

LAGUNA TOOLS

SMARTSHOP SS2 (SS II) MANUAL 2021

Basic Operations-Main Screen Set-up, Set-up Menus, Machine Settings, CNC Tool Data, Delivery Protocols, Warranties, Packaging/RMA Procedures.



- [SmartShop II 4'x4' - 6 HP Spindle 10HP Vacuum CNC Router](#)
- [SmartShop II 4'x8' - 6 HP Spindle 10HP Vacuum CNC Router](#)
- [SmartShop II 4'x8' - 7.5HP Spindle 10HP Vacuum CNC Router](#)
- [SmartShop II 5'X10' - 7.5HP spindle CNC Router](#)
- [SmartShop II 4'x8' - 11HP HSD Spindle 10HP Vacuum CNC Router w/ATC](#)
- [SmartShop II 5'x10' - 11HP HSD Spindle 10HP Vacuum CNC Router](#)

LAGUNA TOOLS

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Direct Phone #: (800) 234-1976

Warranty Repair Information: (800) 332-4094



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Safety Rules-

As with all machinery, there are certain hazards involved with the operation and use. Using it with caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. If you have any questions relative to the installation and operation, do not use the equipment until you have contacted your supplying distributor. Read carefully before operating the machine:

- 1) Keep the working area clean and be sure adequate lighting is available.
- 2) Do not wear loose clothing, gloves, bracelets, necklaces or ornaments. Wear face, eye, respiratory and body protection devices as indicated for the operation or environment.
- 3) Be sure that the power is disconnected from the machine before tools are serviced or an attachment is to be fitted or removed.
- 4) Never leave the machine with the power on.
- 5) Do not use dull, gummy or cracked cutting tools.
- 6) Be sure that the keys and adjusting wrenches have been removed and all the nuts and bolts are secured.



SmartShop SS2 Machine Specifications-

	<u>Machine Specifications SS2</u>
Motor Drive+A2:A39	Delta brand VFD-E variable frequency drive.
Spindle	11 HP HSD (Italian) Electrospindle ISO-30 (ATC), Ceramic Spindle Bearings.
Spindle RPM	6,000 - 24,000 RPM
Controller	Laguna "Touch" Series CNC Controller. Machine features the Networking, Connectivity and online Troubleshooting. Runs industry standard "G-Code". Program transfer to the controller can be accomplished with USB, Ethernet.
Remote Dust Collector and Vacuum Control at the Operator Station	Yes
Dust Chute Diameter	4" Inches
Volts	208-220 volts 1 or 3 phase
Amps	Dependent on the Vacuum Pump Selection.
X, Y and Z Axis Travel	48" x 48" x 9.5" axis travel (4' x 4' Model) 48" x 96" x 9.5" axis travel (4' x 8' Model) 60" x 120" x 9.5" axis travel (5' x 10' Model) 60" x 144" x 9.5" axis travel (5' x 12' Model)
Gantry Clearance	11" Inches
Machine Work Table	48.0" x 48.0" (4' x 4' Model) 48.0" x 96.0" (4' x 8' Model) 60.0" x 120.0" (5' x 10' Model) 60.0" x 144.0" (5' x 12' Model)
Rapid Travel/Cutting Speed	720 rapids,550 cutting
Heavy-Duty Welded Tubular Steel Frame	3,500 lbs. - 4,500 lbs. (Depending on Model)
Machine Foot Print	80" x 80" (4' x 4' Model) 80" x 140" (4' x 8' Model) 90" x 160" (5' x 10' Model) 90" x 184" (5' x 12' Model)

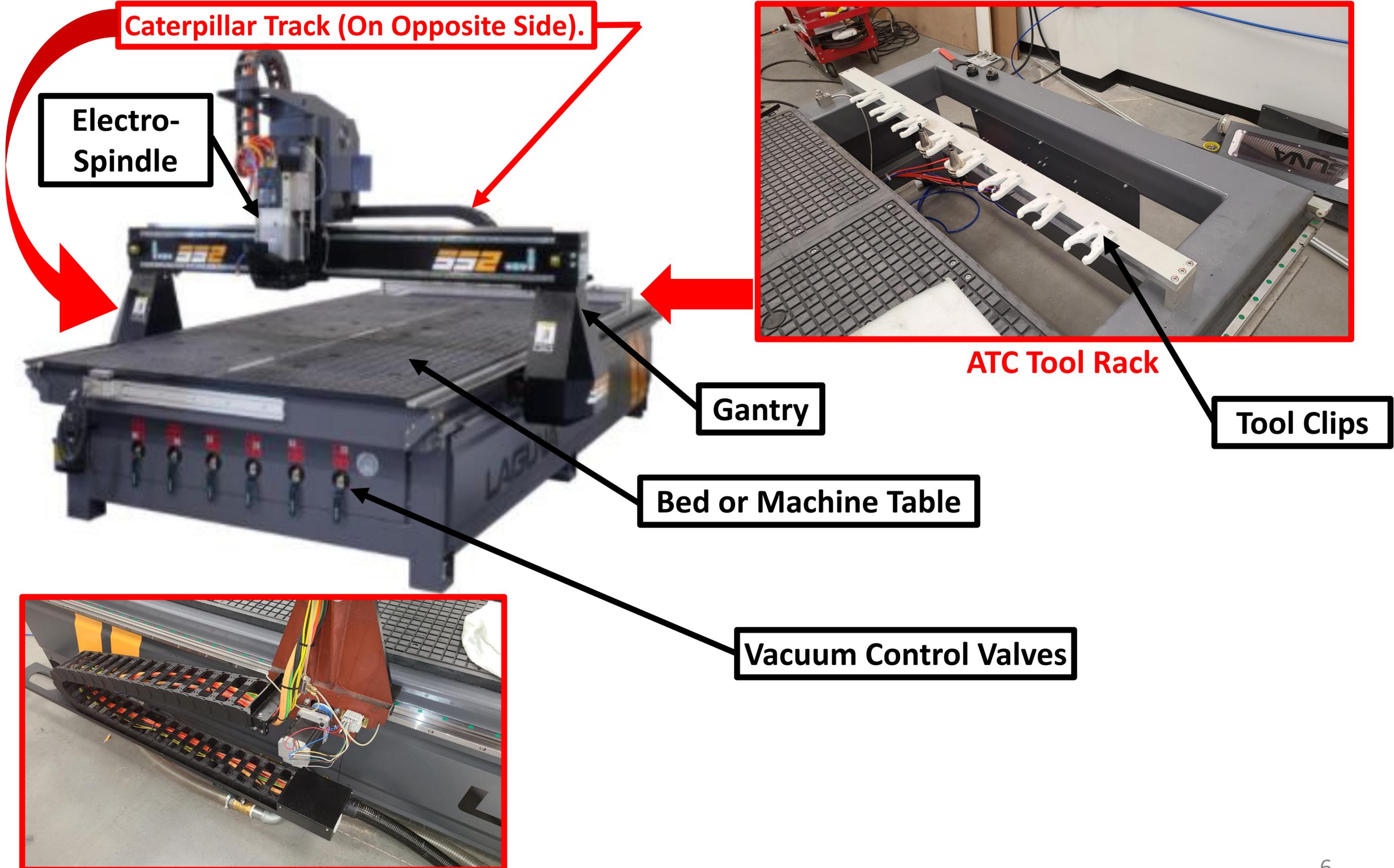


SmartShop SS2 Machine Specifications-

	<u>Machine Specifications SS2</u>
Work Envelope	49.0" x 73.0" x 8.0" (4' x 4' Model) 49.0" x 97.0" x 8.0" (4' x 8' Model) 61.0" x 121.0" x 8.0" (5' x 10' Model) 61.0" x 145.0" x 8.0" (5' x 12' Model)
Vacuum Table with T-slots	Yes
25 mm heavy-duty HiWin HG Series linear bearings and rails on all axis.	Yes
Helical Rack-and-pinion drives on "X" and "Y" axes and precision-ground ball screw drive on "Z" axis.	Yes
Gantry is driven on each end (two "helical" rack-and-pinion drives on "Y" axis).	Yes
Limit Switches.	Solid State
Expandable control system for custom applications.	Yes
Spindle Speed control through programming.	Yes
Manual overrides of Spindle Speed and feed speeds during run.	Yes
Centralized Lubrication System.	Yes
10 HP Vacuum Pumps.	Yes
Vacuum monitoring gauge.	Yes
ISO-30 tool holders, collets and precision collet nuts.	30 amp
Automatic Tool Changer with 8-position tool rack.	Yes



Introduction to CNC Machines-





Introduction to CNC Machines- Glossary & Definitions:

Machine Table: The bed of the machine consists of a heavy steel all-welded frame with a composite worktable that is machined for use with a vacuum pump. The table includes T-slots (and clamps) for special fixturing. The T-slots are used to clamp the job or fixtures to the bed.

Gantry: The gantry straddles the bed and carries the Electro-Spindle and X and Z axes motion components. It is moved along the length of the bed by precision Helical Rack-and-Pinions with drive motors on each end of the gantry.

Electro-Spindle Assembly: The Electro-Spindle is moved along the gantry by a precision Helical Rack and-Pinion Ball Screw system that is controlled by the machine controller.

Frame: The frame is a heavy steel all-welded construction that provides a rigid platform for the other components and ensures accuracy as well as edge finish.

Electrical Control Cabinet: A standalone electrical control panel houses all of the major electrical components, including the machine controller.

Caterpillar Track: The caterpillar track runs along the side of the machine in a special trough and carries all the electrical cables and air lines.

Vacuum Control Valves: The machine has six (6) vacuum control valves that can be used to direct the vacuum to the vacuum table zones.

Tool Rack ATC: Tool changer includes eight (8) tool stations to accommodate a large range of tools. Each of the stations includes a ISO-30 gripper assembly, and station positions are controlled the Laguna Touch CNC controller.

Additional Instructions for the use of the Laguna SmartShop II CNC: Like all machines, there is danger associated with the machine. Injury can be caused by lack of knowledge or familiarity. Use this machine with respect. If normal safety precautions are overlooked or ignored, serious personal injury may occur. As the CNC is under the control of the onboard machine controller, it is important that you are clear of the cutter when operating the machine.



Accessories, Machine Location, Unpacking & Installation-

List of Additional Accessories:

Clamps
Cutters & Collets
Memory Stick
Dust Hose Clamps
Tool Holders Wrenches

Machine Location, Unpacking & Installation-

Machine Location & Guidelines:

Before unpacking the machine, select the area where the machine will be installed.

- 1) There should be an area around the machine suitable for the length of material that will be machined as well as any loading and unloading requirements.
- 2) There should be adequate lighting in the work area. The better the lighting, the better the productivity.
- 3) The floor area under the machine should be flat and solid so that the machine frame does not shift as the gantry and tool plate traverse. Concrete is preferable.
- 4) Consider the electrical and air supplies, vacuum pump location and dust collection when identifying an area to place the machine.



Machine Location, Unpacking & Installation (Cont'd.)-

Unpacking the Machine:

Unpacking the machine will require tin snips (to cut banding), a knife and an adjustable wrench. Follow the steps below:

- 1) Using the tin snips, cut the banding that is securing the machine to the pallet (if fitted).
- 2) **WARNING: EXTREME CAUTION MUST BE USED BECAUSE THE BANDING CAN SPRING AND COULD CAUSE INJURY.**
- 3) Remove the box from the CNC machine (if fitted) and any other packaging material. The parts ordered with the machine will be packed on or inside the machine. (Please note, the machine is heavy, and it is recommended that professional assistance [rigging] be used for unloading and placing the machine.).
- 4) Use a forklift with sufficient lifting capacity and forks that are long enough to reach the complete width of the machine before attempting to lift the machine.
- 5) Remove the securing bolts that attach the machine to the pallet (if fitted).
- 6) Approaching the machine from the side, lift the machine on the frame, taking care that there are no cables or pipes in the area of the forks.
- 7) Move the machine to the required position and install the leveling feet.
- 8) Then lower the machine gently to the floor.
- 9) Level the machine so that all the supporting feet are taking the weight of the machine and no rocking is taking place.



Machine Location, Unpacking & Installation (Cont'd.)-

1.) Using Leveling Feet, Support and Level SS2 CNC Machine.



2.) SAFETY-Verify your shop/building has proper electrical supply. For confirmation on this, call customer service (1-800-234-1976) for diagrams verifying proper voltage & amperage requirements.

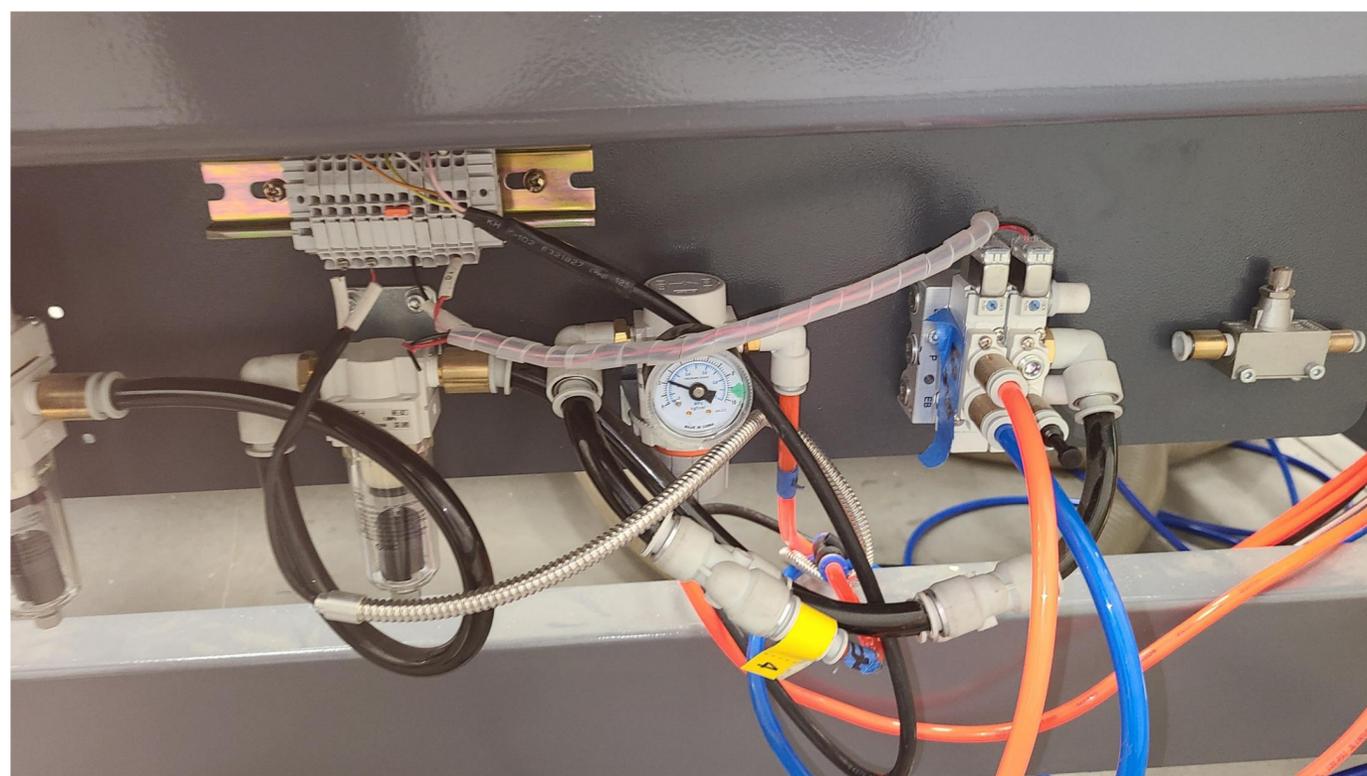


3.) Have a Certified Electrician wire from building breaker into control box (Does not need to hook up L1, L2, and L3, but they must run the wire into the box.)

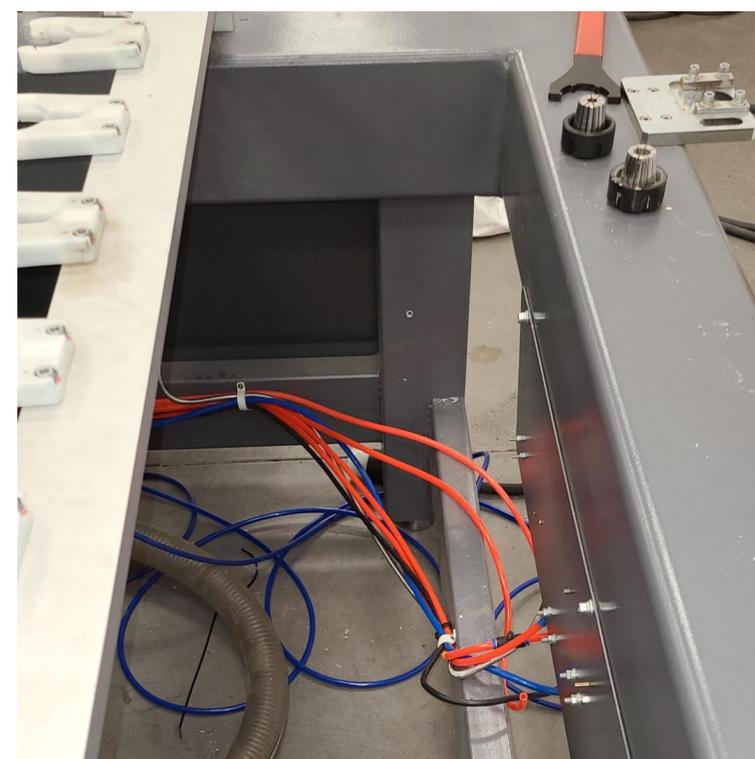
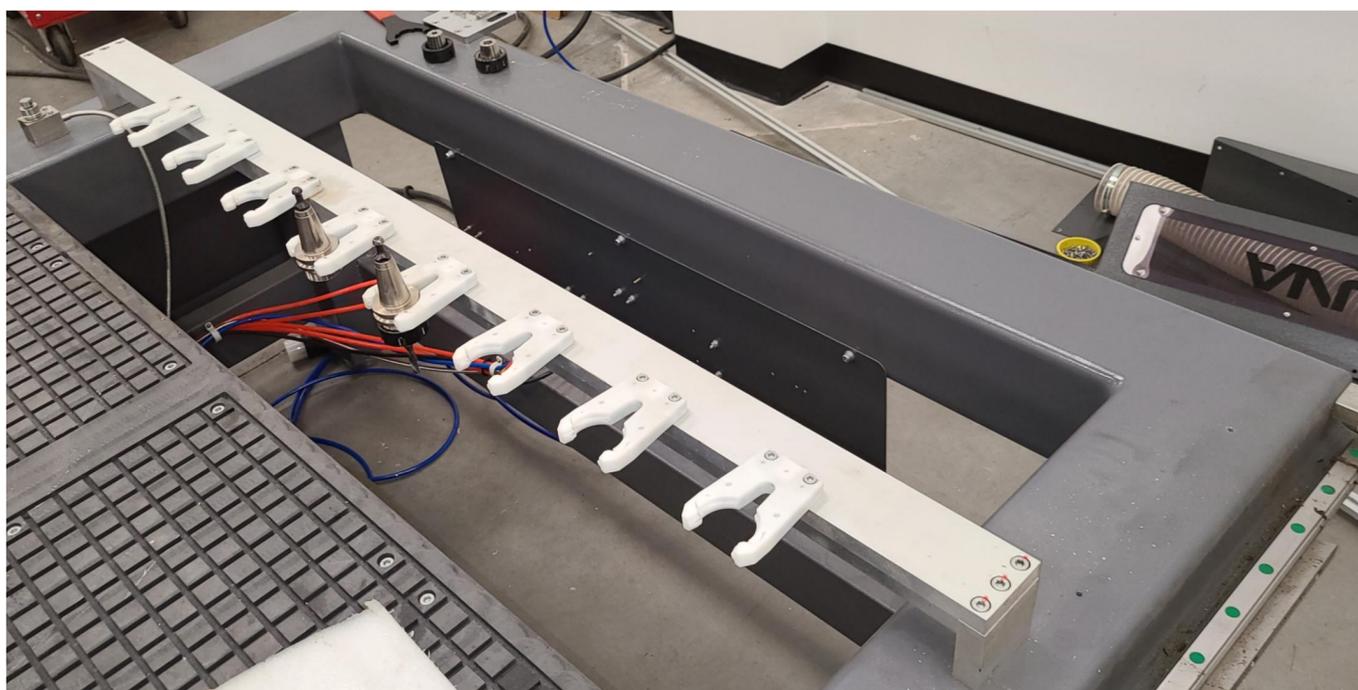


Machine Location, Unpacking & Installation (Cont'd.)-

4.) Have a Certified Electrician wire from contactor to vacuum. (Run wires to vacuum and into box, we can wire once the wires are inside to the contactor. Vacuum has a Legend-Plate, electrician must decide wire size).



5.) Hook up clean, dry air to compressor on rear of machine underneath tool rack. (We do not supply inlet connector) Needs to be 85 PSI-95 PSI.





Machine Location, Unpacking & Installation (Cont'd.)-



The machine is supplied with an air regulator. The input air regulator regulates the air pressure that is supplied to the machine. You will require an air supply that can deliver a constant minimum pressure of 85 psi. The input air regulator will need to be adjusted to 85 psi-90 psi once you have connected your air supply to the machine.

Note: No air pipe is supplied, as the length will depend on your installation. To adjust the air pressure, pull the cap out (up) and rotate until the gauge reads the correct pressure. Once the pressure is adjusted, push the cap in.

Note: It is strongly recommended that 90 psi is supplied to the SmartShop II and that the regulator then be set to 85 psi. This will ensure that the machine always has the minimum required air pressure. The input regulator has a moisture trap that must be emptied each day.

Note: It is important that the air that is supplied to the machine is clean and dry. The machine will not perform consistently if the air is wet or dirty, as any dirt and moisture will block the valves. Wet, damp or dirty air will damage your machine and cause inconsistent performance.

Note: The pneumatic system does not need any type of lubricant. Some types of lubricant can damage the machine and compromise the machine's functions.

Note: During maintenance, always disconnect the air supply.



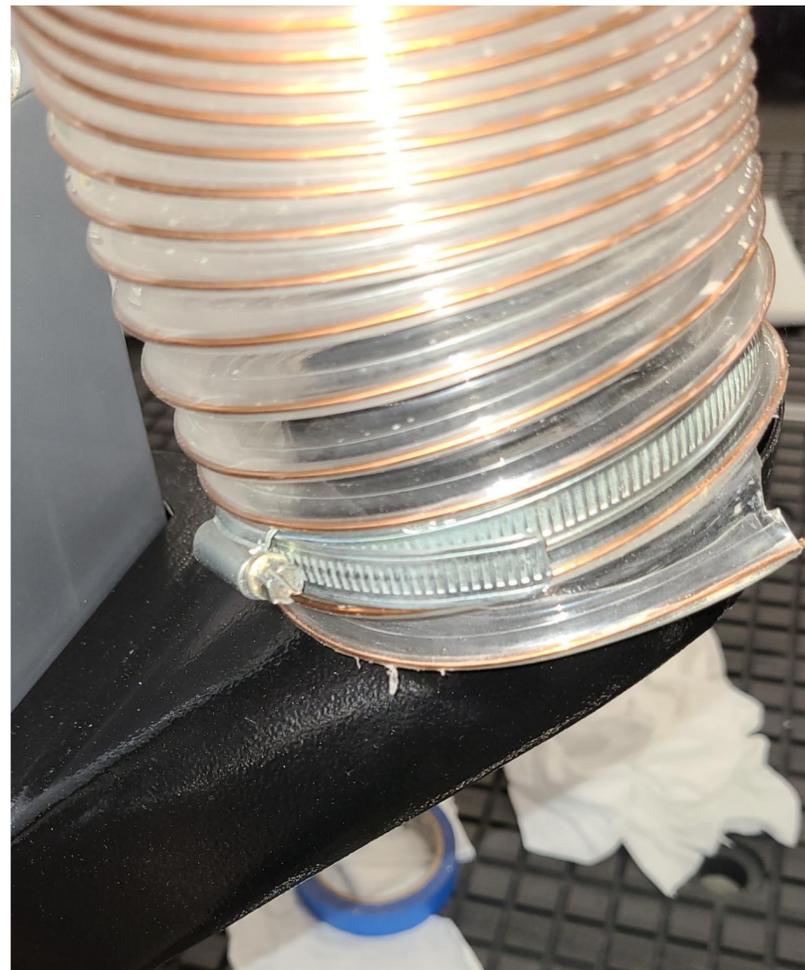
Machine Location, Unpacking & Installation (Cont'd.)-

- 6.) Verify all items that were purchased and are on the sales order were sent and included. Verify there is a dust hood on the spindle. (If any items are missing, call customer service (1-800-234-1976 for verification on missing items so they may be sent out)
- 7.) If providing own tooling, verify all proper tooling is available and readily available.
- 8.) Acquire adequate supply of materials to be cut during install including MDF Board for a Spoil Board to be placed on tabletop (Spec. .75" – 1" Thick).
- 9.) Install all software ahead of time. Review tutorials and gather basic understanding of software before technician arrives.
- 10.) "**Read & Review Manuals**" and try to familiarize with machine and basic components.
- 11.) Get **30W Oil** for lubrication purposes **(DO NOT USE WD-40 as a lubricant!)**.



Fitting the Dust Hose-

1. Fit the dust shroud to the two air cylinder rods and clamp in position with the clamping nuts.
2. Fit a 4-inch (not supplied) dust hose to the dust shroud and secure with the clamp. Ensure that it is tight; it is very inconvenient to have it fall off during production.

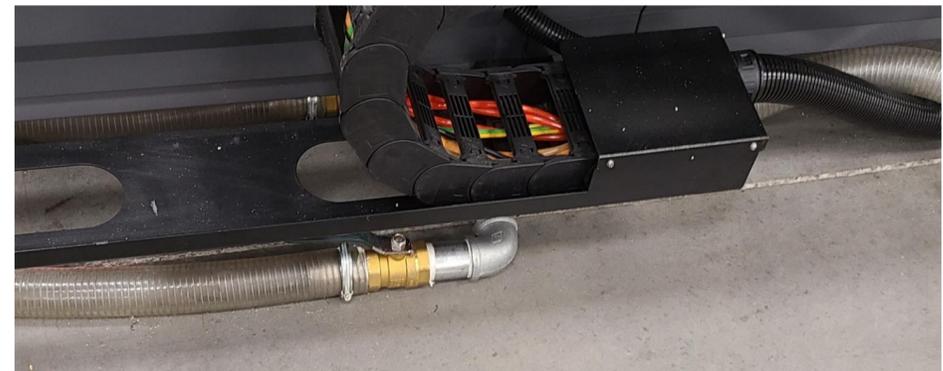


3. The head of the machine will move across the complete table, and the dust hose will follow the head. If there is insufficient slack, the hose may break or damage the dust shroud. It is suggested that the hose be suspended from the ceiling of the shop with sufficient slack so that it will not restrict movement. It will also be out of the way and not causing a trip hazard.



Connecting the Vacuum Pump-

The machine is provided with a 2-inch hose for connection to the vacuum pump. The vacuum hose is connected to the manifold located under the table toward the front of the machine. Connect the free end to the vacuum hose to the vacuum pump inlet. Ensure that it is clamped securely.





Installing Router Bit-

Installing the Router Bit in the Tool Holder **Caution:** Before changing or fitting the router bit, always **disconnect the power to the machine.**

- 1) Select a router bit and its relevant collet.
- 2) Fit the collet into the spindle nut. Press the collet into the spindle nut until it snaps into place.



Note: The router bit must not be fitted into the collet until the collet has been fitted into the spindle nut. With the router bit fitted into the collet, the collet can not compress and “snap” into the spindle nut. The face of the collet and the face of the spindle nut will be close to flush.

Note: To remove the collet, hold the spindle nut and press the collet on the side. The collet will compress and pop out. Do not try to remove the collet while a cutter is fitted, as the collet will not compress and pop out.

- 3) Fit the spindle nut and collet assembly onto the tool holder spindle thread by hand.

Press the bit into the collet. Note that the flute of the router bit must not be inside the collet and should be a minimum of 1/16" outside the collet. Hold the toolholder with the supplied wrench and tighten the collet with a second wrench. Do not over tighten.

Note: Use this process to install each of the router bits into the tool holders, being careful to use the correct collet size for each router bit. Note: Keep the collets clean and blow all dust out of the slots. Fine dust accumulates and may affect the clamping action.



Manual Tool Release-

The tool holder can be released from the spindle manually by pressing the “Green Manual Release Button” near the Electro-Spindle.

Note. When the “Green Manual Release Button” is pressed, the clamping is released and the tool will fall out.

Place your hand so that the tool holder (not the cutter) is supported.

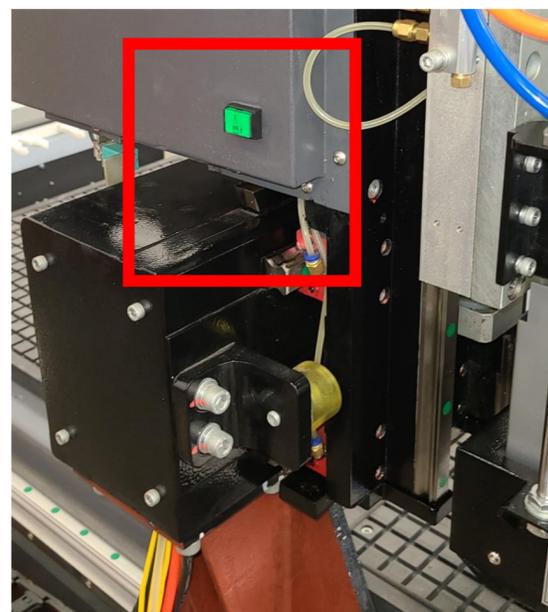
To manually insert a **Tool Holder**, hold the tool holder in the spindle taper while holding the green manual release button.

Once the green manual release button is released, the tool holder will be pulled up into the spindle hole and clamped in position.
*****Please note that a small amount of air escapes from the spindle nose. This is used to blow any dust out of the spindle taper and is normal.**

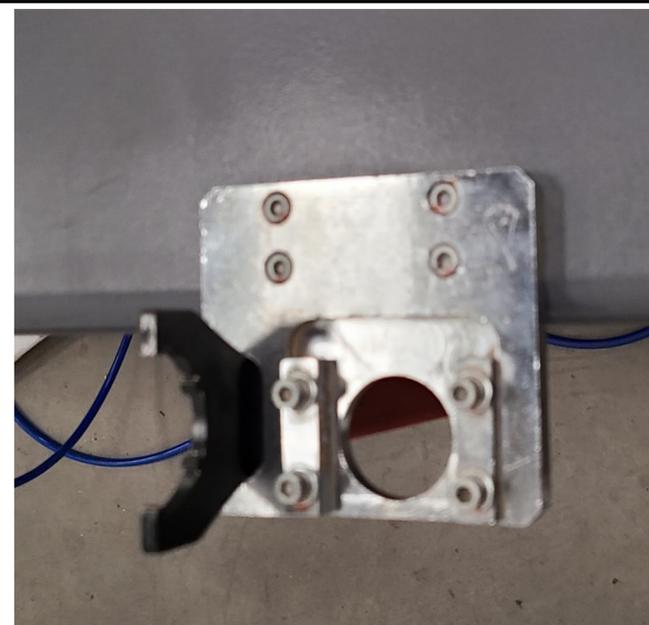
Note: Keep the tool holders clean, lubricated with Teflon.

Note: The spindle taper is susceptible to rust and must be kept clean and lubricated with a Teflon lubricant.

“Green Manual Release Button”



Tool Holder & Tool Holder Bracket





Selecting the Correct Router Bit-



Straight Router Bits



Straight Router Bits: These are the standard router bits that are commonly used with handheld routers and are readily available at home centers. They will work but will generally not produce the edge finishes that are available with the spiral designed router bits.

Up Shear Router Bits: These bits have flutes that are spiraled upward (a standard twist drill is an example of this type of bit). This bit design removes the chips from the kerf but has a tendency to chip the top surface, especially on veneers or melamine surfaces.



Selecting the Correct Router Bit (Cont'd.)-

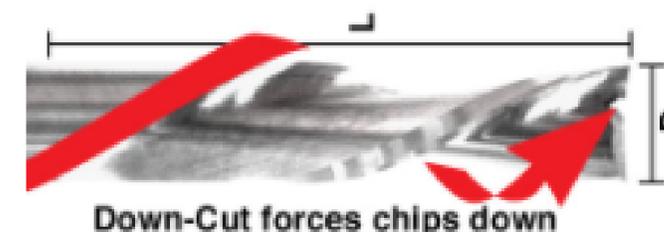


Ball Nose End Mills

Ball Nose Router Bits: are a variation of the up shear bit design but have radiuses on the ends. These bits are typically used for 3D surfacing applications.



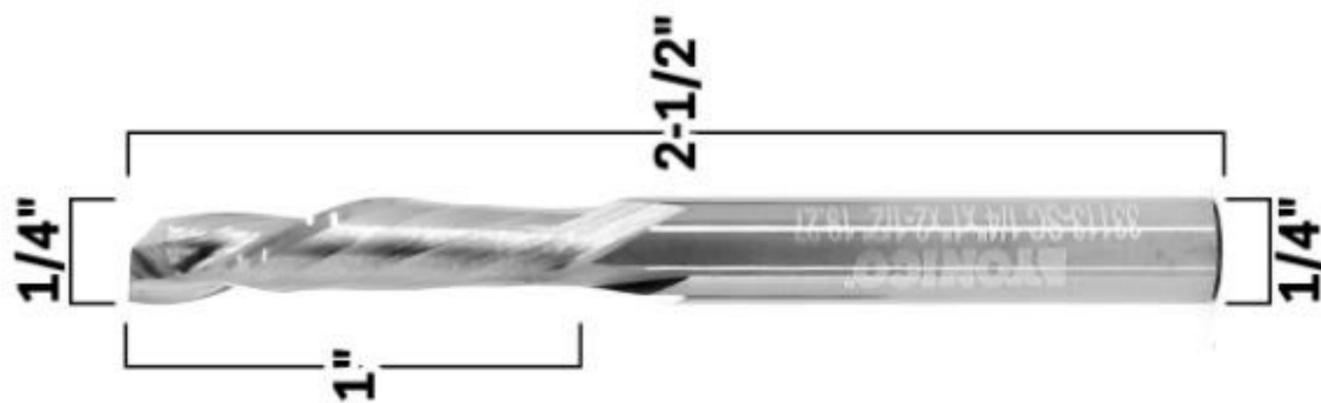
1/4" x 7/8" CL Down Shear Finish Router Bit



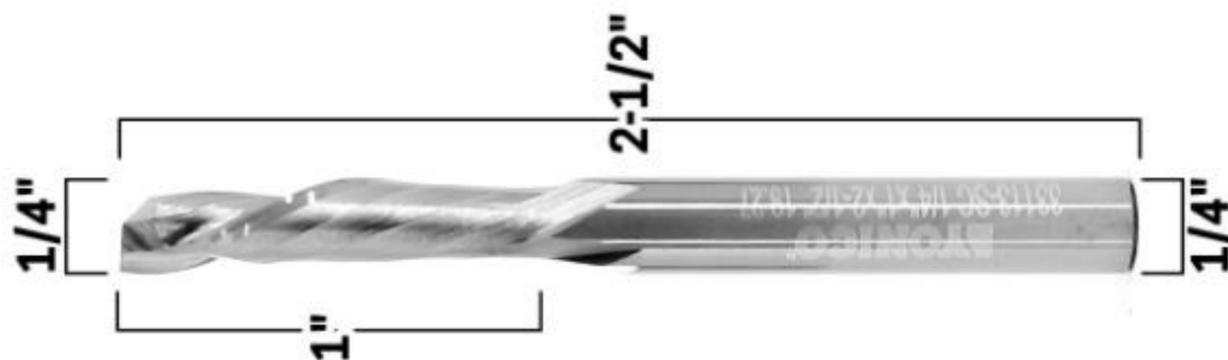
Down Shear Router Bits: These bits are similar to the up shear but with an opposite spiral that actually tends to pack the chips into the kerf. These bits prevent chipping the material surface, especially with veneers or melamine surfaces, and are an excellent choice for machining dadoes and other joinery that do not extend completely through the material.



Selecting the Correct Router Bit (Cont'd.)-



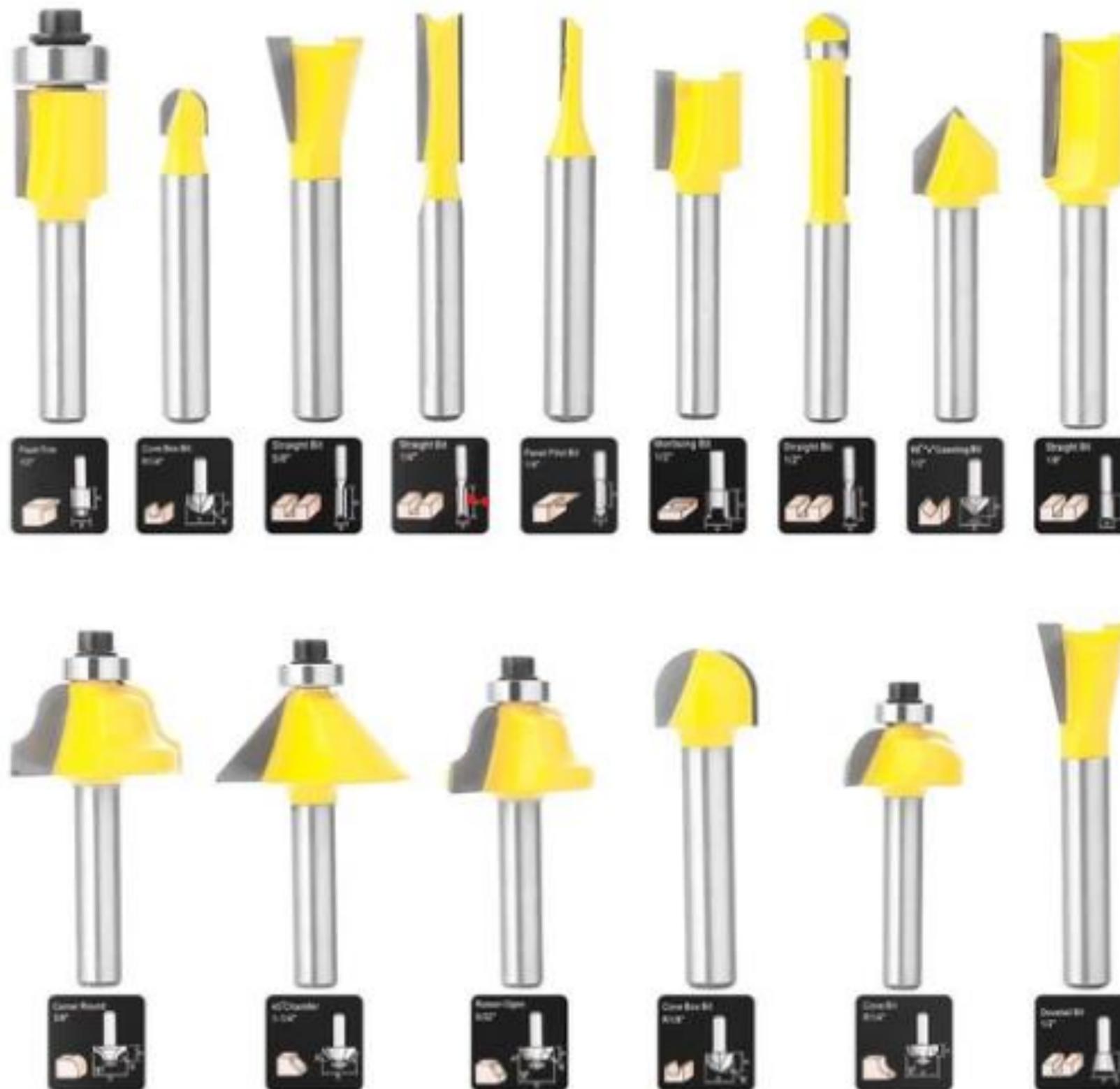
Combination (Compression) Router Bits: These bits combine the advantages of both up shear and down shear designs. The top section of the tool is down shear to prevent chipping the top surface of the material, and the lower part of the bit is up shear to prevent chipping the bottom surface of the material.



Compression Router Bits: are the preferred configuration for machining veneered plywood as well as melamine-surfaced product. A variation of the bit is called the “Mortising Compression” router bit. With this bit, the Up Shear portion of the bit is less than 1/4" in length so that the bit can be used on 1/4" veneered plywood and for dados.



Selecting the Correct Router Bit (Cont'd.)-



Form Router Bits: Form Router Bits typically are available in standard profiles such as round over, ogee, cove, etc. Router bits that have a shape associated with them would be classified with this group.



Working With Vacuum Tables and Spoil Boards-

The more effective the vacuum table setup, the more secure the parts will be held in place. Follow the instructions below to obtain optimum results. The vacuum table has six (6) zones that can be used to configure the vacuum supply depending on the type of application.





Working With Vacuum Tables and Spoil Boards (Cont'd.)-

The table has vacuum ports for each zone that extract the air and generate the vacuum. The table also has grooves to ensure that the air is extracted evenly across the zones. Each zone is controlled by a valve located at the front of the machine.



These valves controls the six “6”
Zones.



Working With Vacuum Tables and Spoil Boards (Cont'd.)-

Spoil Board Material and Precautions For machining parts from panel materials (cabinets, fixtures, case goods, etc.) a technology referred to as “Flow-Through” fixturing is employed.

A sheet of porous material (usually MDF [Medium-Density Fiberboard]) is placed on top of the vacuum table.



Example: Medium-Density Fiberboard.

The panel material that is to be machined is actually placed on top of the MDF, and the vacuum passes through the MDF (Medium-Density Fiberboard) and holds the panel material down as it is machined.

***Great care should be taken when machining parts free to limit the extension of the tool into the spoil board materials.



Working With Vacuum Tables and Spoil Boards (Cont'd.)-

The purpose is to limit vacuum infiltration through grooves in the spoil board. This also allows the processing of various nests without any setup time on the machine.

This technology is the basis for Nested-Based Manufacturing (NBM)-Nested-based manufacturing refers to a system used to efficiently produce groups of rectangular and non-symmetrical parts from flat material, such as composite and solid wood panels or plastic sheets. The components are “Nested” together on the material (see the photo below), which means they are positioned in a pattern that achieves the best possible material utilization.





Working With Vacuum Tables and Spoil Boards (Cont'd.)-

Functions of the Spoil Board-

- 1) To protect the vacuum table from damage. The cutter extends only a few thousandths of an inch past the material thickness. Without the spoil board, the cutters could damage the surface of the vacuum table.
- 2) To transfer the vacuum from the table to the job. This means that the spoil board has to be porous to allow air flow to the panel material. Low cost MDF (Medium-Density Fiberboard) has proven to be a very good material for this purpose.
- 3) To provide a “Zero Setup” environment for processing panel products.

Spoil Board Preparation-

When MDF is sourced for the spoil board, it should be (>) greater than $\frac{3}{4}$ ” of an inch.

Contrary to what might seem logical, the thicker the MDF the better the suction that is created.

“Flow-Through” fixturing maintains a careful balance between air flow through the MDF and the infiltration that occurs as the kerfs (Grooves or Notches made by a cutting tool) are machined.

It is not recommended that the spoil board material be is thicker than 1 inch.

The MDF manufacturing process causes the top and bottom surfaces of the material to be compressed. It is necessary, therefore, to remove the compacted top and bottom surfaces.

This process is termed “fly-cutting” and requires the removal of approximately 0.060" from each surface. This process also ensures that the machining plane and spoil board surface are parallel.



Working With Vacuum Tables and Spoil Boards (Cont'd.)-

The spoil board (MDF) edges are also very porous, and sealing them can improve the part holding ability.

*****Hard Candle Wax**-is an excellent product for sealing the spoil board edges because it contains no water and is very easy to apply***.

Never use a water-based product to seal the edges of the board, as this will make the board expand and become unsuitable for use as a spoil board.

Even some glue products contain water and can affect the edges of the spoil board.

Note: Do not confuse flatness with bow. If the board is bowed, the vacuum may not pull the board flat on the table. Never try to use a bowed MDF panel as a spoil board.



Working With Vacuum Tables and Spoil Boards (Cont'd.)-

Use the following Procedure for preparing the Spoil Board:

- 1) Cut the spoil board to the size of the table of the machine, if necessary.
- 2) Apply gasketing (The action of fitting or sealing with a gasket) to the outermost vacuum grooves on the table surface.
- 3) Make sure that the table is clean and free from sawdust and dirt.
- 4) Place the spoil board on the vacuum table, being careful not to displace the vacuum gasketing.
- 5) “Turn On” the vacuum pump and check for leaks.
- 6) Fly cut the surface of the spoil board, removing approximately 0.060 Inch" to ensure that the compressed surface of the material is removed.
- 7) Once the material surface is machined, “Turn Off” the vacuum pump, turn the spoil board over and repeat the process for the other side. (***)Remember to ensure that the table and spoil board are clean. (***)



Working With Vacuum Tables and Spoil Boards (Cont'd.)-

Spoil Board Use Each time a new job is machined, there may be shallow cuts into the spoil board in the areas that the cutter passes through the material.

Prior to placing a sheet of material on the spoil board, clean with a hand-held blower or vacuum cleaner.

Dirt under the material will reduce the vacuum, and in extreme cases, parts may move during the machining process. In general, keeping everything clean is the key to achieving good, repeatable results.

Precautions Regarding Spoil Boards-

The spoil board is porous and will absorb moisture. As moisture is absorbed, the dimensions of the board will change.

In general, this will not be a problem, as the changes from day to day are not that excessive and will typically be over the complete board.



Working With Vacuum Tables and Spoil Boards (Cont'd.)-

There are, however, exceptions-

- 1) It is a good practice to keep material on the top surface of the spoil board overnight to prevent warpage due to uneven moisture absorption by the material.
- 2) Once a spoil board has been used and has kerf cuts that resulted from machining parts, it is a good idea to fly cut the surface again. This time it should only be necessary to remove 0.015" of material since the only purpose is to produce a smooth, flat surface, and that amount should remove the machining marks.
- 3) The spoil board must cover the complete table and sit on the flats around the table. If the spoil board does not cover all the vacuum slots, the vacuum may be lost or not exist and the panel material will not be pulled down onto the spoil board effectively.



Vacuum Table T-Slots & Automatic Tool Changer (ATC)-

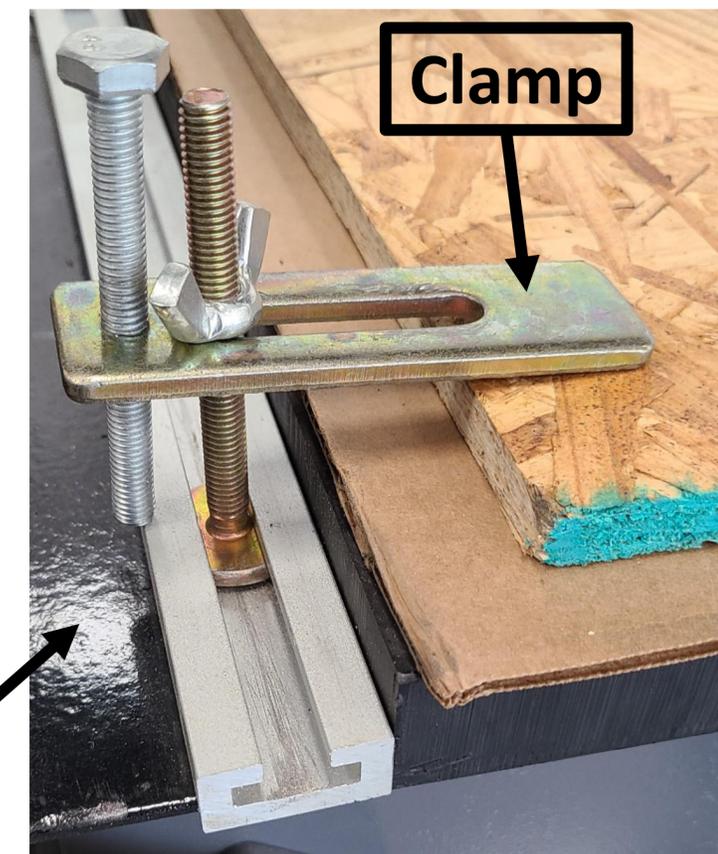
The vacuum table has T-slot mounting devices incorporated into the tables to enable fixtures and material blanks to be clamped directly to the table.

Clamps are provided, but the table must be protected with a backer when using jacking bolts. If the jacking bolts come in contact with the composite or aluminum of the table, the materials could be damaged. The backer should be as large as possible to spread the load on the machine table.



T-Slot Mounting Devices

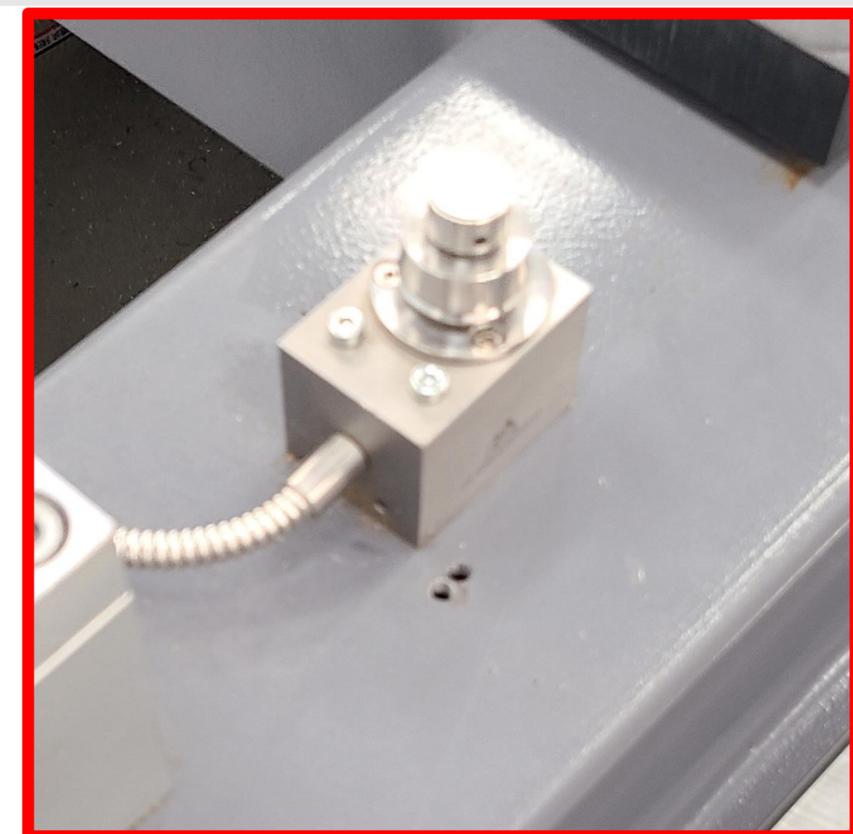
Backing



T-Slot Clamps

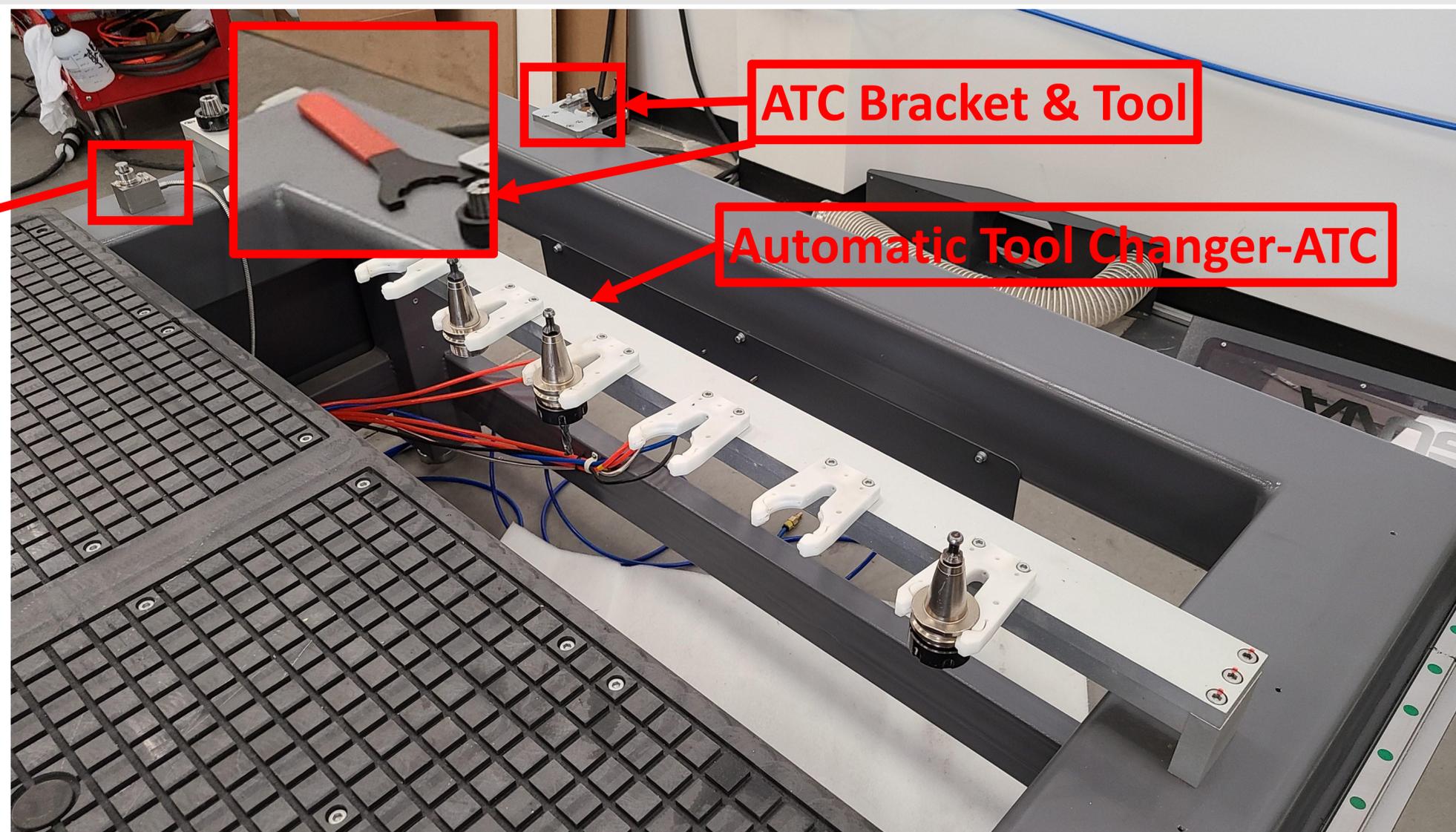


Vacuum Table T-Slots & Automatic Tool Changer (ATC) Cont'd.-



Tool Touch Off-TTO

The Automatic Tool Touch-Off system (described later in this manual) is used to measure the tool lengths automatically.



Automatic Tool Changer (ATC)

The Automatic Tool Changer consists of a group of tool holder grippers mounted to a rigid bar. The machine control knows the location of each of the grippers and will load and unload tools automatically as required by the program.



Safety Rules-

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- 4) Never leave the machine with the power on.
- 5) Do not use dull, gummy or cracked cutting tools.
- 6) Be sure that the keys and adjusting wrenches have been removed and all the nuts and bolts are secured.

Delivery Protocol-

- Most large machinery will be delivering on a tractor trailer 48'-53' long. Please notify Sales Representative with any Delivery Restrictions.
- Customer is required to have a forklift (6000lb. or larger is recommended) with 72" forks or fork extensions and operator.
- Note any visible damage, torn packaging, scuffs or any abnormal marks on the delivery receipt or Bill of Lading (BOL).

Date: 12/02/2020 **BILL OF LADING**

SHIP FROM
 Name: _____
 Address: _____
 City/State/Zip: AUSTIN, TX 78704
 Ph: (512) 645-4170 Contact: Nathaniel Boomer FOB:

SHIP TO
 Name: Laguna Tools TX Location# _____
 Address: 744 Refuge Way
 Suite 200
 City/State/Zip: GRAND PRAIRIE, TX 75050
 Ph: 9494741200 Contact: Vince (ZM) RMACR11096 FOB:

FREIGHT CHARGES BILL TO
 Name: Worldwide Express
 Address: 2828 Routh Street Suite 400
 City/State/Zip: Dallas, TX 75201

SPECIAL INSTRUCTIONS: For assistance, please call 833-8WE-SHIP
 Handling Instructions: RMACR11096
 Pickup Instructions:
 Delivery Instructions: RMACR11096
 Pickup Service(s): Liftgate Pickup, Residential Pickup

REFERENCE NUMBER INFORMATION

REFERENCE	# PKGS	REFERENCE	# PKGS	Total # of Pkgs

CARRIER INFORMATION

HANDLING UNITS		PIECES		WEIGHT	H.M. X	COMMODITY DESCRIPTION Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged to ensure safe transportation with ordinary care. See section 2(e) of NMFC Item 360	LTL ONLY	
QTY	TYPE	QTY	TYPE				NMFC#	CLASS
1	PLT			385		machine, 48(L) x 48(W) x (H) DO NOT STACK		77.5
1				385		Grand Total		

Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of property as follows: The agreed or declared value of the property is specifically stated by the shipper to be not exceeding _____ per _____

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. B14706(c)(1)(A) and (B).

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and Worldwide Express Operations, LLC, a registered motor carrier broker, pursuant to 49 USC 14101(b) and all applicable state and federal regulations.

SHIPPER'S SIGNATURE / DATE
 This is to certify that the above-named materials are properly classified, described, packaged marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Trailer Loaded:
 By Shipper
 By Driver

Freight Counted:
 By Shipper
 By Driver/pallet said to contain
 By Driver/Pieces

COD Amount: \$ _____
 Fee Terms: 3rd Party WWE
 Remit Address: _____

Acceptable Forms of Payment:
 Bank Certified Check
 Customer Check
 Personal Check
 Money Order

CARRIER SIGNATURE / PICKUP DATE
 Carrier acknowledges receipt of packages and required placards. Carrier certifies emergency response information was made available and for carrier has DOT emergency response guidebook or equivalent documentation in vehicle. Property described above is received in good order, except as noted.

(Signature) _____ (Date) _____

Bill of Lading Number : 145787446

SPECIAL INSTRUCTIONS: For assistance, please call 833-8WE-SHIP
 Handling Instructions: RMACR11096
 Pickup Instructions:
 Delivery Instructions: RMACR11096
 Pickup Service(s): Liftgate Pickup, Residential Pickup



Parts & Service

Laguna Tools Warranty-

Dealer Machinery Warranty

New woodworking machines sold by Laguna Tools carry a two-year warranty effective from the date of dealer invoice to customer/end-user. Machines sold through dealers must be registered with Laguna Tools within 30 days of purchase to be covered by this warranty. Laguna Tools guarantees all new machine sold to be free of manufacturers' defective workmanship, parts and materials. We will repair or replace, without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part be returned to Laguna Tools with the complaint. The end-user must request an RMA (return material authorization) number from Customer Service and include the (RMA) number with any and all returned parts/components requesting warranty coverage.* Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

****NOTE: Issuing an RMA number is for referencing materials and issues, it does NOT indicate warranty acceptance/conformity.**

Laguna Tools Warranty-

CNC Limited Warranty

New CNC machines sold by Laguna Tools carry a one-year warranty effective from the date of shipping. Laguna Tools guarantees all new machine sold to be free of manufacturers' defective workmanship, parts, and materials. We will repair or replace without charge, any parts determined by Laguna Tools, Inc. to be a manufacturer's defect. We require that the defective item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges. This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, lack of or inadequate dust collection, misuse/abuse or damage caused where repair or alterations have been made or attempted by others.

Laguna Tools, Inc. is not responsible for additional tools or modifications sold or performed (other than from/by Laguna Tools, Inc.) on any Laguna Tools, Inc. woodworking machine. Warranty maybe voided upon the addition of such described tools and/or modifications, determined on a case-by-case basis. Software purchased through Laguna Tools, Inc., is not covered under this warranty and all technical support must be managed through the software provider. Normal user alignment, adjustment, tuning and machine settings are not covered by this warranty. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided by the manufacturer.

Parts under warranty are shipped at Laguna Tools, Inc.'s cost either by common carrier, FEDEX ground service or a similar method.

Technical support to install replacement parts is primarily provided by phone, fax, e-mail or Laguna Tools Customer Support Website. The labor required to install replacement parts is the responsibility of the user. Laguna Tools is not responsible for damage or loss caused by a freight company or other circumstances not in our control. All claims for loss or damaged goods must be notified to Laguna Tools within twenty-four hours of delivery.

Please contact our Customer Service Department for more information. Only NEW machines sold to the original owner are covered by this warranty. For warranty repair information, call 1-800-332-4094. Copyright 2013 Laguna Tools, Inc. *Warning – no portion of these materials may be reproduced without written approval from Laguna Tools, Inc.**

WARRANTY & REGISTRATION

THANK YOU!

Welcome to the Laguna Tools® group of discriminating woodworkers. We understand that you have a choice of where to purchase your machines and appreciate the confidence you have in the Laguna Tools® brand.

Through hands-on experience, Laguna Tools® is constantly working hard to make innovative, precision products. Products that inspire you to create works of art, are a joy to operate, and encourage your best work.

Laguna Tools®
Imagination, Innovation, and Invention at Work

WARRANTY & REGISTRATION

Every product sold is warranted to be free of manufacturers' defective workmanship, parts, and materials. For any questions about this product, the intended use or what it was designed for, customer service, or replacement parts, please contact our customer service department:

Laguna Tools® Customer Service
2072 Alton Parkway, Irvine, California 92606, USA
1-800-332-4049
customerservice@lagunatools.com
www.lagunatools.com/why/customer-service/
8AM to 5PM PST, Monday through Friday

For warranty claims or to report damage upon receiving – please reach out to our warranty department:

Laguna Tools® Warranty Service
2072 Alton Parkway, Irvine, California 92606, USA
1-949-474-1200
customerservice@lagunatools.com
www.lagunatools.com/policies/warranty
8AM to 5PM PST, Monday through Friday

REGISTRATION

To prevent voiding this warranty, all products sold must be registered within thirty (30) days of receiving the product. Registering the product will enable the original purchaser to receive notifications about important product changes, receive customer service, and be able to file a warranty claim against defective workmanship, parts, or materials.



WHO IS COVERED

The applicable warranty covers only the initial purchaser of the product from the date of receiving the product. To file such claims, the original purchaser must present the original receipt as proof of purchase.

WHAT IS COVERED

The warranty covers any defects in the workmanship of all parts and materials that make up the machine unless otherwise specified. Any part, determined by Laguna Tools®, to have a defect will be repaired or replaced (and shipped), without charge. The defective item/part must be returned to Laguna Tools® with the complaint and proof of purchase in the original packaging that it was received in. In the event the item/part is determined to be not covered by this warranty, the customer will be responsible for the cost to replace the item/part and all related shipping charges.

WARRANTY LIMITATIONS

This limited warranty does not apply to natural disasters, acts of terrorism, normal wear and tear, product failure due to lack of maintenance or cleaning, damage caused by accident, neglect, or lack of adequate dust collection. The warranty may be voided against proof of misuse/abuse, damage caused where repair or alterations have been made or attempted by others, using the product for purposes other than those described as intended use (unless with consent by Laguna Tools®), modification to the product, or use with an accessory that was not designed for the product. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided in this manual.

LENGTH OF WARRANTY

All new machines and optional accessories sold through an authorized dealer carry a two-year warranty effective the date of receiving the product. Machines sold for either commercial or industrial use have a one-year warranty. Wearable parts like throat plates, bandsaw guides, etc., have a ninety-day warranty.

Table A-1 Warranty Lengths

2 Year – New Machines Sold Through an Authorized Dealer

2 Year – Accessories Sold as Machine Options (excluding blades)

1 Year – Machines Sold for Commercial or Industrial Use

1 Year – Blades and Accessories outside of Machine Options

90 Days – Wearable Parts

Aside from being free of defects upon receiving, consumable parts, like cutters and abrasives, are not covered by this warranty unless otherwise stated by Laguna Tools®. These parts are designed to be used at the expense of the operator and are available for replacement or inventory purchase. The determination of a consumable part will be made on a case-by-case basis by Laguna Tools®.

SHIPPING DAMAGE

Laguna Tools® is not responsible for damage or loss caused by a freight company or other circumstances not in the direct control of Laguna Tools®. All shipping-related claims for loss or damage goods must be made to Laguna Tools within twenty-four hours of delivery.

HOW TO RECEIVE SUPPORT

To file a warranty-claim please contact the warranty department at 1-949-474-1200. To receive customer service or technical support please contact the customer service department at 1-800-332-4094. Parts, under warranty, are shipped at the expense of Laguna Tools® either by common carrier, FedEx ground services or similar method. Technical support to install replacement parts is primarily provided by phone, fax, email, or the Laguna Tools Customer Support Website.

LAGUNA

Laguna Tools Warranty-

No Modifications Allowed or Sold.

Laguna Tools, Inc. is not responsible for additional tools or modifications sold or performed (other than from/by Laguna Tools, Inc.) on any Laguna Tools, Inc. woodworking machine. Warranty maybe voided upon the addition of such described tools and/or modifications, determined on a case-by-case basis. Normal user alignment, adjustment, tuning and machine settings are not covered by this warranty. It is the responsibility of the user to understand basic woodworking machinery settings and procedures and to properly maintain the equipment in accordance with the standards provided by the manufacturer. Parts, under warranty, are shipped at Laguna Tools, Inc.'s cost either by common carrier, FEDEX ground service or a similar method. Technical support to install replacement parts is primarily provided by phone, fax, e-mail or Laguna Tools Customer Support Website. The labor required to install replacement parts is the responsibility of the user. Laguna Tools is not responsible for damage or loss caused by a freight company or other circumstances not in our control. All claims for loss or damaged goods must be notified to Laguna Tools within twenty-four hours of delivery. Please contact our Customer Service Department for more information. Only new machines sold to the original owner are covered by this warranty.

For warranty repair information, call 1-800-332-4094.

Laguna Tools Packaging/RMA Procedures-

Dealer Machinery Warranty

****Any machines returned to Laguna Tools must be returned with packaging in the same manner in which it was received. If a part or blade is being returned it must have adequate packaging to ensure no damage is received during shipping. In the event the item/part is determined to be damaged due to lack of maintenance, cleaning or misuse/abuse, the customer will be responsible for the cost to replace the item/part, plus all related shipping charges.**

We require that the defective item/part be returned to Laguna Tools with the complaint. The end-user must request an **RMA (Return Material Authorization) Number** from Customer Service and include the (RMA) number with any and all returned parts/components requesting warranty coverage.

Laguna Tools Packaging/Laguna Tools RMA Example-

12/1/2020

Return Authorization - NetSuite (Laguna Tools, Inc)

Return Authorization

CR10979

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CUSTOMER

DATE

CURRENCY

SUBSIDIARY
Laguna Tools, Inc

RTN. AUTH. #
CR10979

DEPARTMENT
Sales : Wholesale

PRODUCT LINE

LOCATION
Laguna Texas Demo / Returns

SALES REP
Benjamin Helshoj

PARTNER

LEAD SOURCE
Dealer_Canada Dealer-Canada

PO #
PO-981

MEMO

PENDING RECEIPT

Actions

CREATED FROM

Sales Order #210855

SALES EFFECTIVE DATE

EST. EXTENDED COST

EST. GROSS PROFIT

EST. GROSS PROFIT PERCENT

PROMISE DATE
5/12/2020

DEPOSIT RECEIVED

ACCOUNTING APPROVAL

COMMENTS

Customer's bandsaw cast iron at the bottom is bent the customer can't insert bolts to stand. No shipping damage machine arrived in excellent condition do damage to packaging.
PO 981

RETURN REASON

Manufacturers Warranty Defect

SHIP IMMEDIATE

SPLIT SHIP

REVISED INVOICE

ORDER HOLD REASON

Summary

SUBTOTAL	1,686.59
DISCOUNT	
GST/HST	84.33
PST	0.00
TOTAL	1,770.92

RMA #

RTN. AUTH. #
CR10979



SHIPPING COMMENTS

[Items](#) [Promotions](#) [Address](#) [Messages](#) [History](#) [Workflow](#) [Custom](#) [Partners](#) [Sales Team](#) [Additional Information](#) [OzLINK](#) [Pacejet](#) [SPS](#)

EXCHANGE RATE
0.76094

RATE

DISCOUNT

ITEM	RETURNED	REFUNDED	QUANTITY	UNITS	INVENTORY DETAIL	DESCRIPTION	PRICE LEVEL	UNIT PRICE	AMOUNT	TAX CODE	TAX RATE	PST	OPTIONS	GIFT CERTIFICATE	CLOSED	DROP SHIPMENT	CO: EST TYF
Machine : Bandsaw : MBAND1412- 175 14 12 Bandsaw 110V 1,75HP	0	0	1	Each		14-12 110 VOLT BANDSAW	Retail Price			CA- GST only	5.0%	0.0%					Iter De Co

[Edit](#) [Back](#) [Receive](#) [Close](#)

Actions

Laguna Tools Packaging/Laguna Tools BILL of LADING Example-

SHIP FROM		BILL OF LADING						
Name: Nathaniel Boomer Address: [REDACTED]		Bill of Lading Number : 145787446						
City/State/Zip: Ph: (512) 645-4170 Contact: Nathaniel Boomer		Carrier Name: Estes Express						
Name: Laguna Tools TX Address: 744 Refuge Way Suite 200 City/State/Zip: GRAND PRAIRIE, TX 75050 Ph: 9494741200 Contact: Vince (ZM) RMACR11096		SCAC: EXLA Pro number:						
Name: Worldwide Express Address: 2828 South Street Suite 400 City/State/Zip:		Freight Charge Terms: (freight charges are prepaid by Worldwide Express unless indicated otherwise)						
SPECIAL INST e call 833-8WE-SHIP		<input type="checkbox"/> Master Bill of Lading: with attached underlying Bill Of Lading						
Handling Instructions: RMACR11096 Pickup Instructions: Delivery Instructions: RMACR11096 Pickup Service(s): Liftgate Pickup, Residential Pickup		WWE Number: W709699351						
REFERENCE NUMBER INFORMATION								
REFERENCE	# PKGS	REFERENCE	# PKGS					
Total # of Pkgs								
CARRIER INFORMATION								
HANDLING UNITS		PIECES		WEIGHT	H.M. X	COMMODITY DESCRIPTION <small>Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged to ensure safe transportation with ordinary care. See section 2(e) of NMFC Item 360</small>	LTL ONLY	
QTY	TYPE	QTY	TYPE				NMFC#	CLASS
1	PLT			385		machine, 48(L) x 48(W) x (H) DO NOT STACK		77.5
1				385		Grand Total		
Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of property as follows: The agreed or declared value of the property is specifically stated by the shipper to be not exceeding _____ per _____				COD Amount: \$ Fee Terms: 3 rd Party WWE Remit Address:		Acceptable Forms of Payment: <input type="checkbox"/> Bank Certified Check <input type="checkbox"/> Customer Check <input type="checkbox"/> Personal Check <input type="checkbox"/> Money Order		
Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. B14706(c)(1)(A) and (B)				RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and Worldwide Express Operations, LLC, a registered motor carrier broker, pursuant to 49 USC 14101(b) and all applicable state and federal regulations.		CARRIER SIGNATURE / PICKUP DATE Carrier acknowledges receipt of packages and required placards. Carrier certifies emergency response information was made available and /or carrier has DOT emergency response guidebook or equivalent documentation in vehicle. Property described above is received in good order, except as noted.		
SHIPPER'S SIGNATURE / DATE <small>This is to certify that the above-named materials are properly classified, described, packaged marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.</small>		Trailer Loaded: <input type="checkbox"/> By Shipper <input type="checkbox"/> By Driver		Freight Counted: <input type="checkbox"/> By Shipper <input type="checkbox"/> By Driver/pallet said to contain <input type="checkbox"/> By Driver/Pieces		(Signature) _____ (Date) _____		

Bill of Lading Number : 145787446

SPECIAL INSTRUCTIONS: For assistance, please call 833-8WE-SHIP

Handling Instructions: RMACR11096

Pickup Instructions:

Delivery Instructions: RMACR11096

Pickup Service(s): Liftgate Pickup, Residential Pickup