

Automatic Material Handling System



The KOMO Automatic Material Handling System is a fully automatic sheet feeder and unloader designed to be used in nested based manufacturing environments.

The modular design is made to be adaptable to either single or multiple bunk applications. The ability to load from the side or the front provides the opportunity to incorporate optional conveyor controlled material staging areas, thereby greatly increasing the operational flexibility of the system.

The weight capacity is 250lb per sheet.

The Material Handling Cycle:

The system is designed for forklift loading of material into the base. When the router is finished cutting, the system is activated and completes a 30 second cycle (depending on weight and size of material) to load and unload the table. A built in scissor mechanism lowers down to the material and picks up a sheet. As it moves the sheet over to the router table, the cut nest is moved onto a conveyor table for part sorting. The cutting debris is automatically cleaned from the router table by the dust collection on the front of the material handling system's gantry. The new sheet is now squared on the table and the router vacuum pump is activated. A new nest program is automatically initiated (by KOMO Production Manager) and the next router cycle starts.

Benefits:

- Automate the transfer of sheets onto the router table
- Simultaneously unload the machined nest
- Eliminate the use of multiple spoil boards
- Provide cleaner working environment and work envelope by removing more dust as parts move onto conveyor
- Increase productivity by loading sheets onto the router and simultaneously unloading the machined nests at a rapid and uniform rate
- Enhance operator safety by eliminating the need to enter the router machining envelope
- Reduce operating costs by decreasing the labor content of machined parts
- The multiple bunk automatic system provides programmable control for processing a mix of various materials such as different panel thicknesses, sizes, colors, material types etc.
- Material surface is less prone to scratching compared to a drag-and-drop style loading system



Available Options:

- Joulin Lumber Grippers for rough and/or uneven material
- Auto Height Adjustment (of sweeper arm) following resurfacing of spoil board
- Programmable Vacuum Cups with Proportional Valve Control for applications utilizing porous material and/or various sheet sizes

Multiple Bank System

The KOMO Automatic Material Handling System is available with one to eight bunks; a three bunk installation is shown below.



All KOMO Automatic Material Handling Systems are available with either a downdraft table or offload conveyor.

