

# Description

#### Drawing nr. 122-659020



### Semi-Automatic production

Crane loading & Pump loading

Cases based on 9 freezers























## Semi-Automatic Production

Crane loading & Pump loading

Semi-automatic production with automatic robot palletizing. Automatic pallet feed and full pallet wrapper. Filling arms for pumpable products with pig cleaning and a bin tipper for non-pumpable products.

#### **Cases based on 9 Freezers**

- V3 26/75 Nh3 -38° C
  Cycle time 180 min
  Approx 68,3 Ton/24 hours
  Block size 1070x535x75 mm
- V5 26/75 Nh3 -38° C
  Cycle time 180 min
  Approx 58,7 Ton/24 hours
  Block size 600x820x75 mm
- V7 26/75 Nh3 -38° C
  Cycle time 180 min
  Approx 72,7 Ton/24 hours
  Block size 1220x500x75 mm



Dimensions







## Flow Description

### Crane loading & Pump loading

The process and description of the flow of the project. Depending on the product the freezers will either be loaded by a loading arm or by a semi-automatic container loading system.

• The operator will distribute the material into the freezers by a loading arm which will be connected to a pipeline system and further will be connected to a pump. The system contains 2 loading arms which each can fill 3 freezers. The loading arm will be manually handled by an operator who must control and make sure that the product is evenly distributed into the slots of the freezers. When the operator has filled the freezers, the freezing cycle can begin.

To be able to clean the pipe system the operator must after finished pumping, remove the nozzle, and connect the loading arm to the return pipeline. The operator manual loads the pig in the pig launching system and shoot the pig. Once the pig has passed to the correct pipe the operator can start the pump sequence on the other pipeline system. The cleaning pig will be caught in a receiving station in either the pump hopper or at the big box outlet.

When the blocks are solid frozen, and a proper hotgas cycle has finished. The freezer will open and lift the blocks for the unloading crane to pick up. The operator will manually operate the unloading crane and move it to the freezer. Operator lowers the crane and must make sure that the blocks are ensured in the grab. The operator will lift the blocks and moves the unloading crane to unload the blocks on the unloading table. The operator must start the unloading table and it will begin to flip the blocks two by two and one by one from vertical to horizontal position. It will only be the last layer which will be flipped one by one due to the number of layers on the pallet and the speed of the system. The blocks will be pushed to the block cutter to be cut and divided into two and further distributed through a metal detector. If a block contains metal the palletizing robot will pick up the blocks and place the rejected block into a bin for further inspection. The blocks will be distributed to the robot pick for the palletizing robot to pick up. The system will be supplied with pallets from the pallet magazine which handles standard euro pallets. A piece of foam will be unrolled and placed on the pallet. The pallet will be distributed to the palletizing area for the robot to stack the blocks on. The palletizing robot will place blocks in layers of two. The last layer will made as one and a piece of top folio will be placed on top due to the layer of 9 blocks on each pallet. The blocks will be placed with the rough sides up against each other. After finished stacking the pallet will be weighed before it gets released.

The stacked pallet will be distributed to an automatic stretch wrapper where the stacked pallet will be wrapped with stretch folio. The pallet will be distributed to a buffer conveyor for the operator to remove the pallet and place it in storage.



If you're interested in learning more, please feel free to complete our questionnaire, which is available on our website under the "Download" section. Once filled out, you can send it to info@erlinord.com







## Worldwide Service & support

Get in touch with the people behind Erlinord. We're here to help you find the right solutions.

www.erlinord.com



Thomas Uldall Jørgensen CEO/ Part owner +45 20718820 tuj@erlinord.com





Lasse K. Jensen Spare parts & service manager +45 2262 5143 aftersales@erlinord.com

