



## No more lifting at JKE Design

**Throughout industry and no more so than in furniture production the new safety regulations covering repetitive and heavy lifts during the day have caused concern. How to protect the health and safety of the employees when wrapping and shipping cabinets while at the same time maintaining efficiency.**

The solution to this has now been found and implemented jointly by JKE Design and Q-System: a conveyor line which eliminates both the many daily lifts and the strenuous manual handling of high and heavy cabinets.



Upended cabinets are transported to the conveyor line on a driver-operated Q transfer cart and are fed into the line and automatically transported ahead till they reach a blade stop. Here the operator will transfer one cabinet at a time onto a square ball table section where he will effortlessly and without any strain turn the cabinet into the right position before further transport.

### **The High Cabinets Must Be Tilted to Horizontal Position**

so that the operator can position the corner protections and finish the packaging process. Therefore, the roller conveyor section after the ball table is a tilting unit which moves the cabinet from a vertical to a horizontal position (see photo). The high cabinet, now being in a horizontal position, will continue onto a section with a pneumatic bar. This bar can be raised so that the operator can turn the cabinet without difficulty whilst placing the protective mouldings etc. Afterwards the cabinet continues through a strapping machine and stops at another blade stop.

### **The Last Section Is With a 90° Tilt**

The operator standing here will transfer one cabinet after the other to the next section and place the cabinets in the best possible order for palletising. When activated via his push button panel the roller conveyor will tilt into a vertical position so that the cabinets will now stand on top of each



When the unit tilts back 90° the high cabinet will be lying horizontally.



The operator will arrange the cabinets before tilting them 90°



The stack is formed using the tilting unit and then pushed onto the transfer cart.

other. The high cabinets too will again be standing upended. Now, the operator can easily push the stack onto a transfer cart and drive it to a palletising station, which is also supplied by Q-System.

### **Stacks Are Moved Smoothly On Wheeled Rails**

An empty pallet has already been placed on the palletising station. At the push of a button four wheeled rails will raise between the pallet beams. With the stack of cabinets running on the wheels the operator can now easily push it in place onto the pallet.

When the operator has loaded the pallet, he will lower the wheeled rails and the cabinets are now placed on the pallet, ready for removal by pallet jack.

### **Both staff and management are happy**

After having worked at the new line for about a month the operators all agree that the tilting units are real H & S god-sends. The production manager is pleased too, better ergonomics means fewer sick days and, additionally, the new line has improved the packaging speed.



The stack can be transferred to the palletising station without any difficulty.