

INCREASE YOUR PRODUCTIVITY





PLATE FREEZING PROCESS AUTOMATION

PLATE FREEZING SYSTEMS

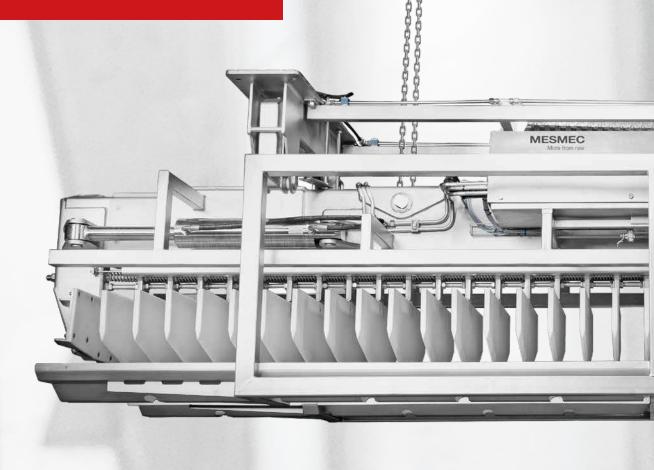
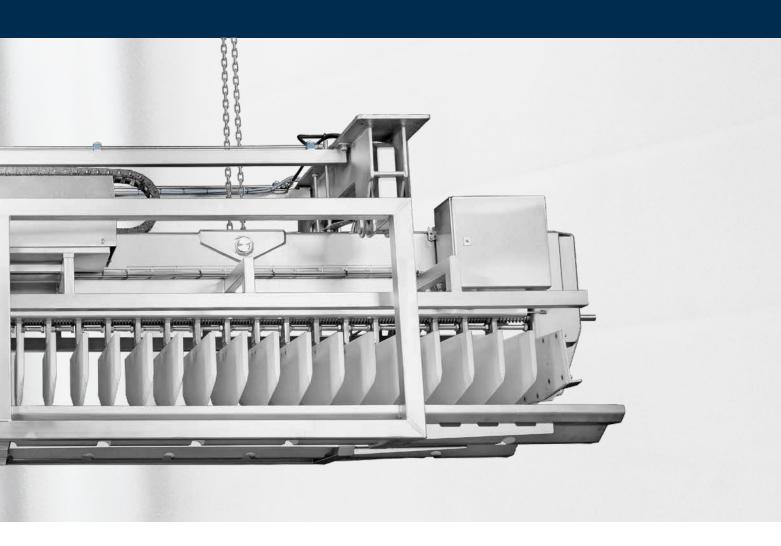


PLATE FREEZING PROCESS AUTOMATION – DESIGNED TO INCREASE YOUR PRODUCTIVITY





We offer equipment and systems for automating the plate freezing process from unloading the freezers to palletizing, weighing and wrapping the frozen plates.



User-friendly and safe handling

By automating the heavy manual handling of frozen blocks you can cut down the risks of work-related accidents. The plate freezing system is easy to use by just one person.

Hygienic and easy to service

The system is easy to clean and disinfect in order to avoid cross contamination between raw materials.

It is built with as few moving parts as possible making it easy to service. Fully automatic systems and semiautomatic system come with all the necessary equipment for several years of service.

Options

We are able to provide various options for all your needs. The line can be equipped with e.g. pallet size according to customer needs, buffering conveyors, full pallet wrapping, weighing or labelling.

PLATE FREEZING SYSTEMS

LOADING PLATE FREEZERS

When loading a plate freezer, it is important to choose the correct filling system that suits the raw material requirements.

Tipping for gentle handling

A bin running on rails enables you to tip the materials into the plate freezer gently, without the risk of crushing them.

Pumping for efficiency

The pump filling system runs on rails above the freezers and has a swivel arm that is moved to fill the freezer. This technology is recommended when freezing grinded material or small fish.

UNLOADING PLATE FREEZERS

We offer efficient unloading devices that lift all blocks from the plate freezer at the same time.

The devices are mounted on an overhead crane that moves blocks to stacking.



Process automation

The whole process can be automated or semi-automated. The operator uses an unloading device to pick up the blocks from the freezer and the crane automatically drives to the stacking table for unloading the blocks.

After unloading, the crane automatically continues to the next plate freezer. It is also possible to automate the unloading of the next completed plate freezer.













Loading by tipping or pumping

Unloading

Automated or manual crane

Metal detector

Stacking with robot, automatic manipulator or manual stacking

Wrapping, weighing and plastic interleave

PLATE FREEZING SYSTEMS

Hydraulic unloader

for vertical plate freezer.



Technical data	F12H	F10H	F8H
Plate thickness	50, 75 or 100 mm	50, 75 or 100 mm	50, 75 or 100 mm
Plate size	1210 x 400 mm	1060 x 530 mm	800 x 600 mm
Plate amount	22-36*	22-36*	22-36*
Total length	2260-5110 mm**	2260-5110 mm**	2302-5180 mm**
Lifting capacity	Up to 1800 kg	Up to 1800 kg	Up to 1800 kg
IP-class	IP66***	IP66***	IP66***
Oil	Food grade	Food grade	Food grade

* optional up to 44 plates ** depending on the amount and thickness of plates *** except hydraulic unit

Pneumatic unloader

for vertical flat top freezer.

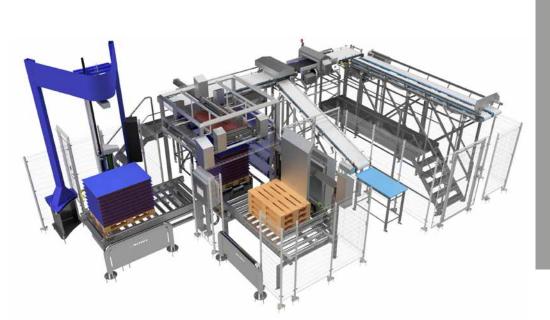




* optional up to 44 plates ** depending on the amount and thickness of plates

STACKING

Automatic stacking unit



The stacking unit picks the blocks up from the table one by one and automatically stacks them on a pallet. The system stacks the blocks in a criss-cross layout creating a more stable oallet, which is safe to store and transport.

The blocks can be wrapped individually or a plastic film can be placed between each block. The completed pallets are fed out of the stacking unit when they are ready.

The unit can also be equipped with a block breaking unit or a pallet dispenser, which feeds the palletising unit with a new pallet in order to achieve continuous production.

Stacking can be automated or semi-automated. A robot can be used to pick up the blocks from the table and automatically stack them on a pallet.

Technical features FA Stacking Fully automatic Electrical cabinets & metal detector Capacity Up to 15 ton / h Options: Foreign body detection Metal detector Plastic between block layers Unloading and tilting conveyor Automatic Weighing Reject Automatic Wrapping Pallet loading unit Automatic PLC Control Pallet size EUR pallet, other sizes as option Communication	Advant IP-class IP69K Automatic Automatic Automatic Siemens With ERP on demand	Stainless Steel High volume production Easy to clean Low need of maintenance Safe to use Ergonomic
CapacityUp to 15 ton / hOptions:Foreign body detectionMetal detectorPlastic between block layersUnloading and tilting conveyorAutomaticWeighingRejectAutomaticWrappingPallet loading unitAutomaticPLC ControlPallet sizeEUR pallet, other sizes as optionCommunication	Automatic Automatic Automatic Siemens	High volume production Easy to clean Low need of maintenance Safe to use
Foreign body detection Metal detector Plastic between block layers Unloading and tilting conveyor Automatic Weighing Reject Automatic Wrapping Pallet loading unit Automatic PLC Control Pallet size EUR pallet, other sizes as option Communication	Automatic Automatic Siemens	Easy to clean Low need of maintenance Safe to use
Unloading and tilting conveyorAutomaticWeighingRejectAutomaticWrappingPallet loading unitAutomaticPLC ControlPallet sizeEUR pallet, other sizes as optionCommunication	Automatic Automatic Siemens	Easy to clean Low need of maintenance Safe to use
RejectAutomaticWrappingPallet loading unitAutomaticPLC ControlPallet sizeEUR pallet, other sizes as optionCommunication	Automatic Siemens	Easy to clean Low need of maintenance Safe to use
Pallet loading unit Automatic PLC Control Pallet size EUR pallet, other sizes as option Communication	Siemens	Easy to clean Low need of maintenance Safe to use
Pallet size EUR pallet, other sizes as option Communication		Low need of maintenance Safe to use
	With ERP on demand	Low need of maintenance Safe to use
<section-header></section-header>		Low need of maintenance Safe to use
<section-header></section-header>		Safe to use
Technical features SA		
Stacking Semi-automatic Options:		
Foreign body detection Metal detector Plastic between block layers	Semi-automatic	
Unloading and tilting conveyor Automatic Weighing	Manual	
Reject Manual Wrapping	Manual	
Pallet loading unit Manual PLC Control	Manual	
Pallet size EUR pallet, other sizes as option Communication	Siemens	
Electrical cabinets & metal detector IP-class IP69K Ergonomics	Siemens With ERP on demand	



Mottisenkatu 3 FI-67700 Kokkola, FINLAND Tel. +358 207 280 680 info@mesmec.fi www.mesmec.fi



Contact your local dealer: