

Planning an efficient installation of your new equipment

Our goal is to install your new machines and systems as planned and in the shortest amount of time possible so that you can start using the new solution as soon as possible.

Your active cooperation is necessary and appreciated to achieve this goal. The installation requirements detailed below will help us carry out the installation in a structured, interruption-free manner.

Please ensure that all preconditions described in this document are met before the installation begins. Waiting time due to unmet preconditions will result in delays and, in most cases, additional costs.

>> PRELIMINARY REQUIREMENTS <<

A confirmed and actual drawing (format *.DWG or *.DXF) of the building and the area where the new equipment will be installed is required. The drawing must show all relevant dimensions, the position of the machines in the area, potential obstacles, such as wire ways, piping, steel structures, a.o. that could result in collisions with the new equipment.

Based on this information we edit our installation drawing showing the new equipment with all the necessary resources and connecting points as well as the specification of the pallets and products which are part of the order.

All construction works necessary for the new equipment, including pits, wall and ceiling openings, robot foundations, and safety devices, must be completed before installation begins. The area for the new equipment must be dry and accessible and must meet the specifications.

Any necessary changes or upgrades to the upstream and/or downstream equipment must be completed before installation begins. This includes mechanical and electrical changes, updates to existing software and/or interfaces, etc.

If the customer is providing steel structures, e.g., for overhead conveyors, they must be in place before our installation begins.

Robot foundations must comply with the specifications shown in the installation drawing.

>> RESOURCES - POWER CURRENT / COMPRESSED AIR / EXHAUST SYSTEM <<

All necessary technical resources for installing the new equipment must be in place at the start of the installation process. The Installation Drawing shows details and connecting points.

POWER: 3 Phase, 400 V/AC, Neutral conductor N, Grounding conductor PE is used,

Frequency 50Hz, unless otherwise agreed.

Our Installation Drawing shows the connecting/delivery points of all necessary

electric connections (control cabinet, main machines)

Installation of cable channels for power supply up to the required connection

points of the system

COMPRESSED AIR: Our Installation Drawing shows the connecting/delivery points of all necessary

compressed air connections (main machines)



Customer responsible for a constant supply of compressed air (dry) for all components shown

EXHAUST SYSTEM: Our Installation Drawing shows the connecting/delivery points of the exhaust system for the trimmers.

> Customer is responsible for a reliable exhaust capacity for all rotary knife trimmers shown in the layout (air consumption: 900 m³ per suction nozzle, suction nozzle: 100 mm diameter, air speed: 31 m/s).

The last section of the suction tubes connected to the trimmers must be flexible and easily moveable (in order to match the situation on-site).

>> SPEED FOLLOWING SIGNAL | POSTPRESS INTERFACE <<

SPEED FOLLOWING SIGNAL: For an automatic speed following the postpress equipment requires a speed signal from the press with the following specifications: Setpoint setting 0-10VDC > 10mA (electrically isolated).

If a speed following signal cannot be provided, a tach generator can be installed on the folder delivery conveyor (additional cost). Please check on time with your press manufacturer about the availability of the required speed signal.

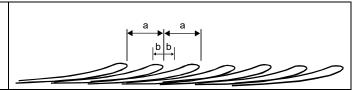
POSTPRESS INTERFACE: For further automation between web press and postpress, such as the automatic ejection of start-up, blanket washing and splicer waste or product specific counting, a postpress interface is required. This postpress interface must be ordered from the press manufacturer. The web press manufacturer will install it in its control cabinet. It is not included in our scope of supply.

>> SHINGLED STREAM REQUIREMENTS <<

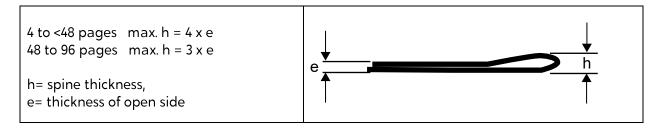
To ensure reliable, high-quality product handling in postpress, the shingled stream coming from the press/folder must match the following specifications:

SHINGLE PITCH:

Shingle pitch "a" (distance between copies): 40 - 80 (optional 100) mm, max variation of \pm 15% or \pm 10mm At the folder delivery the shingled stream needs to be consistent with no gaps

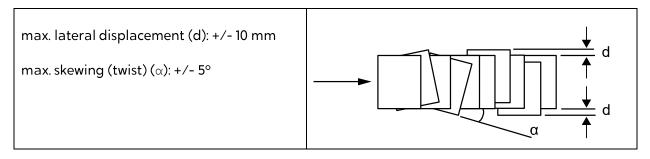


SPINE HEIGHT PRODUCTS:





COPIES IN SHINGLED STREAM - TOLERATED IRREGULARITIES:



NOTE: The processing of Double Parallel (double digest) products must be checked in advance.

Conveyor speed: The max. belt speed of floor & overhead conveyors is 100 m/min

Static charge: The static charge of the printed products must not exceed 20 kV/m

Laser counter: Very dark or black products might affect the function of laser counters and/or

light sensors/fences resulting in wrong counting / detection of copies.

>> PALLETS <<

For all systems, including pallet automation, the type of pallet must be specified in advance. If nothing is specified, the equipment will handle standard Euro pallets (format: $800 \times 1200 \times 144 \text{ mm}$).

If other pallets need to be handled, detailed information about the pallet material, sizes, runner orientation, and type (nested or not) must be available when defining the project. We need a drawing with top and side views of each pallet processed in the postpress equipment, as well as pictures showing the pallets from the top, bottom, and four sides, if possible.

Depending on the project and pallet type, sample pallets may be needed.

>> GENERAL INSTALLATION REQUIREMENTS <<

Working hours: from 07:00 a.m. to 05:00 p.m., unless specified otherwise.

Safety: Provide safety instructions to our installation staff.

Internet: Provide an internet connection for remote access from start of installation

(see dedicated specs for more information on remote internet connection).

Access: Make sure doors and openings are big enough to get the equipment into the

plant and its final position. The installation area must be free, clean-swept and

comply with the project requirements and all driveways must be free,

accessible and free from danger.

Working space: Provide enough free space to place & pre-assemble the equipment.

Steel support: Provide all necessary suspensions & supports before start of installation.

Preparation: All on-site measures, civil work, etc. be completed before installation start



Connections: Provide all necessary connections (power, compressed-air, extraction system)

as per installation layout before start of installation.

Interfaces: Provide necessary signals from/to up- and downstream equipment according

to the project requirements before start of installation.

Installation aide: Provide fork-lifts and lifting platforms (with drivers) during installation.

Support: Provide company technician to deliver the resources (power, air, exhaust,...) to

the connecting point as shown on the installation drawing

Training: Allow access to the line, provide staff (operators & maintenance) to be trained

at agreed dates.

Commissioning: Allow access to the line and provide staff and material for the start-up and

acceptance at agreed dates.

Permission: Permission to use workshops as well as transport and installation means (hand

pallet truck, pallet jacks, forklift trucks, hydraulic lifts) on prior agreement.

Plant resources: Supply of electric current and compressed air for the installation.

Provide a storing place for tools locked against theft during installation.

Permission to use dressing rooms, washing facilities and toilets.

For the installation of overhead conveying systems two moveable hydraulic lifts are necessary, each with a working area of min 1 x 2 m and operatable from the platform. Height must match the height of the overhead conveyors.

Forklifts: capacity > 1,5 tons for stackers, blocking units, trimmers, conveying components

capacity > 3,5 tons with long forks for log stacker, palletizers, robots,... >> check with your project engineer the specific needs of your project <<

>> NOT INCLUDED <<

Any type of civil works, fire protection provisions, changes of existing piping, wiring, etc. and changes to the sound walls of the web press or any changes to existing equipment.

Mechanical, electrical & software changes to existing up- or downstream equipment.

Interfaces (new or adjustments) to existing up- or downstream equipment.

Elevating platforms, fork-lift trucks, etc. necessary for unloading and installation.

Unloading and moving of the equipment inside the plant.

Fixed ladders, overpasses or platforms which might be shown on the layouts.

Not included is also any other service & work not explicitly stated in this document.

>> ADDITIONAL INFORMATION <<

See dedicated specification for strapping material & end boards (log stacking), robot foundation, remote internet connection.