

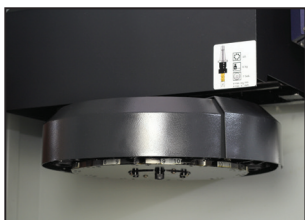
## 31" X 10" VERTICAL MACHINING CENTER

Palmgren Vertical Machining Centers are compact machining centers perfect for production lines, short runs, one-offs and prototyping. These machines provide the perfect solution for machining small parts and are valuable for shops in need of a "second-op" machine, or additional spindle where needed. Their 10-tool magazine with automatic tool changer, allow them to be the ideal option for prototype or short-run shops. The machines small footprint allows it to fit into small areas of a shop where a large machine simply could not go. Every Palmgren Machining Center is manufactured and tested to assure that they meet the highest quality and accuracy standards. Improved accuracy and repeatability are the result of the machines rigid construction. The long-term reliability and precision are the result of the quality of components and the craftsmanship that goes into their construction. The brain that makes these machines run lies in the Siemens 808 control, which is perfectly configured to meet the needs of any level of operator.

### STANDARD FEATURES:

- Linear guides on all three axes
- Servo-drives on all three axes
- Safety switches on all doors for improved safety while machining
- Ball screws on all three axes
- Central lubricating system delivers oil to guideways and ball screws to provide long life and reduce maintenance requirements
- Fully integrated, flood coolant system and chip tray for easy machine cleaning and chip removal

Item # **9680187/9680188**



10-tool magazine with automatic tool changer



User-friendly portable handwheel

Item #	9680187	9680188
<b>Electric Supply</b>		
Driving Motor	3 HP	
Coolant Pump	1 HP	
Torque Motor (X, Y, Z-Axis)	3.75/3.75/4.5 ft-lb	
Voltage	230V	460V
Phase	3-Phase	
<b>Spindle</b>		
Spindle Taper	BT30	
Spindle Speed	50-10000 RPM	
Face Milling Dimension (Max)	2.5"	
End Milling Dimension (Max)	1.25"	
<b>Magazine</b>		
Capacity	10	
Tool Diameter (Max)	4"	
Tool Weight (Max)	13.2 lbs.	
Tool Changing Time	7 Seconds	
<b>Table</b>		
Table Length x Width	31.5" x 10.25"	
Distance Spindle-Table	18.75"	
T-Slot Size	5/8"	
T-Slot Distance	2"	
Number Of T-Slots	5	
Load (Max)	220 lbs.	
<b>Travel</b>		
X-Axis	15.75"	
Y-Axis	9"	
Z-Axis	14.75"	
Rapid Feed (X, Y, Z-Axis)	394 Inch/Min	
<b>Accuracy</b>		
Positioning Accuracy	+/- 0.0006"	
Repeatability Accuracy	+/- 0.0006"	
<b>Dimensions</b>		
Coolant Tank Capacity	42 Gal.	
Overall Dimensions (LxWxH)	75.75" x 63" x 81.5"	
Packing Dimensions (LxWxH)	81.75" x 69" x 87.5"	
Net Weight	4180 lbs.	
Gross Weight	4380 lbs.	