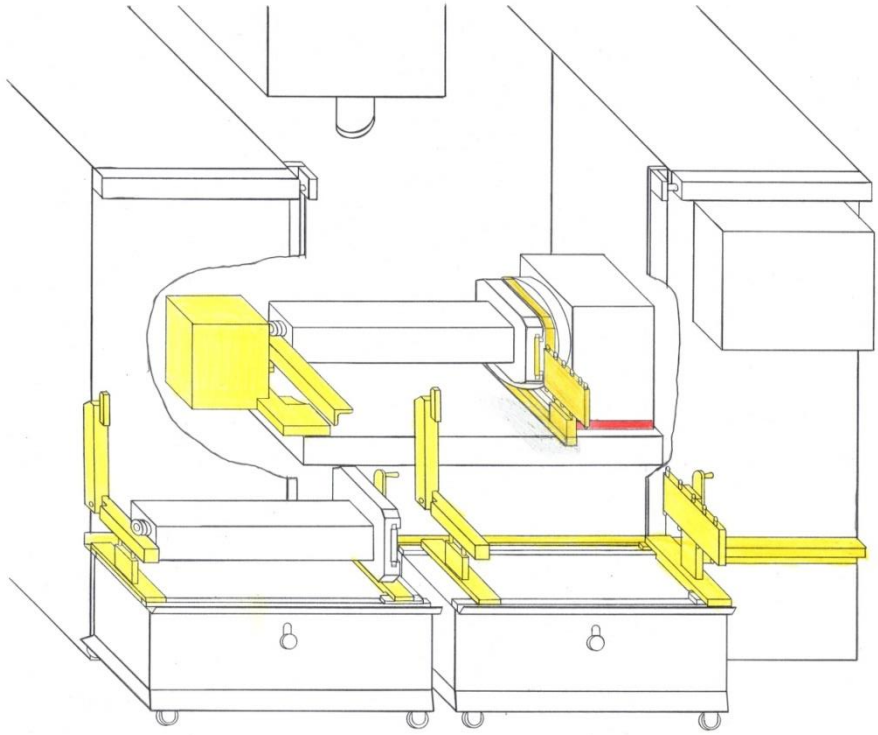


BAYER ROTARY LOG PALLET SYSTEM

ROTARY MOTION ENABLES MULTIPLE SIDES OF MULTIPLE PARTS TO BE MACHINED WITH MINIMUM SETUP, TOOL CHANGE TIME AND WORK HANDLING TIME.

Horizontal machining centers are superior to vertical machining centers for most parts.

But, vertical machining centers with the Rotary Log Pallet System are superior to horizontal machining centers because:

1. **Logs supported on both ends are 38 times more rigid than tombstones that are supported on one end.**
   - **A. This enables logs to be thinner, lighter and less expensive.**
     1. **This increases cutter access to the parts.**
     2. **Enables longer logs.**
     3. **Reduced weight facilitates storage and transfer.**
2. **Logs rotate about a horizontal centerline that provides constant load height.**

BEST FOR BATCH PRODUCTION

BAYER SYSTEMS 5150 N 24 ST, PHOENIX, AZ 85016 TEL 602-448-9409 www.bayersystems.com

STORAGE BENCH

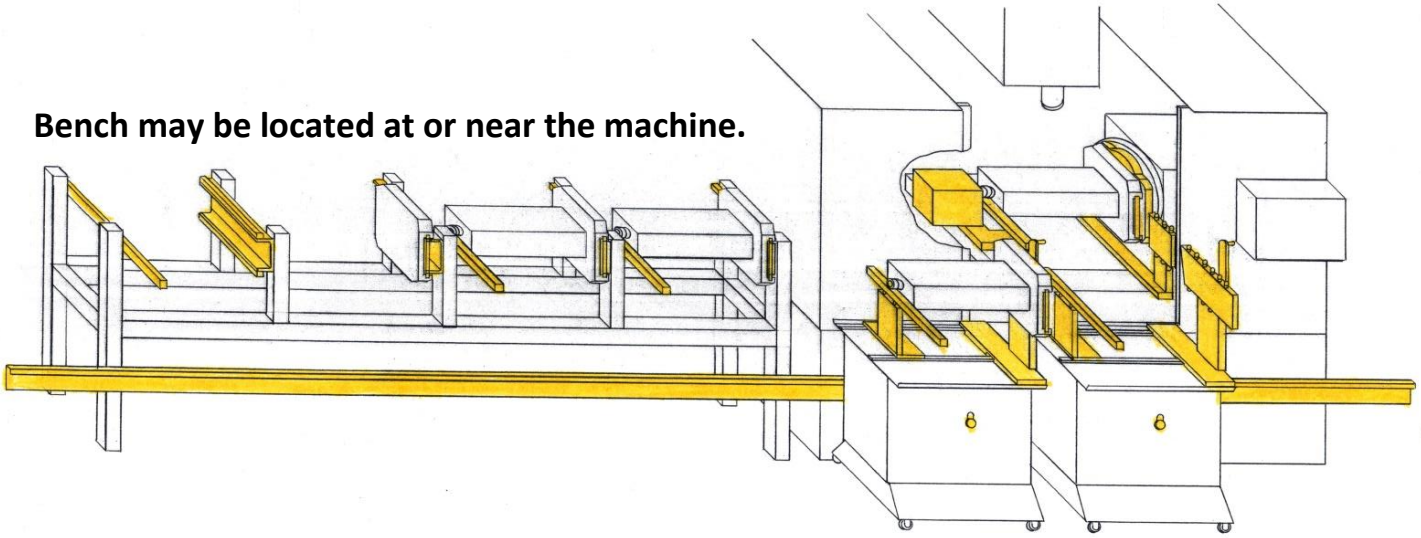
Any number of logs, pallets and setups can be stored on benches and/or carts and transferred to any number of machines.

1. This enables setup storage to facilitate batch production.

2. It enables the use of the optimum log or pallet for the setup.

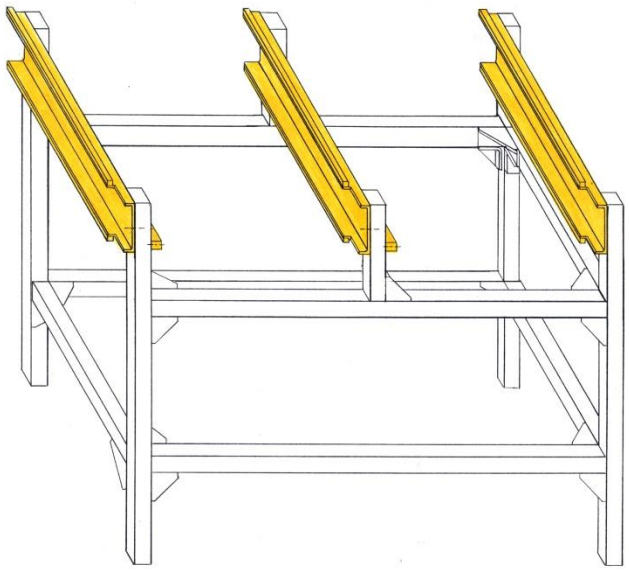
3. It enables emergency jobs to be machined during production cycles.

Bench may be located at or near the machine.



The storage bench is made from aluminum profile with T slots on four sides. This enables the height and pallet and log space to be adjusted. Two logs or two pallets can be located on each station .

This drawing shows a three station bench for four logs and two pallets.



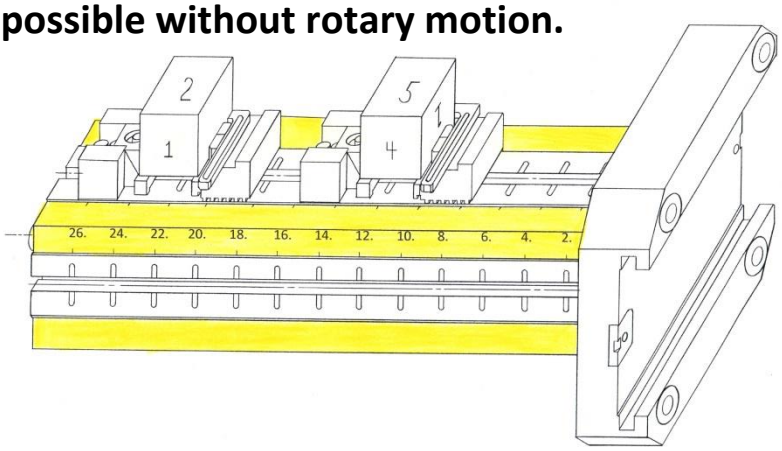
The customer must specify:

1. The number of stations required.
2. The length of the logs and pallets .
3. The guide rail length required if attached to the machining center.

Price on request.

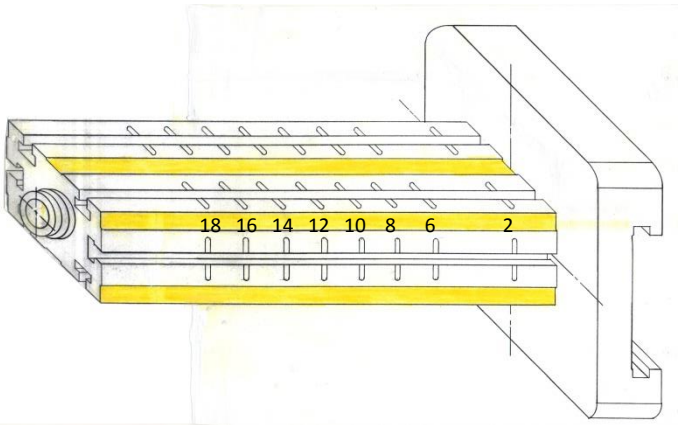
This log was set up to machine six sides of a work piece using two locations.

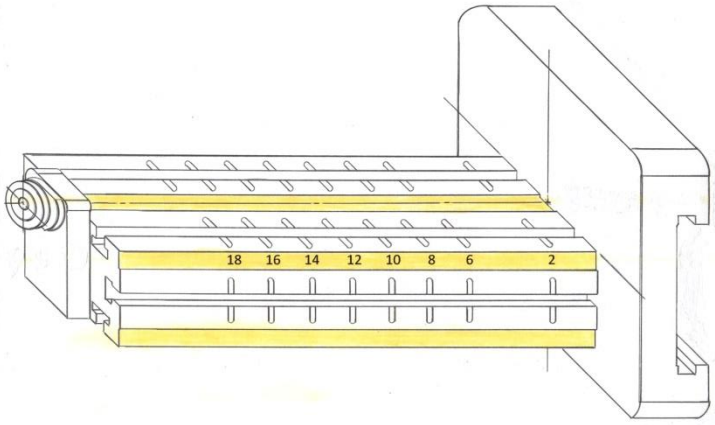
This would not be possible without rotary motion.

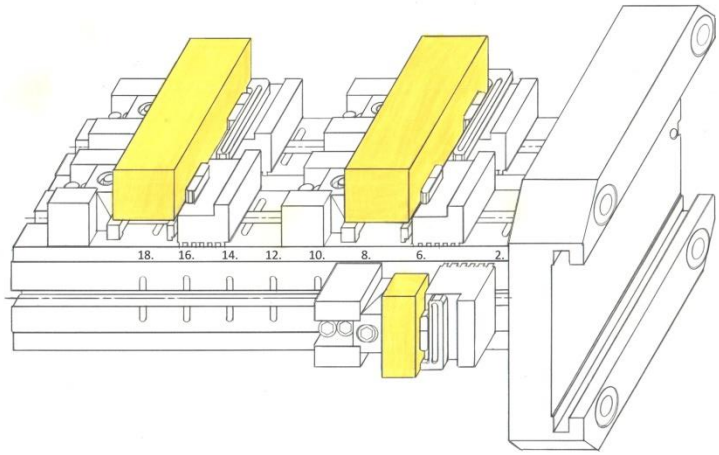


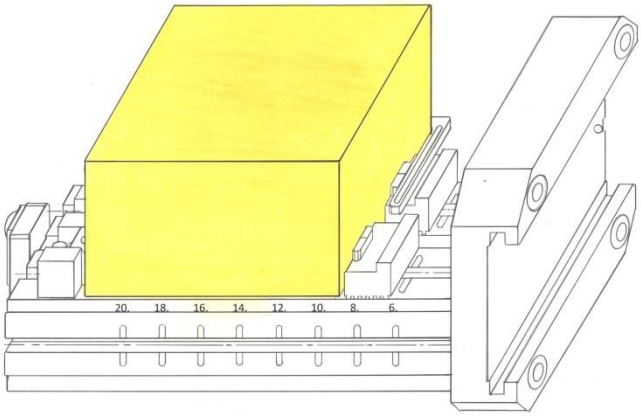
The Rotary Log Pallet System enables a large verity of logs and pallets to be stored and retrieved in seconds for the optimum set up.

Standard log pallets





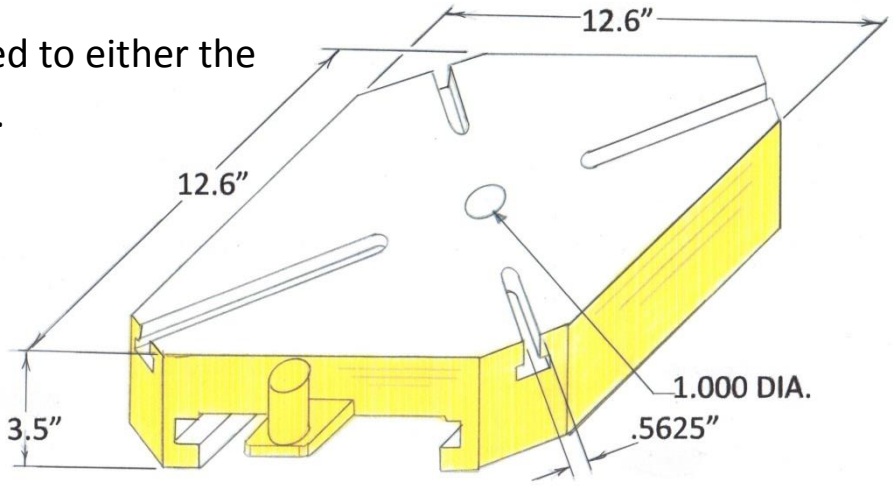




THE UNIVERSAL LOG PALLET CAN MACHINE LARGE AND SMALL PARTS

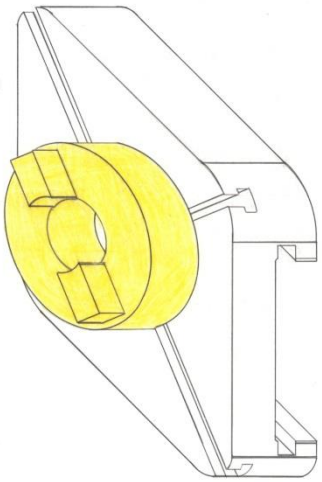
THE UNIVERSAL OFFSET LOG PALLET CAN MACHINE VERY LARGE PARTS

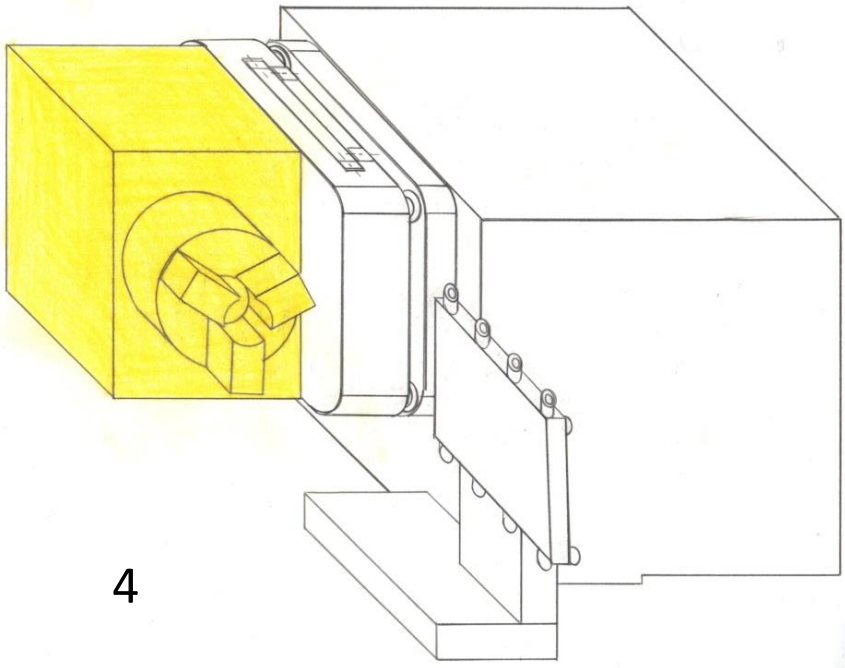
The square pallet can be mounted to either the rotary table or flat pallet system.



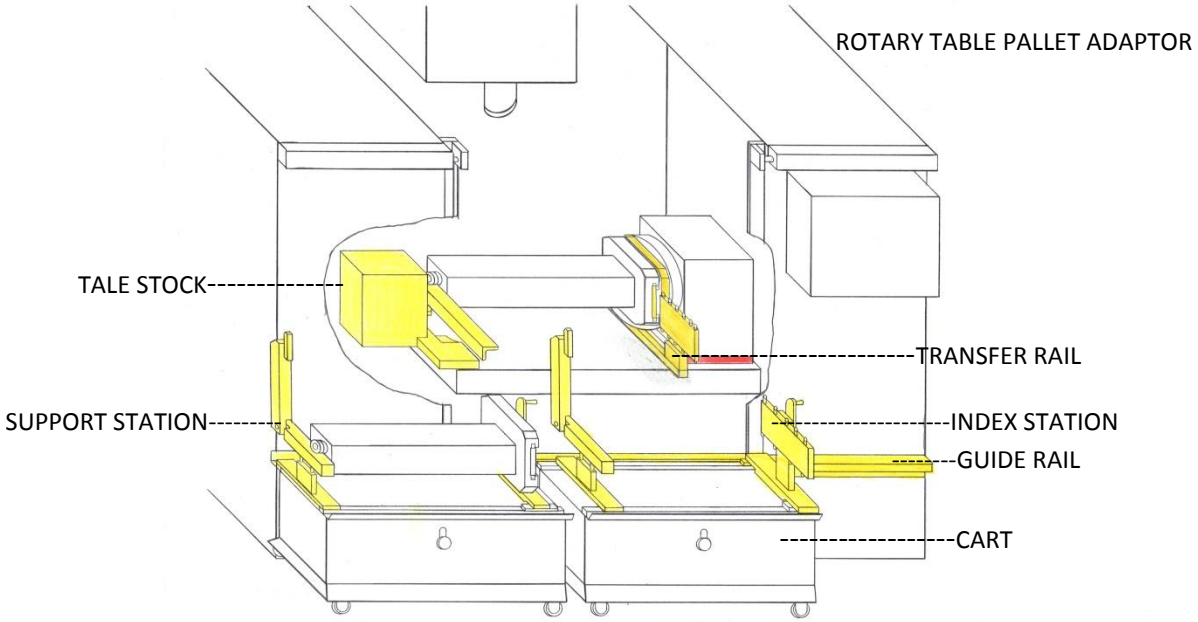
Indexers, rotary tables, round chucks and other clamping devices can be mounted to the square pallet and used for either the rotary table or flat pallet system.

When the indexer or rotary table is used with the rotary table, compound motion can be achieved.



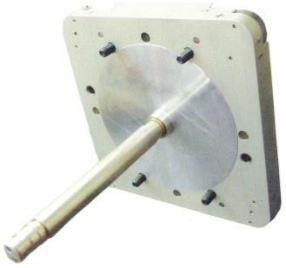


A PALLET ADAPTER CAN BE MOUNTED TO ANY ROTARY TABLE OF SUITABLE SIZE



PALLET ADAPTER

1. The Pallet Adapter can be mounted to any rotary table with a turn table diameter of 12.2” inches or more.
2. The Pallet Adapter clamps the pallet using both spring and air pressure. The pallet remains clamped even if the air pressure is lost.
3. Pallet unclamping is prevented unless oriented for pallet transfer.
4. Air flow removes contaminates from pallet locating surfaces. A gage is provided to show if the pallet is not properly clamped.
5. Pallet location repeatability .0001”



Back side of pallet adapter

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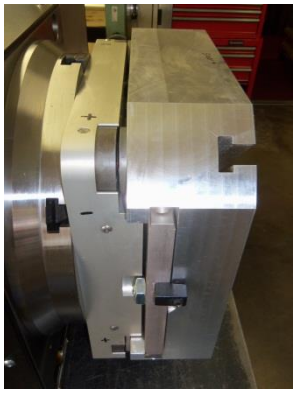
The Pallet Adaptor is mounted to the rotary table face plate as shown.



The pallet is clamped by the Pallet Adaptor as shown.

PALLETS ARE LIGHT AND MOBILE

Carts enable off machine setup, work handling and unlimited pallet storage.

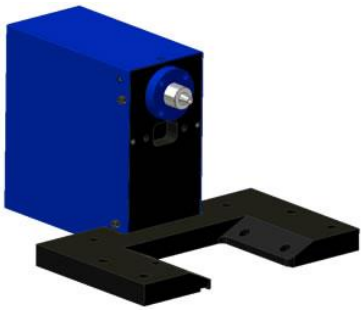
A guide rail mounted to the front of the machine is used to locate the carts.

1. Carts are easily attached and detached from the guide rail.
2. Pallets are transferred to and from the pallet clamp and stations located on the cart.

TRANSFER RAIL

The transfer rail with frictionless rollers is used to transfer pallets to and from the cart and machining center.

TALE STOCK



1. The tale stock provides automatic engagement with the log when clamped by the Pallet Adapter.
2. Air flow cleans the engagement with the log. A gage indicates if the Tale Stock is not properly engaged.
3. Air can be transferred from the tale stock to the log to provide power clamping or to operate other devices.

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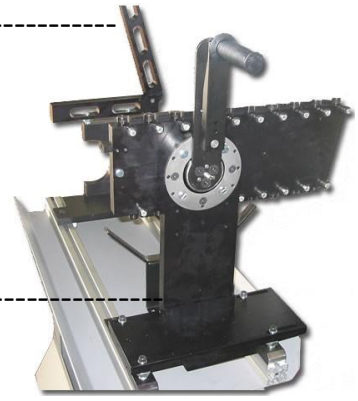
SUPPORT STATION ----------

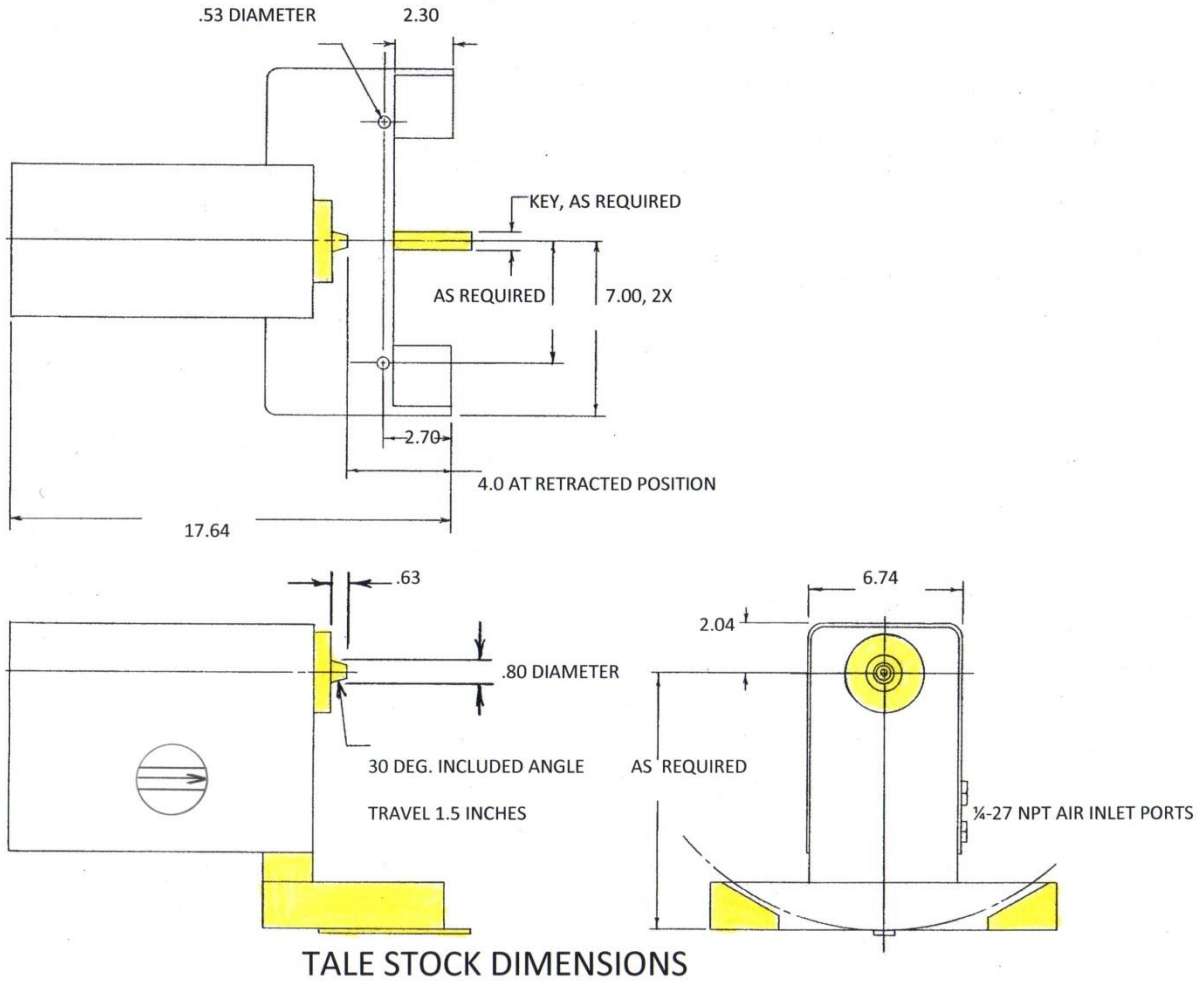


1. The support station is used to support one end of the log while on the cart. It provides a continuous path to the machine to support the roller located on the end of the log.

INDEX STATION ----------

1. One or more Index Stations and Support stations can be located on a Cart.
2. The Index Station enables the operator to index the pallet to provide access to all sides for set up or work handling.

TALE STOCK DIMENSIONS



TALE STOCK DIMENSIONS

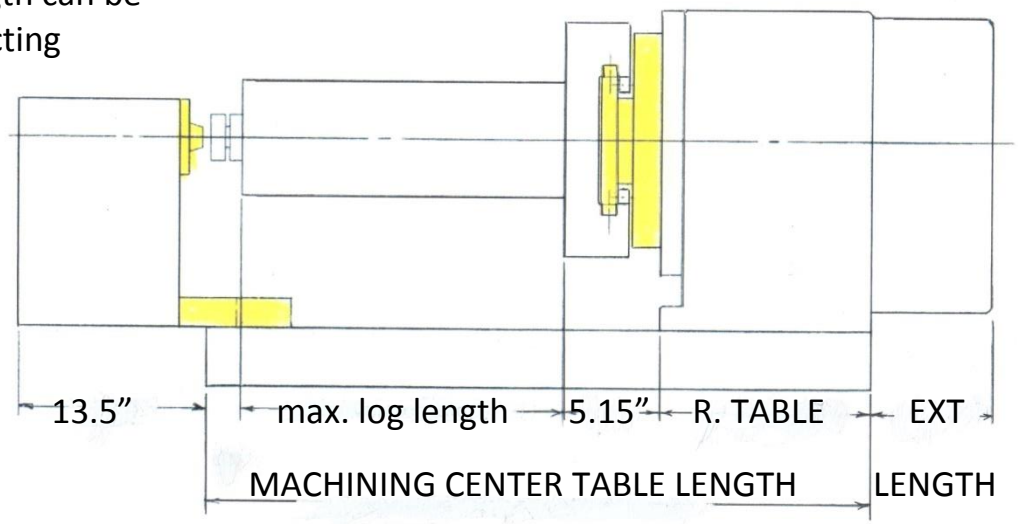
The tale stock may extend beyond the machining center table to provide additional space for log length.

The center height can be provided to match any need from five inches to 18 inches.

The center line location can be adjusted .02 inches in any direction to accurately align with the rotary table centerline.

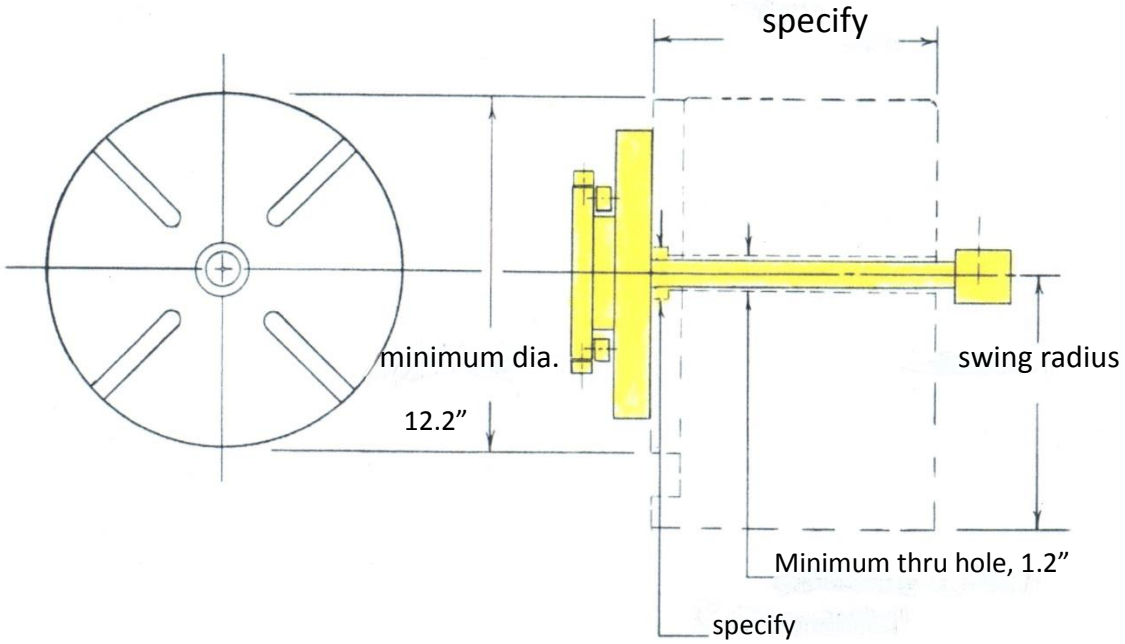
How to determine the maximum log length.

1. The maximum log length can be determined by subtracting the rotary table mounting length and 7.0” from the machining center table length.



2. The maximum log length must be reduced however if the space for the rotary table and tale stock extension beyond the machining center table length exceeds the available space at full table travel.
3. The spindle centerline may not reach the left hand end of the log if the table length does not exceed the maximum x travel by 3.7 inches. (two times 1.85 inches)

How to determine the compatibility of the rotary table for the pallet adapter.



The minimum swing radius is 8.0”. A larger swing radius is recommended to prevent injury if the operator’s hand should ever be trapped by the rotating square pallet.

Also a larger swing radius enables larger parts to be machined.

INFORMATION REQUIRED TO ORDER THE ROTARY LOG PALLET SYSTEM.

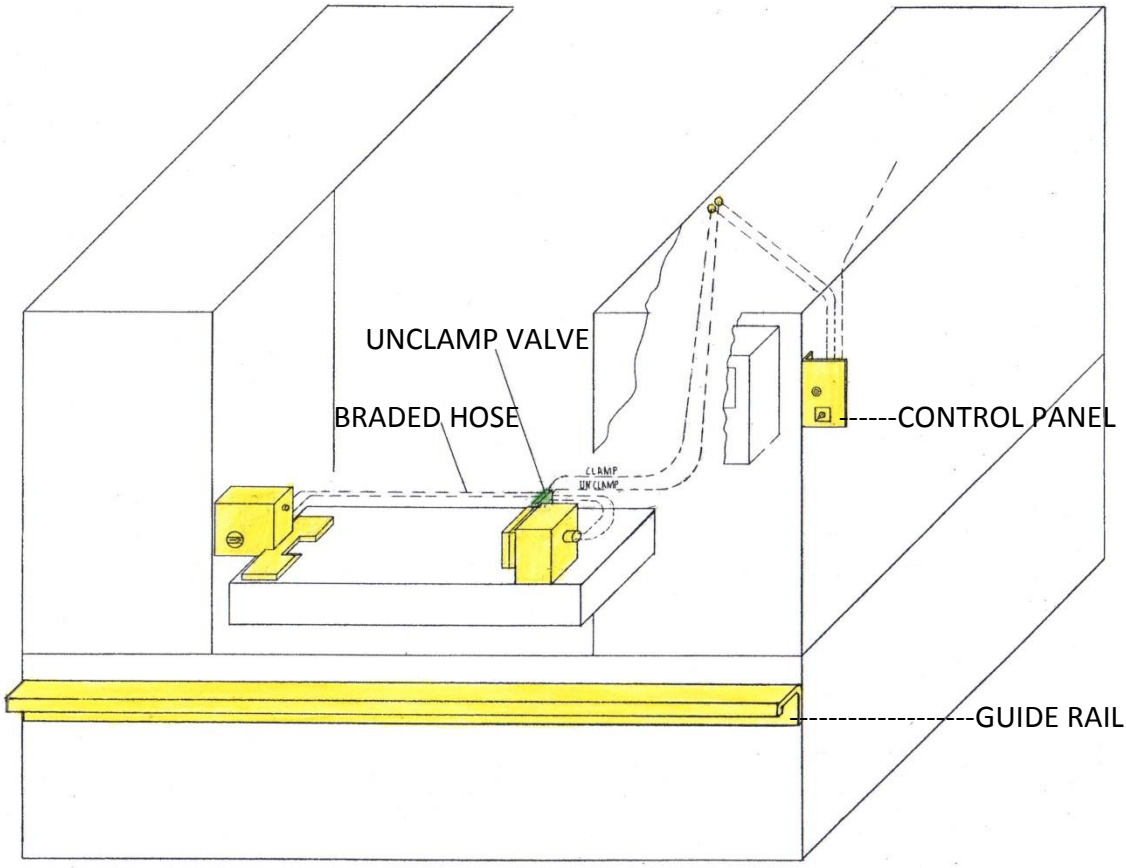
1. Specify the rotary table manufacturer, model number and serial number.
2. Specify the distance from the machining center table top to the floor.
3. Specify the distance from the machining center, central tee slot to the inside and outside of the machining center front when the table is positioned full out.
4. Specify the machining center tee slot size and distance between the tee slots.

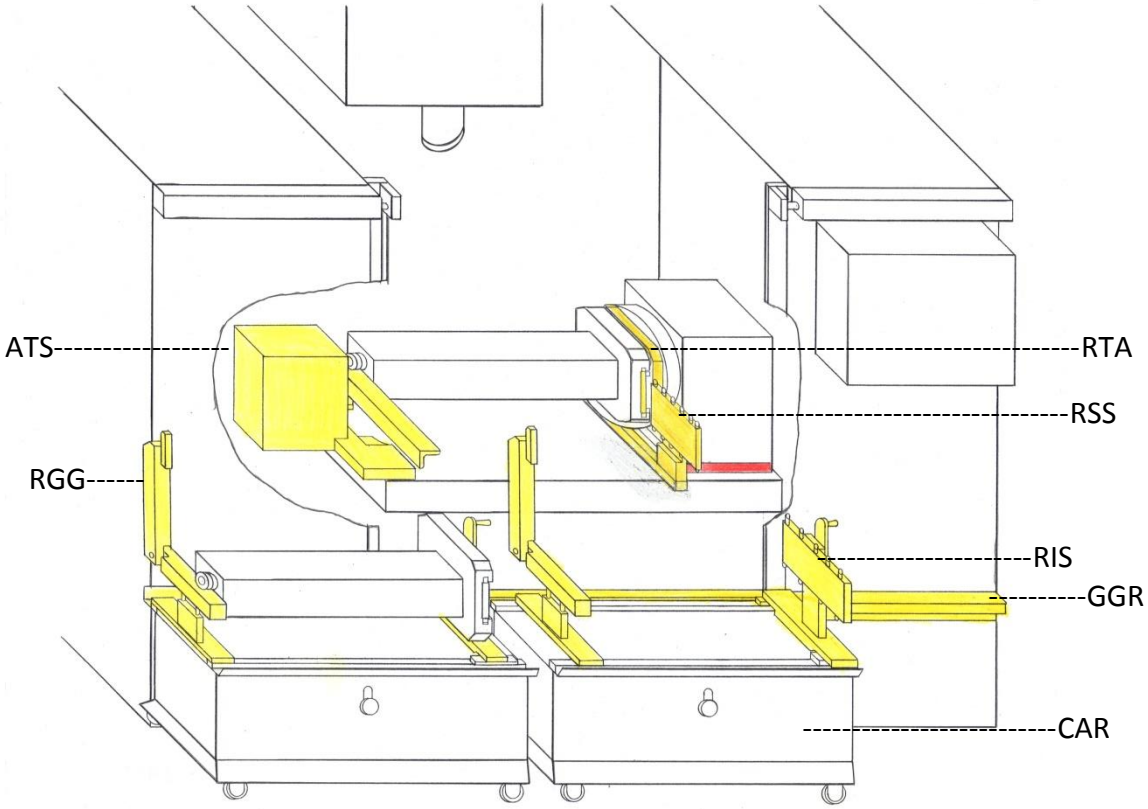
INSTALLATION

The installation consists of:

1. Mounting the components on the machining center table.
2. Mounting the guide rail to the front of the machining center.
3. Mounting the pneumatic control panel to the machine.
4. Routing the airlines to the various components.

Some machining centers may require relocation of the pendent or re configuration of the cart to clear the index station.





P/N NAME

RTA ROTARY TABLE PALLET ADAPTER
RSS BRIDGE ASSEMBLY
ATS AUTOMATIC TALE STOCK
RGG SUPPORT STATION
RIS INDEX STATION
GGR GUIDE RAIL
CCL CART LOCATER USED ON GUIDE RAIL
CAR-18X32" CART
CAR-24X32 CART

ROTARY TABLE

You can use your existing rotary table if it is the right size and in good condition.
Our standard rotary table is Samchully model number S-320F8 or model number S-320.

Model number S-320FB is provided with a stand- alone control. It does not require a machine fourth axis and amplifier. It must be programed separately. It can provide all the basic functions except compound machining.

Model number S-320 requires a machine fourth axis and amplifier. It can do all the basic functions including compound machining.

A Haas rotary table model number HRT 310 may also be used. It also can be provided with a stand- alone control or can use the machine fourth axis and amplifier.

VERTICAL MACHINING CENTER

You can use your existing vertical machining center or any other machining center if it is large enough to accept the pallet rotary table and the spindle height is sufficient to machine your parts. It is best to avoid a machining center that provides a control pendent that obstructs the cart movement.