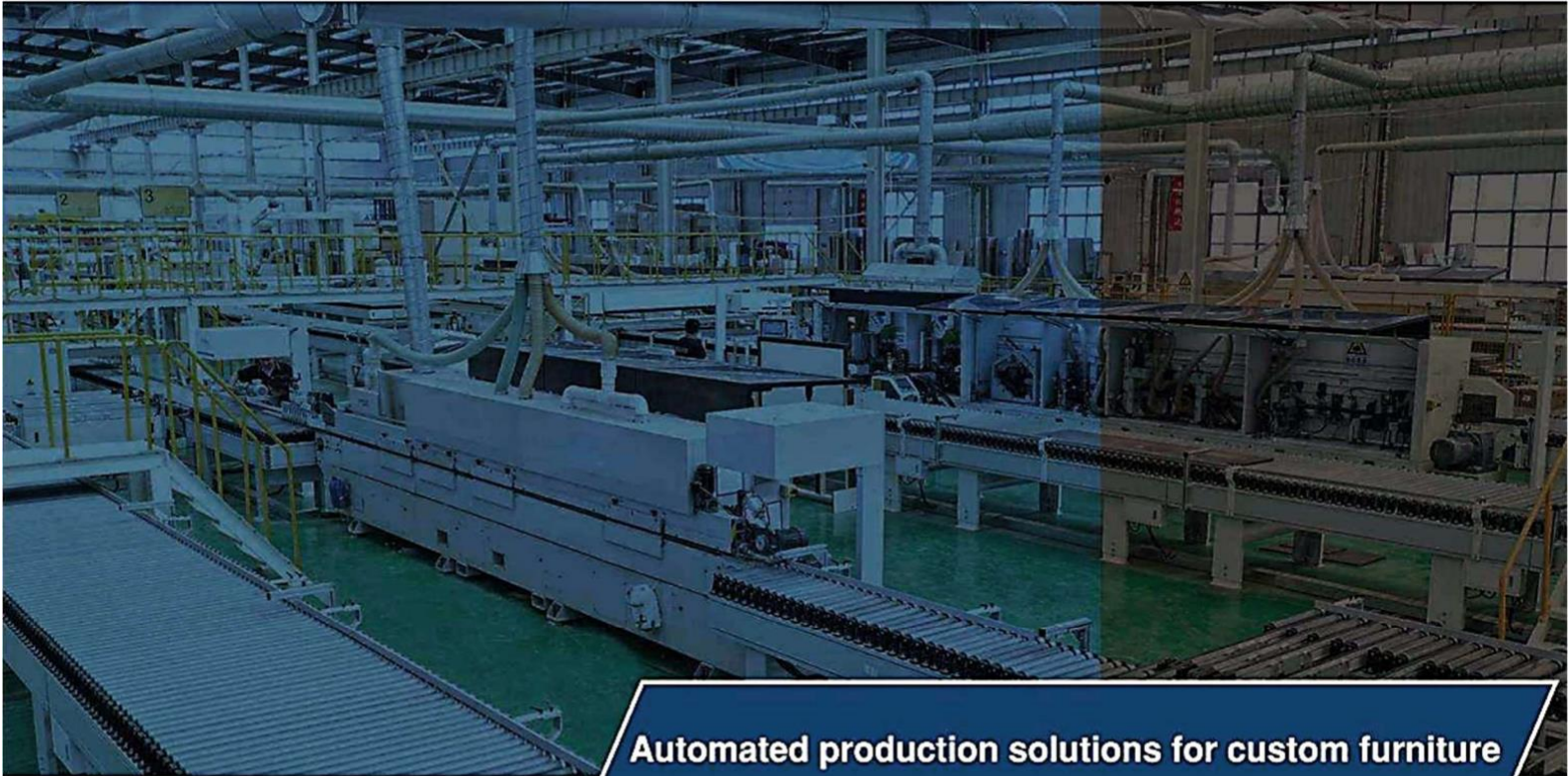


Lekon

Woodworking Machinery



Automated production solutions for custom furniture

Proposal #: XXXXXXXX
Date: February xxxxxxxx
Proposal valid for 30 days

Sales Rep: xxxxxxxx
Phone: xxxxxxxx
Email: xxxxxxxx@lekon.ca

CNC Nesting Line LN416

Prepared for

xxxxxx

Lekon Nesting Line LN416

\$XXX,XXX CAD



The product image is for illustrative purposes only.

The actual machine delivered may differ in colour or markings from what is shown in the image above.

Features

- The CNC nesting machine operates with minimal visible dust. After processing, the panel's surface, backside, groove interiors, and the area around the machine remain spotless and dust-free.
- Equipped with world-class components, the machine features an Italian high-frequency electronic spindle, advanced control system, precision helical rack and pinion drives, a drill bank, high-quality German and French electronic parts, Japanese linear guides, servo motors and drivers, pneumatic components, and a high-precision planetary gearbox.

Applications

- This CNC nesting table can perform various operations - cutting, drilling, routing, and grooving, making it a versatile tool for producing cabinet parts, furniture components, and custom wood products.

Technical Specifications

General Specifications

Working Size	xx”* xxx”
Transmission	“X” and “Y” rack and pinion drive, “Z” ball screw drive
Spindel Sower	Italy 12 kW HSD (HSK F63)
Spindle Speed	24000 RPM
Drill Bank Configuration	Italy HSD 5+4 vertical drill bank
Driving System	Japan YASKAWA servo motor
Reducer	Japan SHIPMO reducer
Table Structure	Double-layer vacuum table
Vacuum Pump	1/2 sets 5.5 kW Becker vacuum pump LTLF250
Vacuum Zones	10
Travelling Speed	80 m/min
Working Speed	25 m/min
Loading & Unloading speed	15 m/min (if applicable)
Tool Magazine	Carousel
Tool Slots	16
Guide Rail	Japan THK guide rail
Tool Sensor	Automatic tool sensor
Controller	OSAI controlling system
Total Line Weight (Approximate)	5600 Kg

Electrical

Operating Voltage 380v / 3 Phase / 60 Hz, (220v optional)

Amperage 85 Amps at 380v

Total Connected Load 36 kW

Technical Specifications (continued)

Dust Extraction

Connection Size 200 mm | 150 mm

Air Speed 32 m/sec

Air Volume 5655 m³/h

Compressed Air

Connection Size R ½ inch

Pressure Required 100 psi – 7 bar

Terms and Conditions

Warranty: 1 Year (bumper to bumper) labor and parts

Installation: Included

Freight: Included

Financing: Lekon will be pleased to help you with your financing or leasing needs. Please speak to your sales representative for more information.

Delivery: Equipment is available for shipping from inventory once an official order, along with a down payment and all technical details, is confirmed, subject to availability. If shipped from the factory, the estimated lead time is 28 to 30 weeks after the order and down payment are received, with all technical specifications clarified. These delivery timelines are estimates and depend on the factory's order volume and receipt of deposit. Once the end customer is notified of completion, the equipment must ship from the manufacturing site within 10 business days. If not shipped within this period, storage fees of \$5.98 per square foot per month will apply, covering the machine and associated components (like vacuum pumps, feeders, safety enclosures, etc.). These storage fees are prorated weekly and are capped at a maximum one-month storage period.

Payment Terms (Subject to Credit Approval): A 10% deposit is required with the order, followed by 30% in two months, and a remaining balance of 60% one week before shipment.

Shipping Terms: Delivered at Place (DAP) under Incoterms 2010, with the seller covering packaging, freight, and insurance to the specified destination. The buyer assumes risk and responsibility once the equipment reaches the destination but remains unloaded. Customs duties and import taxes, if applicable, are the buyer's responsibility.

Features and Details

Italian Brand Control System “OSAI”



The OSAI Control System is a versatile and robust CNC (Computer Numerical Control) solution. Developed by OSAI, the system is engineered to optimize the efficiency and precision of automated machinery operations. Its advanced software and hardware integration provide detailed control over machine movements, such as tool positioning, speed, and accuracy, making it ideal for complex cutting, milling, and shaping tasks.

Italian Brand Spindle “HSD” (Type HSK F63)



Our CNC comes with HSD ES 951 Air Cooling ATC 12kW Spindle with a max of 24000 RPM. The HSD spindle is a powerful, high-performance spindle designed for precision machining across a range of materials, including wood, plastics, and composites. Known for its durability and consistent output, the spindle offers outstanding accuracy at high speeds, making it ideal for demanding CNC applications. It ensures a secure and precise tool change, minimizing vibrations and maximizing stability. This spindle is perfect for manufacturers looking to enhance productivity with smooth, reliable operation.

Italian Brand 5+4 Vertical Drilling Unit “HSD”



Included:

- 5 mm Drill bit (6Pcs)
- 3 mm Drill bit (1 Pc)
- 8 mm Drill bit (1 Pc)
- 35 mm Drill bit (1Pc)

The HSD drill block 5+4 features nine high-performance vertical drills (five on “X” and four “Y” axes), ideal for precise and efficient vertical drilling operations in CNC machining centers. Its compact design and robust construction make it an excellent choice for manufacturers looking to enhance productivity and precision in various drilling applications.

Italian HSK F63 Tool Holder “Klein”



Included:

**8 HSK F63 Tool holders. Market Value \$200 each
Total Value \$1600**

The HSK F63 tool holder is considered one of the best on the market due to its superior stability, precision, and speed. Designed with a hollow shank, the HSK F63 provides a lightweight yet highly rigid connection between the spindle and the tool, minimizing vibration and ensuring high-speed performance without sacrificing accuracy. Its design allows for rapid tool changes, reducing downtime and increasing productivity.

16 Position Tool Carousel with YASKAWA Servo Motor



A 16-position automatic tool change carousel is a game-changer for productivity and versatility. With 16 slots, operators can load a diverse range of tools in advance, which means fewer interruptions and faster transitions between operations. This setup minimizes downtime and ensures that our CNC can handle complex jobs with multiple tools seamlessly, boosting efficiency and cutting down on manual tool changes. This flexibility is a major asset in high-paced production environments.

Japanese Brand YASKAWA Servo Motors



YASKAWA servo motors offer exceptional precision, reliability, and speed. Known for their robust performance, these motors deliver smooth, precise movements essential for intricate CNC work. Their advanced design also reduces wear and tear, lowering maintenance needs and extending machine life.

Japanese Brand Reducer “Shimpo”

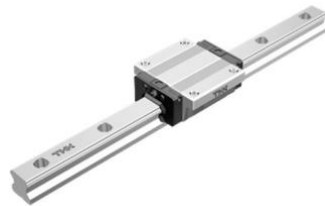
SHIMPO



Pairing Shimpo reducers with YASKAWA servo motors takes our CNC performance to the next level. Shimpo reducers provide outstanding torque and smooth, stable motion control, which complements the precision of YASKAWA motors perfectly. This combination ensures high power transmission and accuracy, enabling your CNC to handle demanding tasks effortlessly. With reduced backlash and enhanced efficiency, you'll enjoy precise, reliable operation, making every project faster, smoother, and more accurate.

Japanese Brand Linear Guide “THK”

THK



Using THK Linear Guides in our CNC machine brings unmatched precision and durability to your operations. 5000 Km maintenance-free with LaCS dust proof and QZ self-lubricator technology. Known for their smooth, friction-free motion, THK guides ensure stable, accurate positioning, which is crucial for high-quality, detailed work. Their robust design withstands heavy loads and high speeds, reducing wear and extending the machine's lifespan.

Taiwanese Brand Inverter “DELTA”

DELTA



Delta inverters offer reliable speed control and energy efficiency. With Delta's advanced technology, you get smooth, stable motor performance, ensuring precise control for even the most detailed work. Designed for durability, these inverters optimize power usage, reducing energy costs while maintaining high performance. Choosing a Delta inverter means improved efficiency and reduced wear on components.

German Brand Electronic Components “SIEMENS”

SIEMENS



Siemens electronic components deliver unmatched reliability, precision, and advanced control. Known for their high-quality engineering, Siemens components ensure seamless communication between our CNC systems, boosting accuracy and responsiveness. Built to withstand industrial demands, they offer long-lasting performance and reduce downtime, helping keep your operations running smoothly.

German Brand Wires “IGUS”



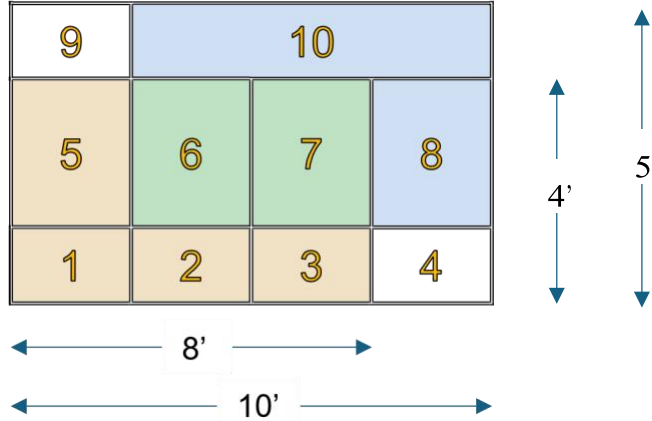
German IGUS wires provide exceptional durability, flexibility, and reliability. Engineered to withstand constant motion and high-stress environments, IGUS wires reduce the risk of wear and signal interference, ensuring smooth and uninterrupted operation. Their longevity minimizes downtime and maintenance costs, keeping our CNC running efficiently over the long term.

German Brand Vacuum Pump “Becker”



Our CNC machines come equipped with two Becker vacuum pumps (VTLF 2.250), providing unparalleled holding power and stability. Becker pumps are renowned for their high suction capacity and efficiency, ensuring that materials stay firmly in place during even the most demanding operations. By using two pumps, we maximize both reliability and performance, allowing for secure, precise machining without interruptions.

Double Layer 10 Vacuum Zones Bakelite Place Table (5'x10')



Our CNC machine features 10 suction zones meticulously designed to handle 5'x10', 4'x8', 4'x10' and 5'x8' sheets, as well as small offcuts. Each of these zones can be controlled individually from the operator control station with just the click of a button. The innovative V-groove table design ensures that vacuum suction power is evenly distributed across each zone, optimizing performance and efficiency.

Pop Up Tool Measuring Sensor



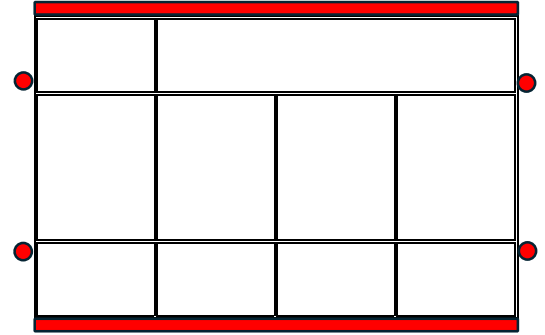
Our pop-up tool measuring sensor is equipped with an air blower that effectively removes dust and debris from the sensor, ensuring precise measurements every time. This innovative feature enhances the sensor's accuracy and reliability, allowing for consistent performance in high-paced production environments. With its quick activation, the air blower ensures that the sensor is always ready for use, minimizing downtime and maximizing productivity. Say goodbye to manual cleaning and enjoy seamless operations with our advanced measuring technology.

Mozaik Subscription for 6 months - Free



Mozaik is one of the leading software companies who are focused on cabinet manufacturing industry. We are pleased to offer a full year free subscription for one seat with purchase of our CNC.

Reference Pins and Guide Rails



Our CNC machine is meticulously designed for optimal precision and ease of use, featuring 12 strategically placed reference pins around the table: 2 at the front, 2 at the back, 4 on the left side, and 4 on the right side. This innovative setup allows any of the four corners to be used as the zero position, providing incredible flexibility in material setup and ensuring precise alignment from any starting point. For seamless material handling, selecting the loading and offloading option activates reference guide rails on both the left and right sides of our CNC.

Helical Rack and Pinion Gear for X and Y Axes



Our CNC machines are equipped with high-quality helical rack and pinion gears on “X” and “Y” axes. This type of gear elevates performance, precision, and durability to meet the demands of modern manufacturing. Helical gears are engineered with angled teeth that engage gradually, providing smoother motion and significantly reducing noise and vibration during operation. This smoothness translates to more accurate positioning. Additionally, the helical design distributes load more evenly across the teeth, resulting in higher load-bearing capacity and longer-lasting.

Ball Screw Gear for Z Axes



Ball screw gears are the gold standard in CNC machinery, designed to deliver unmatched accuracy, efficiency, and reliability. Ball bearings reduce friction, and ensure smooth, accurate positioning, perfect for high-precision tasks. Less friction also means lower maintenance and energy costs. Consistent, repeatable quality and reliable, high-speed performance.

Safety Light Curtain



Our CNC is supplied with two pairs of safety light curtain. This can give you a peace of mind that every job is performed with maximum safety, without compromising productivity. It allows for safe, hands-free monitoring and enables quick emergency stops, ensuring a safe environment while maintaining efficient workflow. This feature not only helps in compliance with safety regulations but also demonstrates a commitment to the well-being of your team.

Safety Fence



At our company, safety isn't just a priority—it's a commitment. That's why every CNC machine we offer is equipped with comprehensive safety fencing around the entire perimeter where protection is essential. This fencing acts as a reliable safeguard, creating a secure workspace for operators and staff, ensuring safe operations at every stage. In short, we're committed to equipping your workspace with the highest standards of safety, so you can focus on what matters - getting the job done with confidence and care.

Dust Extraction Flexible Hose



Our CNC comes with all necessary duct hoses. 200 mm wide 20 feet long main duct hose. It is **\$1000 in saving.**

Pusher for Automatic Unloader



A CNC pusher unloader becomes essential when you're focused on maximizing efficiency and streamlining workflow in high-volume production settings. This feature automates the unloading process by pushing finished materials off the table, readying the machine for the next cycle without requiring manual intervention. Our pusher comes with air blowing nozzles and dust collection chute to eliminate any dust from working table.

Loading Suction Cups



Loading suction cups are essential for maximizing production efficiency in operations where sheets are automatically transferred from the loading table to the CNC machine. By securely gripping each sheet, these suction cups ensure a smooth, accurate transfer, eliminating the need for manual handling and reducing setup time.

Automatic Labeling



An automatic labeling system on a CNC nesting line boosts efficiency and precision by applying accurate labels directly onto each panel, streamlining workflow and reducing errors. It minimizes sorting time and improves traceability, ensuring every part is easily tracked throughout production. This organized approach enhances productivity and gives a clean, professional look to each piece, reinforcing your commitment to quality and detail.

Hydraulic Lift 3000Kg



Our hydraulic lift with a 3000 kg capacity is a powerful asset for your CNC operations, providing greater efficiency, safety, and precision. By automating sheet loading, it minimizes manual handling and aligns materials accurately, reducing errors and boosting productivity. This lift can handle diverse materials effortlessly, allowing our CNC to run continuously, meeting high demand with faster turnaround and less downtime.

Unloading Belt Conveyor



An automatic belt conveyor unloading table is the perfect companion for any CNC machine, streamlining your workflow and enhancing overall productivity. With this system, finished parts are gently transported away from the machine as soon as they're cut, allowing seamless transitions between production stages and eliminating manual unloading delays. This keeps your CNC running continuously, maximizing output and minimizing labor costs.

Technical Drawings

