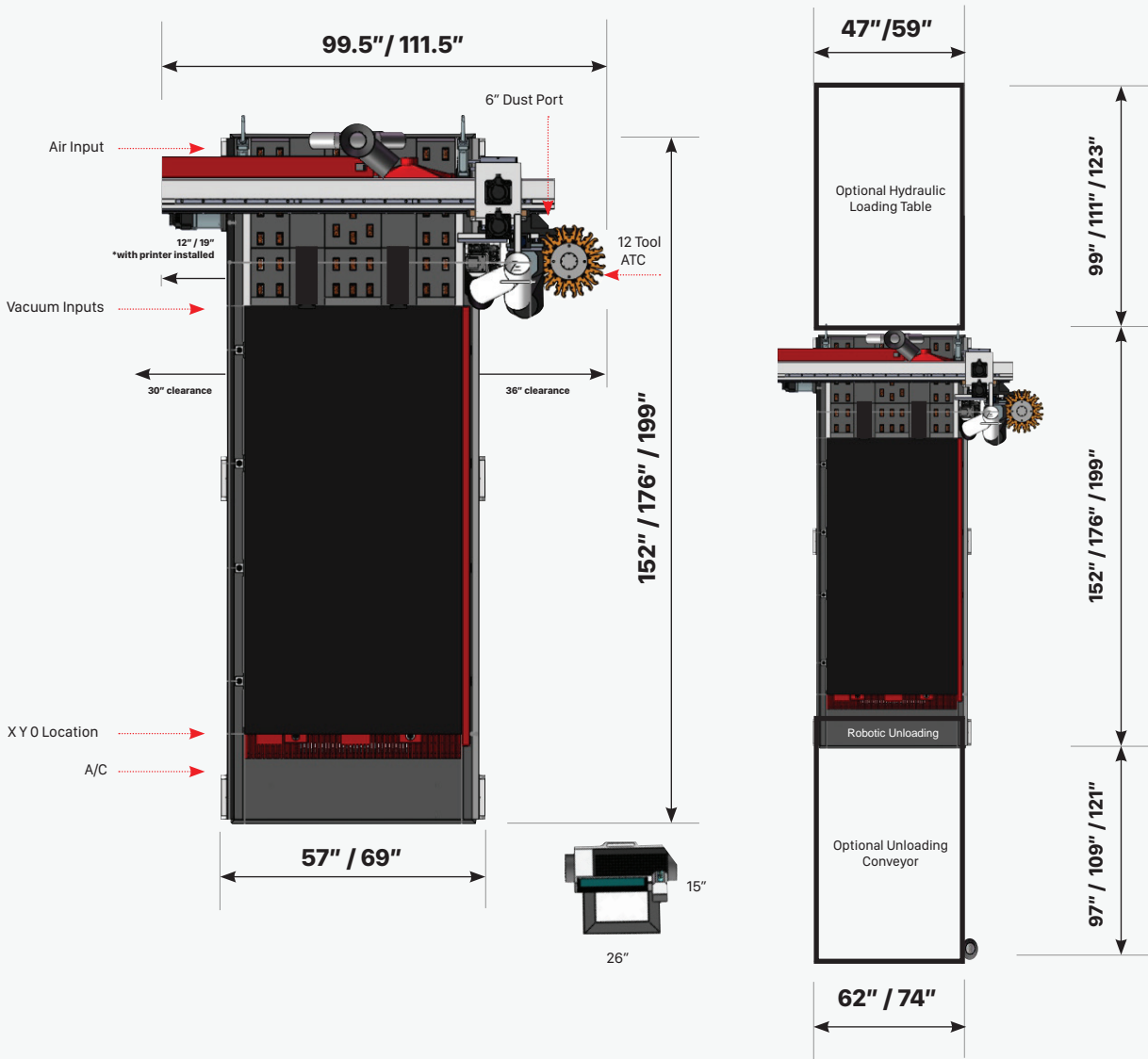
FOOTPRINT

Processing Area	Table Size	4' x 8'	4' x 10'	5' x 10'	5' x 12'
	X-Axis Width	49"	49"	61"	61"
	Y-Axis Length	97"	121"	121"	145"
	Z-Axis Height	11.5"	11.5"	11.5"	11.5"
	Z-Axis Clearance	Up to 4.5" clearance with unloading arm			
		Up to 7" clearance without unloading arm			
		Custom size tables and configurations available			

Footprint

<b>4' x 8' Table</b> 99.5" x 152" x 101"H 7200lbs.	<b>5' x 10' Table</b> 111.5" x 176" x 101"H 7800lbs.
<b>4' x 10' Table</b> 99.5" x 176" x 101"H 7600lbs.	<b>5' x 12' Table</b> 111.5" x 199" x 101"H 8500lbs.

4'X8', 5'X10' AND 5'X12' TOP VIEW





## MECHANICAL/ELECTRICAL INSTALLATION

- |                          |   |
|--------------------------|---|
| <b>AC - CNC Machine:</b> | <ul style="list-style-type: none"><li>• 208-240 volts, 3 phase. 30amps.</li><li>• Single phase option available for additional charge.</li></ul>                          |
| <b>AC - Vacuum Pump:</b> | <ul style="list-style-type: none"><li>• 208-240 volts, 3 phase. 50amps.</li><li>• 208-240 volts, single phase. 70amps.</li></ul>  |
| <b>Air Pressure:</b>     | (3/8" inlet) 8 bar, 120 psi, 9 cfm  |
| <b>Dust Collection:</b>  | <ul style="list-style-type: none"><li>• 2800 cfm for main 6" port</li><li>• Gravity for the secondary 4" port</li><li>• Gravity for the unloading table 4" port</li></ul> |

## UPGRADE OPTIONS

- |                                  |  |
|----------------------------------|--|
| <b>Production Upgrades:</b>      | <ul style="list-style-type: none"><li>• Custom table size</li><li>• Custom gantry height</li><li>• Single-phase power conversion</li><li>• Aggregate head rotary on spindle</li></ul>  |
| <b>Plug &amp; Play Upgrades:</b> | <ul style="list-style-type: none"><li>• 9-Position drill block</li><li>• 4-Port marking block</li><li>• V300 Vacuum pump</li><li>• Mister kit</li><li>• Robotic label printing &amp; application</li><li>• Robotic arm to handle post production</li></ul> |
| <b>Tooling:</b>                  | <ul style="list-style-type: none"><li>• Deluche Vision Marking Tool</li><li>• Cabinet Startup tooling kit</li><li>• Cabinet &amp; drill block tooling kit</li></ul>  |

## INSTALLATION

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.

- |                 |   |
|-----------------|---|
| <b>Options:</b> | <ul style="list-style-type: none"><li>• 2-day on-site installation and training by certified CNC Factory technician. Flat rate for any location in the continental USA. Inclusive of travel &amp; incidental expenses.</li><li>• Extra training day on top of standard 2-day installation. Must be purchased together with standard 2-day installation.</li></ul> |
|-----------------|---|

CNC FACTORY 5G CNC ROUTERS

VIPER

SIDEWINDER

PYTHON

5th Generation CNC Features

ATC Air-Cooled Spindle	10HP	12HP	12HP
No Homing or Alignment Servo System	✓	✓	✓
Axis Motor Size (X&Y)	Servo 750W	Servo 750W	Servo 850W
Axis Motor Size (Z)	Servo 1300W	Servo 1300W	Servo 1300W
Driverless Mobile Touch Screen & Remote Controller	✓	✓	✓
Cutting Speed	1000 IPM	1200 IPM	1500 IPM
Travel Speed	2000 IPM	2200 IPM	2500 IPM
Auto Tool Measuring	✓	✓	✓
ATC Tool Changer Setup	on gantry bar	rotary carousel	rotary carousel
ATC Tool Changer Capacity	8 tools, upgradable to 12	8 tools, upgradable to 12	12 tools
Tool Change Time	8 seconds	8 seconds	8 seconds
5G Helical Rack & Pinion (X & Y axes)	✓	✓	✓
Network, WiFi, USB Connectivity	✓	✓	✓
Onboard Air-conditioning & Cooling	✓	✓	✓
Pressurized Automatic Oil Lubrication	✓	✓	✓
5G Servo System	✓	✓	✓
Compatiblity with popular CAD/CAM software	✓	✓	✓
Servo Gear Reduction	✓	✓	✓
Intelligent Zoned High-flow Vacuum System	single layer	dual layer	dual layer
Material Position Pins & Guide Rails	✓	✓	✓
Robotic Material Alignment	X	upgradable	✓
Robotic Cleaning & Unloading	X	✓	✓
Robotic Material Sensing for Dust Extraction	X	upgradable	✓
Deluche Vision Marking Tool	sold separately	sold separately	sold separately
V300 Intelligent Vacuum Pump	sold separately	sold separately	sold separately
Robotic Label Printing & Application	X	X	upgradable

Built-in Software & Tool Holders

KCD (if pre-qualified for KCD 6-month CNC Commander Trial)	✓	✓	✓
VCarve Pro	✓	✓	✓
ISO-30 Tool Holder	8 Tools	8 Tools	12 Tools

Production Upgrades

Custom-sized tables	✓	✓	✓
Custom gantry height	✓	✓	✓
Single-phase power conversion	✓	✓	✓

Anytime Upgrades

Spindle	to 12HP	X	X
9-Position Drill Block	✓	✓	✓
ATC tool	up to 12	up to 12	X
4- Port Marking block	✓	✓	✓
V300 Vacuum Pump	✓	✓	✓
Deluche vision marking tool	✓	✓	✓
Mister	✓	✓	✓
Robotic Material Alignment	X	✓	included
Robotic Loading Arm	X	✓	included
Hydraulic Automated Loading Table	X	✓	included
Unloading Conveyor with Material Sensing	X	✓	included
Robotic Label Printing & Application	X	X	✓

Training

Lifetime Technical Support	✓	✓	✓
CNC University Certification	✓	✓	✓
On-Site Support	sold separately	sold separately	1 year

Warranty

Advance Exchange Program on Major Components	5 years	5 years	5 years
Warranty	18 months	18 months	18 months