

### 30-DAY PROPOSAL FOR 2020 MODEL 193G24W10 "Wide Pro Series" CNC ROUTER



\*Image depicted may not represent this quoted machine's exact specifications.

C.R. ONSRUD "Wide Pro Series" CNC ROUTER	PRICE	QTY	TOTAL
<p><b>ONE (1) NEW C.R ONSRUD MODEL 193G24W10 "Wide Pro Series" CNC ROUTER</b>            Designed, FEA Engineered, and Manufactured in America, utilizing steel construction.</p> <ul style="list-style-type: none"> <li>• Dual supported gantry driven on both sides with independent servo motors and drives. This dual channel design enhances accuracy &amp; rigidity. The moving gantry, fixed table, design allows for up to 3,000 ipm programmable feed rates.</li> <li>• Control system comes standard with full 3D capability (multi-axis interpolation).</li> <li>• Precision linear motion systems on all axes.</li> <li>• Standard with Onsrud Universal High Flow Vacuum Table System suitable for flow-through spoil boards, dedicated fixtures, or easily upgradable for pod systems.</li> <li>• Price Includes a limited two-year warranty</li> </ul>	INCLUDED	1	INCLUDED

193 - 10x16 - Work Envelope			
<b>CR ONSRUD Aluminum Universal Vacuum Table System UPGRADE</b> - Includes: 4" intake manifold, high-capacity vacuum plumbing, high-flow 45mm wide waffle patterns, with Onsrud's Unique High Flow Vacuum Inlets, to offer maximum vacuum airflow & absolutely minimal airflow restriction for excellent part holding. Price Per Square Foot.	INCLUDED	1	INCLUDED
<b>Double Plumbed Vacuum Zone Upgrade</b> - For those particularly challenging applications, the Double-sized manifold and hoses provide twice the vacuum flow of our already superior flowing vacuum. Pneumatic Ball Valve, Actuated via Push Button or PLC Controlled. Recommended when using above 50HP pumps &/or very porous or slightly warped material.	INCLUDED	3	INCLUDED
<b>18-inches of Z stroke</b> - Increases 3 or 4-Axis Frame under bridge clearance & Z-stroke 18 inches (Option may Decrease X-Axis Travel by as much as 2 feet on Panel Pro Models Only)	INCLUDED	1	INCLUDED
<b>10x16 - Flow-Through Spoil Board</b> - LDF table top to be used as replaceable sacrificial spoil board.	INCLUDED	1	INCLUDED
Controller			
<b>FANUC 0i Machine Controller System with Panel-i HMI</b> - Industrial CNC Machine Controller with Fanuc Panel-i HMI w/High Res touch screen. Fanuc 0i is not a PC with a control card but is a dedicated Industrial PLC designed to control CNC motion, for maximum reliability and performance. Includes: Network capability, adds Large FANUC Digital Drives & Servos. Includes Full remote diagnostic troubleshooting capabilities. Adds m-code controlled vacuum zones (if equipped with Pneumatic Vacuum Zone option). Provided with 4-port network hub (requires 460V out isolation transformer).	INCLUDED	1	INCLUDED
Head Options			
<b>3 axis - 24HP Spindle Upgrade</b> - 4-Pole, 18kW, 24HP – 24,000 RPM Long Nose Spindle w/ HSK-63F Spindle Taper, fully programmable & reversible, variable speed, liquid cooled, quick-change spindle, capable of routing & drilling, programmable feed rates w/override capability.	INCLUDED	1	INCLUDED
<b>Chiller for Liquid Cooled Spindle Option</b> - Adds a liquid cooling system & chiller in place of the standard fan & compressed air spindle cooling system. (Recommended when machining mostly non-ferrous metals or when using 20HP spindles or larger)	INCLUDED	1	INCLUDED
<b>Programmable Air Blast</b> - Blows air on tool tip to aid chip or dust evacuation. Can be controlled by M-Code.	INCLUDED	1	INCLUDED
Isolation Transformer Options			
<b>20kVA Isolation Transformer</b> - strongly recommended for up to 20 HP models as an electrical noise filter. 6-tap, non-compensating transformer can be specified for your voltage in/machine voltage out for either 460V or 230V nominal. Other voltages are additional charge.	INCLUDED	1	INCLUDED
Machine Lubrication Systems Options			
<b>Standard Centralized Manual Greased Lubrication</b>	INCLUDED	1	INCLUDED
Dust Extraction System & Stanchion Kits Options			
<b>Dust Collection Side Stanchion Kit</b> - (includes flex hose, 2 steel stands, & clamps to connect the provided dust transition to your collector, above to the left, or above to the right of your moving gantry machine's footprint)	INCLUDED	1	INCLUDED
<b>X-Axis Floating Duct Dust Extraction System</b> - Includes: Floating Duct System for full table coverage, Complete with Floating Dust Transfer Carriage, Necessary Dust Hoses, & 8" or 12" Dust Transition, based on machine. Designed for use with, & Requires Dust Collection Side Stanchion Kit.	INCLUDED	1	INCLUDED
Electrical Cabinet Cooling Options			
<b>Air Conditioned Electronics Cabinets</b> - Recommended for extreme environments & some non-temperature controlled workplaces. Option replaces the standard heat exchanger system.	INCLUDED	1	INCLUDED
Tool Changer Options			
<b>12 Tool - Dynamic Automatic Rotary Tool Changer</b> - Fully Servo controlled instead of Stepper controlled or Rack-Style tool changers. Design eliminates misfires & quickly changes between 12 different tools – Able to Store Aggregates. You may require C-Axis or separate Aggregate Tool Changer option to hold some larger or non-standard aggregates.	INCLUDED	1	INCLUDED
Additional Tool Holder Options			
<b>Extra HSK-F63 Standard Tool Holders</b> - 1" collet capacity (each with chuck nut)	INCLUDED	10	INCLUDED

null Options			
<p><b>Custom Fixture</b> - Custom Pneumatic Clamping Fixture 20 clamps rated @ 4000 PSI ea. Solenoids for each said clamp Controls Engineering (custom logic for clamp operation) Custom vac zones to support fixture Mechanical Engineering (plumbing for air lines / electrical lines) This fixture is to be used on a 10x16 Aluminum grid table only to sustain the pressure of the clamps.</p>	INCLUDED	1	INCLUDED
Standalone Options			
<p><b>Osync Machine Analytics</b> - Osync machine monitoring is designed to provide deep insights into your machining process. Osync starts with a real time machine information to let you know exactly what is going on with each of your machines at any time. Osync can also show summary information about your productivity with dashboards, reports, graphs, OEE comparisons, and more based on the program history. Along with program information, Osync provides deeper insights into diagnostic information to get your machine back running quickly. Text message or email alerts can also be setup for critical information. Additionally, Osync will help you keep your machine running in top shape with preventative maintenance schedules. Osync is taking maintenance to the next level by adding predictive maintenance alerts to it latest releases. Osync is in active development and continues to push the Industry 4.0 limits with each release. Osync is licensed per machine. The first year of releases are included with purchase.</p>	INCLUDED	1	INCLUDED
<p><b>LiDAR Scanners for Zone Sensors</b> - LiDAR uses laser light to scan an area and determine if objects are in the sensing area. If objects are detected in the settable area the machine is stopped.</p>	INCLUDED	2	INCLUDED
Vacuum Options			
<p><b>40HP Dekker V-Max Liquid Ring Vacuum Pump</b> - 550 CFM System @ 29"/hg; 781 m3/hr @982Mb. Pricing applies for 460V models; other voltages are an additional charge. Includes: Exhaust Drip Leg, Spin On Oil Filter, Vacuum Relief Valve, Inlet filter, and ControlDek Panel with Osync integration capabilities</p>	INCLUDED	1	INCLUDED
<p><b>40HP Dekker V.F.D. Adder 460V</b> - Requires Dekker V-Max Liquid Ring Vacuum Pump (decreases startup load &amp; controls the pump based on demand)</p>	INCLUDED	1	INCLUDED
Tooling Measurement System Options			
<p><b>Premium Tool Maintenance Package</b> - Includes: Torque Wrench to ensure proper collet tightening, Premium tool holder clamp stand - fits all HSK-63 tool holders, HSK spindle wiper, two tool clips, and Rust Free, T-9, &amp; Collet Brush kit to help maintain your tool holders and collets.</p>	INCLUDED	1	INCLUDED
<p><b>Auto Tool Length Touchpad Digitizer</b> - Measures tool length and records in machine tool length tables, may not work with custom or non-standard tooling, or some custom profiles.</p>	INCLUDED	1	INCLUDED
<p><b>CR Onsrud Startup Tooling Credit</b> - Good towards your various sized collets, collet cleaner kit, spoil board surfacing cutter, vacuum tape, any other necessary cutters, etc.</p>	INCLUDED	4	INCLUDED
<p><b>Onsrud Digital Bench-Top Tool Setter</b> - allows you to measure tools off-line in seconds and be ready for the next job while the machine is still in production.</p>	INCLUDED	1	INCLUDED
Enhancements Options			
<p><b>Upgrade current spindle to Smart Spindle</b> - Upgrade standard HSD spindle to eCore Smart Spindle. Integrates with O-Sync to display spindle information such as clamp position, misfeeds, running condition, etc.</p>	INCLUDED	1	INCLUDED
<p><b>Air Knife on Linear Guide</b> - This option places one set of Air Knives on 1 linear guide (front and back of motion). It is suggested that axes with multiple linear guides, to add multiple air knives (one per rail). Each axis needs air knives added independently.</p>	INCLUDED	2	INCLUDED
Machine Training - C.R. Onsrud Inc. Onsite Training School			
<p><b>Day of Onsite Factory Startup Assistance</b> - CR Onsrud Inc. Installation &amp; Training School consists of: machine setup, integration and training at your facility. Training will be received after the machine has been shipped from CR Onsrud, arrived at your facility, has been permanently placed, all of the necessary utilities have been brought to the machine, and the machine has been commissioned by an authorized C.R. Onsrud representative. If you do not have adequate CAD-CAM training, pre-prepared part programs ready to run, the necessary tooling &amp; collets, then the training will only involve getting the machine to the ready to run state, training your operators, &amp; demonstrating that the machine is in working order. Days are considered 8-HOUR Man Days in such a way as a machine that requires 2 technicians at the same time and they work two 10 hour days would constitute 40 hours of work or 5 Man Days. Days must be used at time of install or no later than 12 months after machine shipment. Technician's travel expenses are billed separately to you and are not included as part of this CR Onsrud Installation / Training School.</p>	INCLUDED	5	INCLUDED

<b>Startup &amp; Maintenance Tooling Kit</b>			
<p>Comprehensive Owner's Manual. Also includes: Preventative maintenance, startup, and tooling information; 2mm – 8mm Folding Hex Key Set; Roll of 4508 Closed Cell Vacuum Tape; Tube of Ball Screw Lube; M20 X 60mm, &amp; M20 X80mm Leveling Bolts w/Leveling Nuts; Software Training and Applications guide &amp;/or training tutorial (if available); Plus:</p> <p>(2) HSK High Speed Balanced Standard Tool Holders  (2) Thrust Bearing Chuck Nuts  (2) Standard SYOZ 1/2in Collets  (2) Collet Wrenches: (1) Spanner Wrench &amp; (1) Open End Wrench</p>	INCLUDED	1	INCLUDED
<b>2-Year Warranty</b>			
<p><b>2-Year Warranty</b> - TWO (2) Year limited warranty on all parts &amp; labor FOB the factory. In addition, all applicable Original Equipment Manufacturer's warranties apply. Each year is defined as 50 hours per week for a period of up to 12 months. Wear items may be prorated after evaluation.</p>	INCLUDED	1	INCLUDED
<b>Installation - The Customer Will Be Responsible For The Following:</b>			
<p>In preparation for the machine installation, the Customer is responsible for:</p> <p>1) Any Floor Preparation that May be Necessary, including bolting down of machine, grouting, etc. – (typically at least 4-5 inch thick concrete pad is recommended but customer's structural engineer should determine what is actually needed based on specific machine ordered)</p> <p>2) All Power Supply Connections (per national &amp; local codes or standards)</p> <p>3) Providing Dust Collection – (6" port for Tech Series &amp; Mate Series machines; minimum 1200 cfm &amp; recommended 1800 cfm; 8" port for most other 3-axis machines; most machines minimum 1200 cfm &amp; recommended 2000 cfm. - consult your machine specific footprint for specific recommendations based on your options.)</p> <p>4) Any Necessary Pneumatic Connections &amp; Supply – (100 psi with up to 10cfm consumption for standard machines and up to 40cfm for larger and multi-head machines)</p> <p>5) Any Rigging, Labor and / or Handling Equipment (forklift, moving or rigging equipment, etc.)</p> <p>6) Materials &amp; Tooling Needed For Machine Testing, Training, or Adjusting</p> <p>7) Necessary Post Processors for any Software Provided by Outside Software Vendors</p> <p>8) Providing an adequately trained programmer and / or IT person with ready to run programs</p> <p>Most of our single base CNC Routers will ship fully assembled, &amp; nearly functional. CR Onsrud expects the machine to be in place, &amp; all of the necessary utilities to have already been brought to the machine, before the technician arrives. If the machine is a multi-base machine, the bases should be placed within a couple of inches (and roughly aligned) so the technician can easily pull the bases together and precision align them. The technician finishes preparing the machine to run, &amp; instructs any machine operators in how to maintain &amp; operate the machine properly. Technician's travel expenses are billed separately to you, at our costs, &amp; are not included.</p>	INCLUDED	1	INCLUDED
<b>CR ONSRUD 24/7 AFTER HOURS EMERGENCY MACHINE SUPPORT</b>			
<p>After Successful Machine Training &amp; Installation, you will receive unlimited toll free access to the CR Onsrud 24/7 After Hours Emergency Machine Support Line. After 5-years, additional years of 24/7 After Hours Emergency Machine Support can be purchased.</p>	INCLUDED	5	INCLUDED
<b>CR ONSRUD MACHINE SUPPORT AFTER INSTALLATION</b>			
<p>After Successful Machine Training &amp; Installation, you will receive unlimited toll free factory technical support, during normal business hours, in addition to any support provided by your authorized CR Onsrud Distributor. After 5-years, additional years of advanced machine support can be purchased. Tech support will only be provided to trained operators &amp; only after successful machine installation. After 5-years, basic tech support will only be provided to factory trained operators.</p>	INCLUDED	5	INCLUDED

Total : \$468,445

26 weeks

**30-DAY PROPOSAL FOR 2020 MODEL 193G24W10 "Wide Pro Series" CNC ROUTER  
 ADDENDUM / ADDITIONAL OPTIONS**



\*Image depicted may not represent this quoted machine's exact specifications.

Enhancements Options			
<b>Inspection+ Software by Renishaw</b> - Includes a set of macros for common probing routines. Requires user to call macros at desired time and pass variables into macros for measurement positions. Additional customer specific training is also recommended for creating programs that use the variable data.	STANDARD	1	\$2,470.00
<b>RF Touch Probe System (Renishaw RMP60 or equivalent)</b> - Includes hardware capable of wirelessly measuring holes, planar surfaces, centers between holes, and outputs points & coordinates. Macros and software for measurement are generally customer specific and are not included. It is recommended to add additional training days for learning how to write probing programs from variable input. Requires RMI-Q RF Receiver (sold separately)	STANDARD	1	\$10,848.00

# 13,318