

Transporting material to the cutting machine

Information:

Handling material in both small and very large quantities
Utilization of lifts and loading equipment
Linking machines together

Use:

Productivity is increased due to improved material handling

The cutting machine can be loaded in one of two ways. In the first, and most often used method the operator manually loads the cutting machine from the front. This is the historical way of loading the machine and is used whenever the material is within certain size and quantity parameters.

Many alternative versions of semi-automated or fully-automated loading procedures exist. Most of these are done via the rear table of the cutting machine.

Transporting material to the jogger



The photo on the left shows a very awkward working position. The operator bends over at the waist, grasps one individual pack, then rises and places the material onto the jogger. On the right, you can see the ergonomically correct way, which is working with the lift. The Polar lift always puts the material to be cut at the right working height.

Transporting material from the jogger to the cutting machine



Small paper formats can be conveniently handled with a hinged jogger when the material to be cut is transported from the jogger to the cutting machine.

For medium and large-size formats (DIN A3 and larger) this jogger feature is an absolute must. This is because the jogged material must be transported to the cutting machine as an entire unit and without it becoming disarranged.

When the material is carried to the machine by hand, some sheets will inevitably slip out.

This also applies to any other part of the transport procedure, such as, when the cutting machine is unloaded.

Gripper systems



While the machine is being unloaded, which is almost always done from the front table, the new material can be fed into the cutter from the rear table. Because this new material has probably been jogged, you must ensure that the prepared reams do not

shift, because this would negate the entire preparation process. Gripper transport systems for the cutting material have proven successful especially when dealing with medium and large size formats and they help to feed the cutting machine both safely and efficiently.

Transomat B

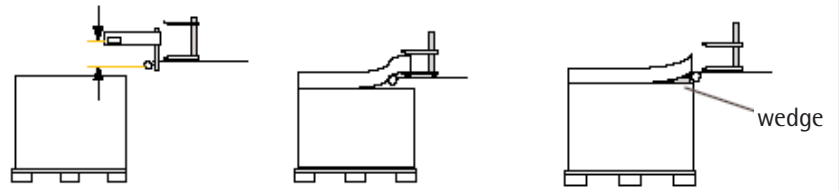


The automated material transport with Transomat B (the B comes from "Beladen", the German word for "Loading") is basically meant to free the operator, for the most part, from feeding the cutting machine.

There are basically two methods. You can transport the material from the Transomat over the front table to the cutting machine, or you can have a pusher or gripper-loading system automatically transfer it to the rear table of the cutting machine.

These methods can in turn be sub-divided.

Material which requires no jogging (e. g. four-side trim of unprinted paper) can be taken directly from a pallet with the "Transomat B" loader and transported onto the rear table (or the front table) by a pusher.



The amount of material is determined by a height-scanning system or by inserting a wedge.

Previously jogged material can also be loaded onto the cutting machine with the Transomat B.



In this case, the material to be cut is usually delivered from an external jogging station and automatically fed into the cutting machine by a Transomat B with "chip function".

Strip pusher



Strips which have been precut can be pushed by a strip pusher directly onto the rear table of the next cutting machine, which is normally an Autocut unit. Since the next cutting machine works continuously, and without any operator, this procedure can also be carried

out automatically. An integrated aligning station allows the linking of two machines that cut automatically. In this case, as an example, a Polar Autotrim-M cuts the paper into strips. Which are then automatically fed to the aligning station. After alignment, the pile pusher takes the strips and automatically feeds them into the strip cutter, which is positioned behind it (Autocut 115 or Autocut 25).

Polar offers:

Cost-efficient lifting devices which allow for ergonomically correct operation

Various types of automatic cutting machine feeding

The proper transport system for diverse requirements

Intelligent transport of materials between automatic cutting machines