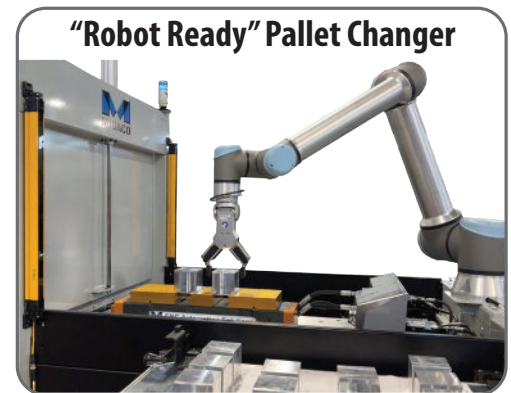




# Pallet Changer Model Guide for Haas F1 Team Machines



Shown with optional Trunnion System for 4th-axis milling on VMC with 1 rotary indexer



"Robot Ready" Pallet Changer

Pallet Changers for **NEW** or **EXISTING**  
**HAAS** Vertical Machining Centers

**MIDACO** Pallet Changers and Automatic Door Openers increase productivity and decrease down time. **KEEP THE SPINDLE RUNNING!**

# Pallet Changer Model Guide for HAAS Machines



## Series A16SD

**ADT-1SD fits:** DT-1  
**ADM-1SD fits:** DM-1



See also: Manual M2216FL\*

**ADT-2SD fits:** DT-2  
**ADM-2SD fits:** DM-2



See also: Manual M2216FL\*

**A2216SD fits:** MM2, SMM2, VF-1 & VF-1YT

**A2416SD fits:** DC-1  
(Automatic N/A for MM or SMM)



See also Manuals:  
M1614FL\* for MM & SMM  
M2216FL\* for DC-1, VF-1, MM2 & SMM2  
M2020FL\* for VF-1YT



## Series A30SD

**A3016SD fits:**  
VF-2  
VF-2SS  
DT-3  
DM-3



See also: Manual M3016FL\*

**A3020SD fits:**  
VF-2YT  
VF-2SSYT  
VM-2



See also: Manual M3020FL\*



## Series A40SD

**A4020SD fits:**  
VF-3  
VF-3SS



See also: Manual M4020FL\*

**A4025SD fits:**  
VF-3YT & VF-3YT/50  
VF-3SSYT  
VM-3



See also: Manual M4025FL\*



## Series AS50SD

**AS5020SD fits:**  
VF-4  
VF-4SS



See also: Manual M5020FL\*

**AS5025SD fits:**  
VF-5 & VF-5/50  
VF-5SS



See also: Manual M5025FL\*



## Series A60SD

**A6025SD fits:**  
VF-5XT & VF-5/50XT



See also: Manual M6025FL\*

**A6432SD fits:**  
VF-6 & VF-6/50  
VF-6SS  
VM-6



Manual N/A

**A6440SD fits:**  
VF-8 & VF-8/50  
VR-8



Manual N/A



## Series A80SD

**A8432SD fits:**  
VF-7 & VF-7/50



Manual N/A

**A8440SD fits:**  
VF-9 & VF-9/50



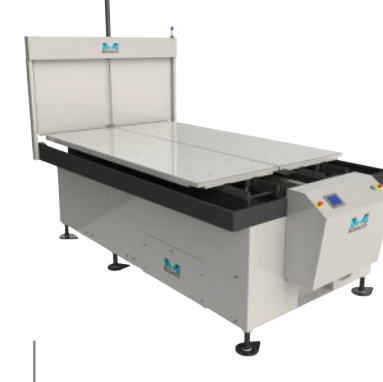
Manual N/A

**A15032SD fits:**  
VF-12 & VF-12/50

**A15040SD fits:**  
VF-14 & VF-14/50



Manual N/A



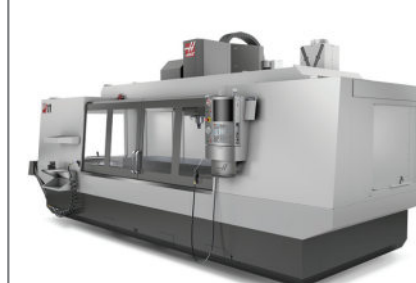
## Series A120SD & A150SD

**A12030SD fits:**  
VF-10 & VF-10/50

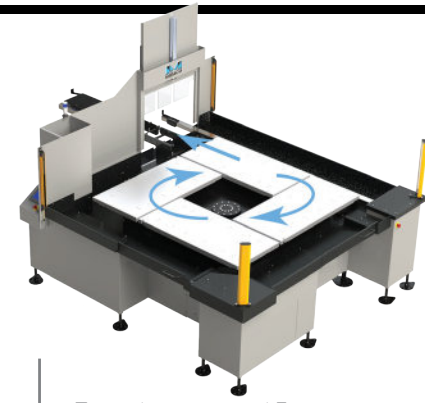


Manual N/A

**A12040SD fits:**  
VF-11 & VF-11/50



Manual N/A



## Automatic 4-Pallet Pool

Available in XY pallet sizes of 28"x15" up to 50"x24"



- 4 pallets.
- 1 shuttle with 360° rotation.
- 1 cast iron receiver.
- 2 loading access stations.
- 3-sided CE Light Curtain is standard.
- NO overhead obstruction for crane loading.



## "Robot Ready"

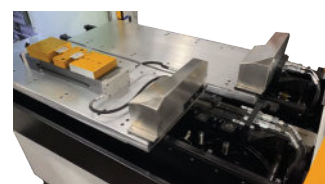
Available for Automatic Pallet Changers series A16SD through A60SD

- Automatic Pallet Changer
  - Robot/Cobot Mount
  - Hydraulic Docking System
- (does not include robot or vises, Light Curtain and Side Carts are additional options)

### Additional Midaco Products for Increased Productivity and Efficiency



- AutoDoor Openers are available for Single and Double doors on VMCs, UMCs and Lathes.



- Hydraulic Docking System for automated vises. Stays charged on the pallet while in the VMC without needing hoses.

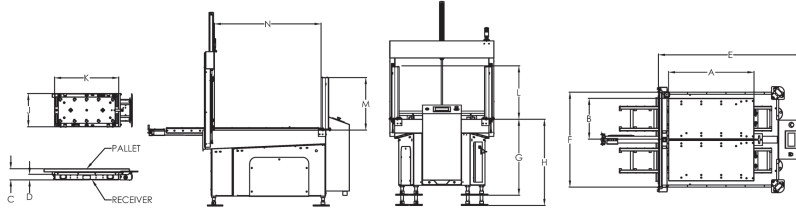


- Industrial CNC Vacuums for Chips, Oil and Coolant Extraction & Liquid Reintegration.

\*All Manual Pallet Changers may require a Transfer Bridge depending on position of VMC control panel. See back of brochure for details.

# Automatic Pallet Changer Specifications

Note: Diagram and image shown with optional Light Curtain



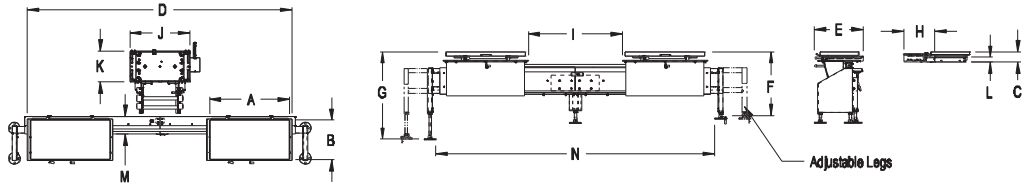
**DUAL systems available with one shuttle on each side of VMC with total of 4... 6... or 8 pallets.**

Automatic	A16SD		A30SD		A40SD		AS40SD		AS50SD		A50SD		A60SD		A80SD		A120SD		A150SD	
Specifications	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm
Clamping Force*	4500	2041.2	5200	2358.7	5200	2358.7	7500	3401.9	7500	3401.9	15400	6985.3	15400	6985.3	20500	9298.6	20500	9298.6	20500	9298.6
Receiver Weight	95	43.1	243	110.2	243	110.2	243	110.2	243	110.2	594	269.4	594	269.4	1539	698.1	1400	635	1400	635
Pallet Thickness	1.0	25.4	1.5	38.1	1.5	38.1	2.0	50.8	2.0	50.8	2.0	50.8	2.0	50.8	2.5	63.5	2.5	63.5	2.5	63.5
Pallet Load Cap**	250-500	113-227	1000 †	454	1000 †	454	2000	907	2000	907	4000	1814	4000	1814	8000	3629	8000	3629	8000	3629
A (Pallet X Dim)	22-27	559-686	30	762	40	1016	45	1143	50	1270	50	1270	60-64	1524-1626	80-84	2032-2134	120	3048	150	3810
B (Pallet Y Dim)	14-15	356-381	15.5-19	394-483	19-24	483-610	24	609.6	19-24	483-610	24	609.6	24-39	610-991	29-39	737-991	29-39	737-991	31-49	787-1245
C	4.1	104.9	5.2	131.3	5.2	131.3	5.7	144	5.7	144	6.9	174	6.9	174	8.1	205.7	8.1	205.7	8.1	205.7
D	2.5	63.5	2.6	65	2.6	65	2.6	65	2.6	65	3.8	95.3	3.8	95.3	4.3	108	4.3	108	4.3	108
E	45	1143.0	54.5	1384.3	68	1727.2	74.8	1899.9	78	1981.2	78	1981.2	88	2235.2	120	3048	161	4089.4	183	4648.2
F	35.2	894.1	45	1143.0	45	1143.0	54.2	1376.7	57	1447.8	57	1447.8	67	1701.8	73-92	1854-2337	73-92	1854-2337	73-112	1854-2845
G (Min Height)	34.8	883.9	38	965.2	38	965.2	38	965.2	38	965.2	38	965.2	38	965.2	45	1143.0	38	965.2	38	965.2
H (Max Height)	44.8	1137.9	49	1244.6	49	1244.6	49	1244.6	49	1244.6	52	1320.8	52	1320.8	57-65	1448-1651	52	1320.8	52	1320.8
J (Receiver)	13	330.2	15.5	393.7	15.5	393.7	15.5	393.7	15.5	393.7	19.5	495.3	19.5	495.3	25.5	647.7	25.5	647.7	25.5	647.7
K (Receiver)	18	457.2	30	762	30	762	30	762	30	762	50	1270	50	1270	75	1905	75	1905	75	1905
L (Door Opening)	16	406.4	20	508	20	508	20	508	20	508	28	711.2	28	711.2	32	812.8	32	812.8	32	812.8
M (LC Height)	24	621	24	621	24	621	24	621	24	621	24	621	24	621	24	621	24	621	24	621
N (LC Opening)	30-36	769-922	39.9	1014	49.9	1269	59.9	1522	59.9	1522	58.9	1497	73.7	1871	99.2	2518	139.4	3541	169.4	4303

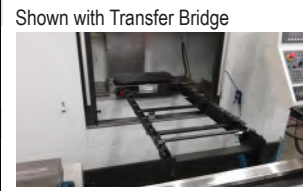
\*At 100PSI (6.9 bar) \*\*At 120PSI (8.2 bar) with weight evenly distributed † Optional 2000 lb (909kg) pallet load capacity with weight evenly distributed Patented. Specifications subject to change without notice.

# Manual Pallet Changer Specifications

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



Manual Series	M10FL		M20FL		M30FL		M40FL		M50FL		M60FL	
Specifications	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm	lbs. / in	kg / mm
Clamping Force*	4200	1906.8	4200	1906.8	5200	2360.8	5200	2360.8	5200	2360.8	5200	2360.8
Receiver Weight	80	36.3	80	36.3	243	110.3	243	110.3	243	110.3	243	110.3
Pallet Weight	***	***	***	***	***	***	***	***	***	***	***	***
Pallet Thickness	1	25.4	1	25.4	1.5	38.1	1.5	38.1	2	50.8	2	50.8
Pallet Load Cap**	300	136.2	300	136.2	1000 †	454	1000 †	454	1000 †	454	1000 †	454
A (Pallet X Dim)	16	406.4	20-22	508-559	30	762	40-45	1016-1143	50	1270	60	1524
B (Pallet Y Dim)	14	355.6	16-20	406-508	16-20	406-508	20-25	508-635	20-25	508-635	25	635
C	4.12	104.6	4.12	104.6	5.17	131.3	5.17-5.67	131-144	5.67	144.0	5.67	144.0
D	80	2032.0	80	2032.0	109	2768.6	133-162	3378-4115	162	4114.8	192	4876.8
E	20	508.0	20-23.5	508-597	25	635.0	25-34	635-864	25-34	635-864	34	863.6
F (Min Height)	29	736.6	29	736.6	34.5	876.3	35-40	889-1016	40	1016.0	40	1016.0
G (Max Height)	39	990.6	39	990.6	44	1117.6	45-51	1143-1295	51	1295.4	51	1295.4
H (this is VMC Specific)	-	-	-	-	-	-	-	-	-	-	-	-
I	30	762.0	30	762.0	39	990.6	47-58	1194-1473	58	1473.2	68	1727.2
J (Receiver)	14	355.6	14	355.6	30	762.0	30	762.0	30	762.0	30	762.0
K (Receiver)	13	330.2	13	330.2	15.5	393.7	15.5	393.7	15.5	393.7	15.5	393.7
L	2.5	63.5	2.5	63.5	2.56	65.0	2.56	65.0	2.56	65.0	2.56	65.0
M	6.5	165.1	6.5-8.5	165-215	10.2	259.08	10.02-13.25	259-337	10.2-13.25	259-337	13.25	336.55
N (Adjustable Min)	75	1905	75	1905	104	2641.6	133-163	3378-4140	163	4140.2	193	4902.2



\*At 100PSI (6.9 bar) \*\*At 120PSI (8.2 bar) with weight evenly distributed on pallet. † Optional 2000 lb (909kg) Pallet Load Capacity Patented. Specifications subject to change without notice. 1024

MIDACO pallet systems are designed for machines with stationary guarding. Some machines require options or customization. Contact your sales representative to confirm model and specifications for all applications.



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