

Manual Pallet System



Compact shuttle with telescoping legs, adapts to all machines including those with chip/coolant drawers

Load, unload, inspect parts and set up jobs while alternate pallet is in machine

Minimize set up time on repeat jobs by dedicating tooling onto pallets

Pallets easily interchanged between machines or departments

Heavy/large workpieces easily loaded outside the machine

Up to 2000+ lbs. (909 kgs.) capacity

Linear guide rails for ease of use



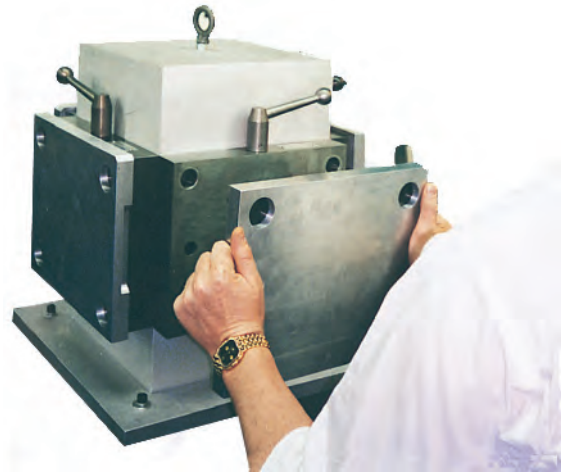
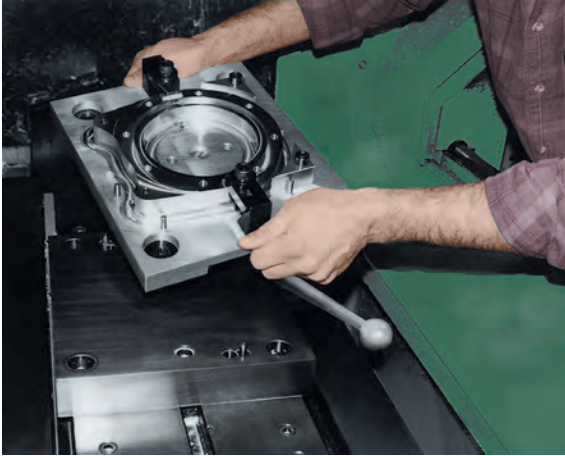
Increase machine and operator productivity

Air blast at each contact pad for chip removal

Palletized jobs easily interrupted for emergency or J.I.T. job

Exchange pallet in seconds with +/- .0001" (.0025mm) repeatability

MANUAL LIFT-OFF



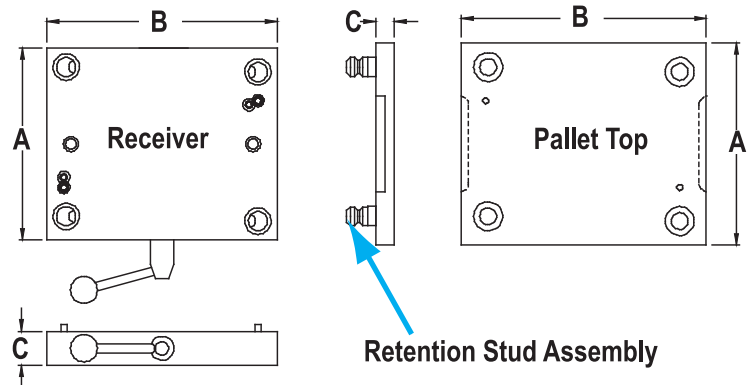
For productivity on all types of machining centers, MIDACO's Micro Pallet System™ allows operators to manually change pallets in seconds.

Easy flip handle precisely locks pallet into cast iron receiver.

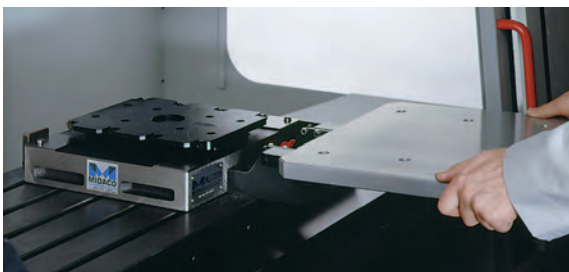
The low profile receiver does not require air supply making it versatile for horizontal, vertical and special application machines.

Each Standard Micro Pallet System (model MPS 31) Includes:

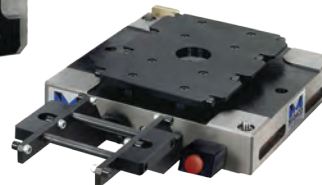
	Receiver	Pallet Top
Material:	Cast Iron	Aluminum
Quantity:	One	Two
Weight:	40 lbs (18.18 kg)	14 lbs (6.36 kg)
A:	10" (254mm)	10.5" (266.7mm)
B:	12" (304.8mm)	12.75" (323.85mm)
C:	1.75" (44.45mm)	1" (25.4mm)
Retention Stud Assembly - 8 standard		



PNEUMATIC LIFT-OFF



Pallet guide rails on the front of the receiver allow safe and easy loading of pallets in only seconds. The operator simply pushes a button to activate the pneumatic clamping mechanism.



Optional "Side by Side" shuttle or Pallet Transfer Cart can be added to assist operators when moving pallets or heavy fixtures.



The "Receiver and Pallets Only" systems are available with pallets from 22"x16" (558.8 mm x 406.4 mm).

"SIDE BY SIDE" SHUTTLE PALLET SYSTEM

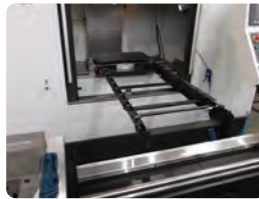
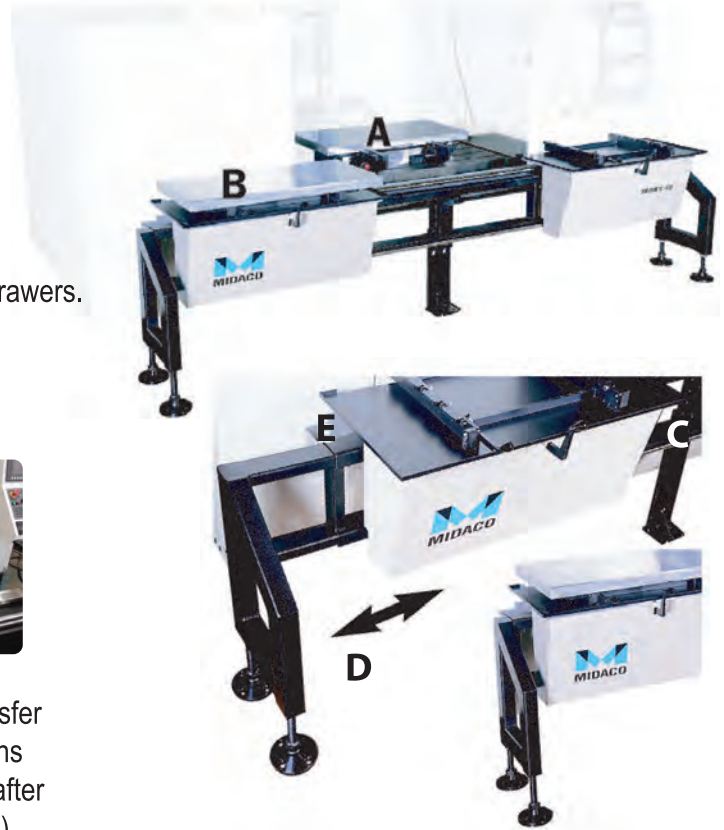
MIDACO's front load "Side by Side" Shuttle Pallet System comes with one cast iron, pneumatically powered receiver, two cast aluminum pallets and one "Side by Side" Shuttle allowing an operator to switch pallets in seconds.

The operator simply activates the pneumatic receiver to unclamp the pallet. The completed pallet (**A**) can be rolled out of the machine to the shuttle. The next pallet (**B**) can be quickly rolled into the machine and clamped in only seconds.

(**C**) Precision ground linear guide rails provide smooth and easy transfer of pallets.

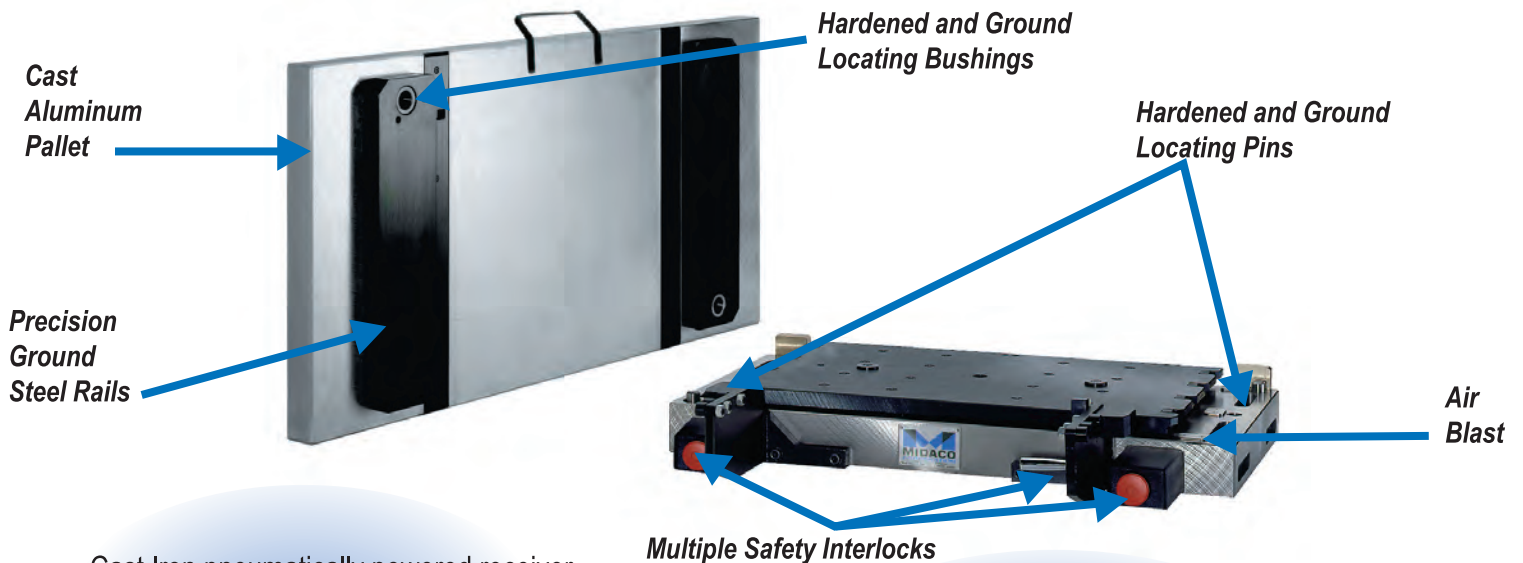
(**D**) Adjustable legs telescope out allowing access to chip/coolant drawers.

(**E**) Full length shuttle drip through captures coolant and chips.



The Manual Pallet Changer may REQUIRE a Pallet Transfer Bridge or Rail Extensions depending upon the obstructions on the front of the machine tool. This will be determined after we receive your Vertical Machine Dimension sheet (VMD).

RECEIVER



Cast Iron pneumatically powered receiver mounts to the machine table. Standard plain cast aluminum pallets. Optional cast iron, T-Slotted and Tapped hole pallets available. Pallet handle promotes ease of use.

"Air Blast" at each contact pad of pneumatic receiver is standard for chip removal. "Dual Palm Buttons" (Series 20 and larger) activate receiver maximizing operator safety. Repeatability is $\pm .0001"$ (.0025 mm).

Since 1969, MIDACO has been a leader in providing innovative and quality solutions to improve manufacturing efficiency for companies worldwide.

CUSTOMER SATISFACTION

"Since I've added 5 MIDACO pallet changers, I've increased my productivity OVER 600%."

"100% plus increase in productivity without suffering quality."

"Productivity has increased over 90% and downtime due to loading and unloading parts was greatly reduced."

"25% savings in job set up time, eliminating lifting of heavy devices such as vises and rotary heads."

"We have achieved a 2 hour savings in production during an 8 hour shift, a 25% increase in productivity."

"I've been in the industry for over 25 years and have seen a lot of different machines and pallet changers. MIDACO's product is the best and most user friendly I've seen."

VARIOUS SYSTEMS AVAILABLE

Various pallet sizes, automatic, rotary and double systems are available along with other accessories designed to meet your needs.



Automatic Pallet System



Dual Automatic System



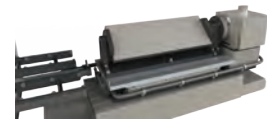
Micro Pallet System - MPS31



Automatic Door System



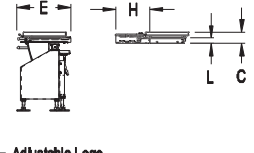
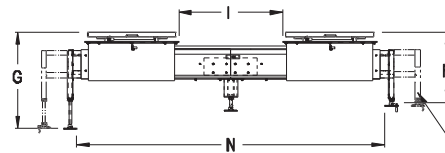
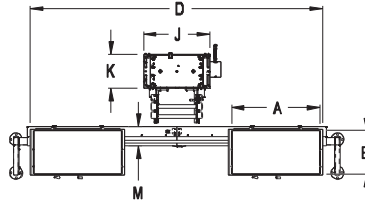
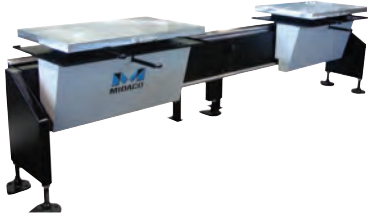
Manual "Lift Off" System



Trunnion System for 4th Axis

Manual Pallet Changer Specifications

Note: Manual Pallet Changer may require a Transfer Bridge depending on position of VMC control panel. Contact Midaco for quote on a specific application.



Adjustable Legs

Manual Series	M10FL	M20FL	M30FL	M40FL	M50FL	M60FL
Specifications	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm
Clamping Force*	4200	1906.8	4200	1906.8	5200	2360.8
Receiver Weight	80	36.3	80	36.3	243	110.3
Pallet Weight	***	***	***	***	***	***
Pallet Thickness	1	25.4	1	25.4	1.5	38.1
Pallet Load Cap**	300	136.2	300	136.2	1000†	454
A (Pallet X Dim)	16	406.4	20-22	508-559	30	762
B (Pallet Y Dim)	14	355.6	16-20	406-508	20-25	508-635
C	4.12	104.6	4.12	104.6	5.17	131.3
D	80	2032.0	80	2032.0	109	2768.6
E	20	508.0	20-23.5	508-597	25	635.0
F (Min Height)	29	736.6	29	736.6	34.5	876.3
G (Max Height)	39	990.6	39	990.6	44	1117.6
H (this is VMC Specific)	-	-	-	-	-	-
I	30	762.0	30	762.0	39	990.6
J (Receiver)	14	355.6	14	355.6	30	762.0
K (Receiver)	13	330.2	13	330.2	15.5	393.7
L	2.5	63.5	2.5	63.5	2.56	65.0
M	6.5	165.1	6.5-8.5	165-215	10.2	259.08
N (Adjustable Min)	75	1905	75	1905	104	2641.6

*At 100PSI (6.9 bar) **At 120PSI (8.2 bar) † Optional 2000 lb (909kg) Pallet Load Capacity Patented. Specifications subject to change without notice.

Shown without Transfer Bridge



Shown with Transfer Bridge



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