Transport systems for furniture production

Reliable, rapid connections for your production
Secure investment – economical transport

Transport systems form the link between the individual processing machines of a production line. The HOMAG Group offers a comprehensive product range based on an ingeniously engineered modular principle: The components are manufactured according to uniform quality standards and tested to defined quality criteria. End-to-end modularity makes the HOMAG Group transport systems astoundingly flexible in application. The HOMAG Holzbearbeitungssysteme GmbH transport systems range is focused on machine-to-machine transport and machine feeding and loading systems.

For more information, go to:
www.homag.com
www.youtube.com/homaggroup
Your benefits with HOMAG transport systems:

- The interfaces to all HOMAG Group machines are defined and coordinated
- The sensor models used are adjusted to meet your specific needs
- Mounting the sensors from above helps minimize soiling
- The possible workpiece dimensions are coordinated in line with the processing machines

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TB and TR series roller conveyors
Feeding machines – bridging distances

Modular elements of the HOMAG TB and TR series are used to construct efficient solutions for machine feeding and to bridge distances between machines.

TB series feeding tables are used to feed components directly to the machine. The transverse or cyclical fence is optionally controlled by time (gap between workpieces) or by cam activation.

The most important features:
- For manual positioning and feeding in the machine’s infeed area
- Transport distance with powered rollers
- Optimization of the gap between workpieces by the cyclical fence
- Coupled-motion side belt
- Ultra-small roller pitch for short processing lengths

TR series roller tables ensure efficient bridging of distances between two processing machines, or are used to create a buffer section. Workpieces are transported by powered rollers.
TV offsetting stations
Transportation and precise positioning

HOMAG TV offsetting stations convey components of differing dimensions with the utmost speed and flexibility. Arranged between two single-sided machines, the offsetting station executes fixed edge changeover and ensures precise infeed of components to the downstream machine.

Single-sided machine line with offsetting station

TVL 100
Components are transported from the right-hand to the left-hand fixed edge.

Integrated cyclical fence
The integrated cyclical fence at the infeed to the second processing machine ensures precise, accurately timed infeed.
TD rotary stations
Taking a turn for the better

HOMAG rotary stations are used in production lines in which the workpiece orientation changes between processing operations. The rotating cone takes care of gentle, precise workpiece movement.
TDL 310 and 510 rotary stations

- TDL 310, longitudinal to transverse rotary station
- TDL 510, transverse to longitudinal rotary station

Upgrading capability for:
- Batch size 1 production
- Lightweight panels
- Workpieces up to 80 kg or more

TDL 310 – Rotation on one level
Components with extreme dimensions are supported during the rotation process by lift-off rails.

TDL 301 and 510 rotary stations
- TDL 310, longitudinal to transverse rotary station
- TDL 510, transverse to longitudinal rotary station

Upgrading capability for:
- Batch size 1 production
- Lightweight panels
- Workpieces up to 80 kg or more
HOMAG angular transfers change the workpiece orientation and transfer workpieces at a 90° angle. For a change of direction, the parts are lifted vertically and transported offset by 90 degrees to be lowered onto the second roller conveyor.
Longitudinal to transverse angular transfer with TWL 310 on one level

Transverse to longitudinal angular transfer with TWL 510 on one level

TWL 310

TWL 510
Double angular transfer TW 410
For highly flexible processing of small series

HOMAG double angular transfers are used in U-shaped lines with two single-sided machines, facilitating the smooth, flexible production of small series. Workpieces are processed, irrespective of width, on single-sided machines. Depending on the task in hand, double angular transfers can be designed for simple longitudinal or transverse processing as well as for combined longitudinal and transverse processing.
Narrow component transport on the TWL 410

There are two sensor types to choose from for workpiece detection

- Laser sensor from above
- Laser photoelectric sensor positioned laterally

TWL 410 double angular transfer

Upgrading capability for:

- Batch size 1
- Small parts: 240 x 120 mm
- Narrow parts: 300 x 60 mm (longitudinal only)
TW 220 workpiece transfer
Gentle action for sensitive workpieces too

HOMAG workpiece transfers work on two levels. The space-saving variant: magazine operation for insensitive materials. When working with sensitive materials, program-controlled switchover to the single operating mode is possible.
TWL 220 workpiece infeed from the magazine

For increasing the cyclical output, longitudinal to transverse workpiece transfer on two levels to the infeed magazine of the cross machine. The component is fed using the cams of the processing machine.
Simple operation and control through seamless control system integration

The control system used for HOMAG transport systems is integrated directly into the machine and plant concepts. The transport systems are actuated using the processor of your upstream or downstream machine. This allows production data to be logged and diagnosed using TeleService, guaranteeing simple, reliable operation. Transport operations can optionally be linked using this concept to a higher-level production line control system, ensuring high plant productivity specifically for batch size 1 production. The integration of automatic workpiece identification systems can make for even greater production flexibility.

Control with powerTouch
Using the widescreen format multitouch monitor, control machine functions by direct touch contact. The ergonomically optimized design and an array of new help and assistant functions substantially simplify operation.

Programming with woodCommander
The programming system for all HOMAG throughfeed machines. Extreme user convenience due to input screens with graphic support – for simple navigation and menu prompting.

Evaluation with MMR Basic
The MMR, Machine Monitoring and Reporting, software evaluates the productivity. The number of transported workpieces and the machine deployment time are logged. The utilization-dependent maintenance instructions ensure optimum execution of maintenance work.

Support via TeleServiceNet Soft
High-speed service and help provided by targeted troubleshooting and support over the Internet.

Option: Diagnostic system woodScout
Alongside error messages in plain text, woodScout also provides a graphic representation of the error location. In addition to the system’s expert knowledge database, users can store their own troubleshooting solutions.

Option: MMR Professional
The MMR Basic upgrade additionally evaluates shifts, analyzes error messages and permits a link to be created to the data evaluation center in the office. You are provided with productivity key indicators, support in problem analysis and an overview of optimization potential.
You invest, we reduce: LifeCycleCost Management and ecoPlus

It is not the investment costs which decide the economic success of your production, but the capacity utilization and unit costs. This is why our primary objective is to combine top class production with higher productivity and consequently lower unit costs. HOMAG Group ecoPlus technologies additionally help to save precious resources in terms of energy, time, material and manpower.

Increased productivity
- 2D codes are a high-density way of saving information for automatic processing and fault prevention
- The automatic scanning of 2D codes reduces machine set-up times and increases throughput speed

Preventive maintenance
- MMR software at the processing machine tells the machine operator when maintenance is required
- Regular inspections and preventive maintenance help avoid faults and prolong the service life
- Support through the worldwide HOMAG service organization which draws on over 500 technicians

Optimum financing
- HOMAG Finance offers optimized financing concepts based on individual business administration requirements
- The outstanding value stability of HOMAG machines offers benefits in terms of leasing and subsequent replacement investment

High degree of machine availability
- Worldwide servicing minimizes downtime
- TeleServiceNet – our “eye” into the machine avoids costly on-side services

Minimal energy costs with ecoPlus*
- Intelligent stand-by operation reduces energy costs during break periods by up to 90%.
- All drive systems comply with energy efficiency category IE2
- Optional measurement and visualization of current compressed air and electricity consumption data to optimize overall energy consumption

Machine utilization period
- Continuous expansion of functionality ensures compliance of the machines with the requirements of tomorrow
- The HOMAG conversion department offers solutions to address major conversion requirements, ensuring a high degree of investment security over years

* depending on equipment configuration, service period and workpiece spectrum