



Lifecycle Service

Your support for continuous high performance

ARODO and Möllers Packaging Technology (MPT) are cooperating with each other as one group since May 2021. The visionary and unique World-Class-Performance concept of MPT is optimally enhanced by the Global-Service-Policy of ARODO. Both work together with their expertise in turn-key packaging solutions for high-quality powders and high-speed packaging.

Expertise comes with shared experience

No matter how well your packaging machine is operating, an unexpected breakdown or a lack of spare parts could compromise production continuity. Replacement components that are no longer available for your current machines increase the risk of downtime. Better safe than sorry, with Möllers Packaging Technology (MPT) and ARODO.

Since 2021, we have been joining forces as a group, using expertise and synergies to optimize our service. The group's performance strategy unites human and machine in harmony with resources – guaranteeing better achievements, efficiency increase and cost savings. We are proud of the many systems we have supplied and which have also been technically maintained for decades. Correct and consistent maintenance is the key to high efficiency and reliable performance, but there is more.

Our Main Drivers, Your Benefits

Spare Parts

Getting spare parts is hard these days. Double-check your machine(s) proactively and do not run out of stock. We have well-equipped parts warehouses dedicated to field service, which are at our disposition to assist you. Parts that are on stock can be shipped within 24 hours. As a consultancy service to our customers, we deliver an on-site part stocking advise. Because it is useful to stockpile the necessary spare parts and consumables to fulfil your needs based upon production volumes.

Machine Upgrades

Our teams equip existing plants for the future: our consultants analyse the current situation and offer upgrade packages in order to increase reliability and production capacity, or decrease maintenance needs. Packages include software-upgrades, mechanical and electrical components as well as user-trainings.

End-of-Life Retrofits

Technological developments follow each other at a rapid pace. Components go to an "End-of-Life" (EoL) status at a certain point in time. Our machines have an extremely long life expectancy, so it is a reality that during the life cycle of our packaging solutions, different components evolve through several generations. Obviously, we want to avoid unexpected downtime facing a situation where a required part is no longer available when it is necessary for a repair. Our service department proactively offers to make the necessary retrofits to replace the EoL components before they fail.

Do you find it difficult to make the choice between bringing the existing installation up-to-date, or discontinue its use and switch to a completely new system? We are at your disposal for any kind of support that will lead to the successful completion of your project.



Ivan Dierckx

Service Manager

Spare Parts for MPT | Roto Packer & Big Bag

Roto packer



Upgrade of the weighing electronics to B&L Datapond (End-of-life upgrade)

- Use of a central PLC for controlling the actuators / sensors
- Use of weighing electronics with standard interfaces
- Start-up, parameterization and remote inquiry via web server possible
- Feedback regulation is possible

Big Bag

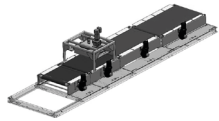


Upgrade of weighing electronics Penko

- Control of the weighing application for the Big Bag system
- Weighing terminal with 8 digital inputs and 8 digital outputs
- Precise operation due to the high speed A/D converter

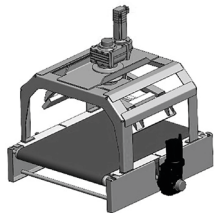
Spare Parts for MPT | Palletizer

Palletizer



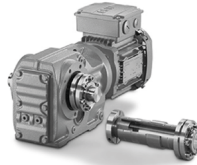
Replacement of the infeed conveyors to servo motors

- High efficiency due to the bevel gearbox
- High starting torque and fast response characteristics
- Low spare parts inventory due to vertical motor position
- Low maintenance – without brake



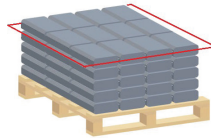
Replacement of the bag turning device with the latest generation turning device

- Less wearing parts
- More precise positioning
- Low spare parts inventory due to vertical motor position (left / right identical)
- Low maintenance
- Conveyor drive without brake



TorqLOC clamping connection for infeed conveyors

- Serves for force-locking connection between gear shaft and drum shaft
- Easy assembly and disassembly of the drive
- Reduction of maintenance work and shutdown times



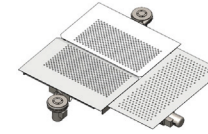
Profile control palletizer

- Monitoring of the stack overhang in the palletizer
- Manual adjustment at the palletizer by the operator possible
- Increase of production quality



Modification of loading plate to servo and ventilation

- High position accuracy due to servo control
- Low wear
- The control panel allows easy adjustability of the loading tray and ventilation



Automatic adjustment of ventilation for intermediate balcony and loading plate

- Adjustment of the ventilation speed depending on the surface temperature of the intermediate balcony
- No parameter adjustment by the operator necessary anymore
- Constant pallet stack shape
- User friendly
- Reduction of the load on the bags in the area of the intermediate balcony, loading plate and infeed



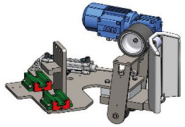
Automatic adjustment of the speed of some motors

- The speeds of the frequency-controlled drives are adjusted depending on the bagging speed
- Less wear
- High efficiency and workability, because downtime and maintenance costs can be reduced
- User friendly

Spare Parts for MPT | HSA-Vario & HSA HE

HSA-Vario

Replacement of the stretch unit



- Compact design with easier rotation of the reefing roller unit
- Transport belts in the stretch fingers are no longer necessary
- Integrated non-contact profile control (by light sensor)

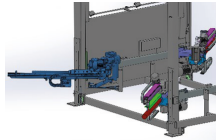
Film control by software



- Monitoring whether the foil has shrunk in the fingers
- Monitoring whether the hood has been completely covered over the package
- Adjustability via the control panel
- Improvement of quality control

HSA HE (delivered before 2010)

Modification of the stretching units



- Replacement of the stretch units, spindle type elevating element is replaced by rack and pinion drive
- Fault reduction due to lower-wear components, which can also be delivered more promptly

Modification of the light barriers under the reefing fingers



- Replacement of the light barriers under the reefing fingers with pivoting flaps
- Faster reaction when touching down on the package
- Greater monitoring of the range

Spare Parts for MPT | for all systems

For all production units



Operating panel upgrade to Siemens TP/MPT

- Larger display with touch function
- Easier operation and display by operator interface
- Modern UX design
- Implementation of service functions for all drives and actuators (optional)
- Visual display of actuators and sensors from the machine (optional)
- Fast diagnosis and troubleshooting



Upgrade of control system to Siemens S7-1500

- Highest performance
- Compact design of the decentralized periphery
- 2 integrated Ethernet / Profinet interfaces
- Communication via Modbus, OPC UA or Profibus possible
- Onboard display for diagnostics and settings
- Fast diagnosis and troubleshooting



Replacement of existing (obsolete) inverter technology to SEW Movi-C.

- Latest standard (safety and efficiency)
- Maximum load 250 % current
- Axis interconnection with double-axis modules possible
- Single-cable solution possible for servomotors to the motor
- Parameterization in SI units



Replacement of the old motor technology to SEW

- Latest standard (safety and efficiency)
- Higher motor load possible
- Single cable solution to the motor possible for servo drives (with converter conversion)



MPT SCADA system

- Detailed analysis and reporting of production data
- Reduction of unplanned downtime / optimization of productivity (OEE)
- Evaluation of energy consumption (optional)
- Creation of maintenance schedules according to actual runtime (optional)



Remote control

- Fast remote support and troubleshooting through use of a modem
- Modem connection via WAN or LTE possible
- Increase of the machine availability



Conversion to standard sensors with distributors

- Use of standard sensors with 4/5pin M12 connectors
- Sensor distributors with Profinet possible
- Conversion from ASI or other bus systems possible

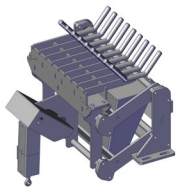
Spare Parts for ARODO | Upgrades for Filling Line & Stretch Hooder

Filling Line Upgrades



Upgrade of the sack applicator linear guides

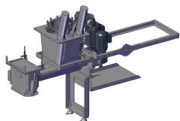
The new sack applicator uses Hepco linear guides instead of the high maintenance linear bearings. Replacing the guides can be limited to one time every 3-4 years. Approximately 12 production hours gain per year.



Upgrade of the shaker lift under the filling spout

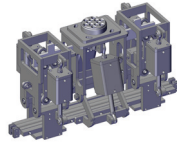
The new shaker lift design uses parallel guides and bearings instead of the linear bearings. This new design improves reliability and reduces wear.

Lifetime expectancy goes up to 4-5 years, with a 3-4 hour gain in the annual production time.



Upgrade dosing unit

The new dosing unit uses larger dosing screws, this will allow for better dosage and will decrease bridge forming.



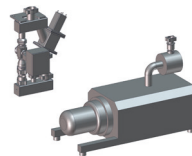
Upgrade of vacuum chamber bag clamps

The new bag clamp design utilizes a more durable type of bearings, better suited for dusty environments. Also, new, custom build, pneumatic cylinders are used. The life expectancy of the new cylinders is drastically better than the previous version.



Upgrade to high capacity filters

To improve filtration efficiency new filter pot assemblies have been designed. Instead of the cloth-type filter we now use prefab filter cartridges. Not only do they have a much longer life, they also have a higher thruput capacity and can be replaced within minutes. The vacuum pumps will have a higher vacuum capacity and longer life.



Expansion with extra vacuum pump

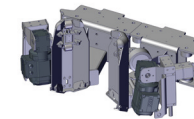
Changing the standard one pump to two vacuum chamber setup to a two pump independent setup will allow for vacuuming the chambers in an overlap cycle. Doing this can reduce total vacuum time with 30%, thus increasing machine output.



Motorized foil reel adjustment

This is an improvement in ergonomics. The operator will be able to adjust the foil height electrically instead of using the manual winch. Controls will be placed next to the foil reel device, including an additional emergency stop.

Stretch Hooder Upgrade

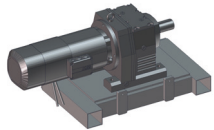


Upgrade to controlled unwinding

Our controlled unwinding technique provides the possibility to exactly define what needs to be done with the bottom of the hood. You can for example decide to create a roping effect just at the top edge of the pallet, or create a second layer of foil on the bottom part. Controlling the bottom of the hood is especially valuable when fully automated warehouse systems are in place.

Spare Parts for ARODO | End-of-Life Retrofits

End-of-Life Retrofits



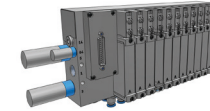
Pallet lifting motor Retrofit

The old model 2-speed motor is no longer available. This retrofit exchanges the old motor to a new SEW motor with 15kW Movidrive. This kit includes the necessary hardware to mount the motor to the existing frame.



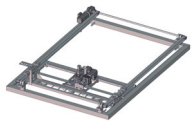
Retrofit to Siemens S7-1200 PLC

Older machines use PLC technology that is no longer available, or no longer compatible with current peripherals. Retrofitting to the current S7-1200 will give your machine a new lease on life, and will eliminate the risk for long unplanned downtimes in case of problems.



Retrofit of VUVB valve islands

Festo VUVB valve technology is obsolete, and has been replaced by VTUG technology. Spare parts are no longer available, thus it is advisable to exchange all VUVB technology to the current standard.



XY-positioning retrofit of drive technology

The old Seidel servodrive technology is obsolete. To change this to SEW motors and drives the current XY-mechanical assembly needs to be replaced to mechanically facilitate the formfactor of the new motors.



Retrofit to Siwarex verifiable weighing system

Over the last decades many verifiable weighing systems have been designed. A lot of them are obsolete without 1 on 1 replacements. Retrofitting to state-of-the-art Siwarex weighing technology is the only future-proof strategy.



Remote Support Industrial Router

By implementing the eWon industrial router, we have the possibility to remotely remedy most of the issues. Using the machines internal network, we can have access to the PLC, HMI's, Seal Controllers, SEW-drive technology, etc. This, of course, with respect for all cybersecurity standards.



Retrofit to Siemens Comfort HMI panels

Older types of control panels are obsolete, and no longer available as spare part. Proactively upgrading your old HMI's will eliminate the risk for long downtimes in case of breakage.

Tailored maintenance or rather service level agreement? You choose.

We believe in catering to our customers' needs. Whether that means a fast reaction to an unplanned technical issue, an agreed upon periodical preventive maintenance, or a detailed Service Level Agreement, you can rely on our global service team to fulfill the requirements of your production environment.

Support & Repair

Our helpdesk is staffed by engineers who have years of field service experience, you have experts at your service. While the vast majority of technical issues can be solved remotely, the helpdesk engineers are able to dispatch field service engineers worldwide.

Periodical Maintenance

Cooperating with your in-house technical department, we can advise the best periodical maintenance plan for your specific situation. Based upon on-site inspections, we will offer you the needed service parts and schedule a follow-up visit during a planned shutdown.

Service Level Agreement (SLA)

Although we always strive for the best possible level of service, in some situations it is mandatory to formalize services, commitments and expectations. Our SLA clearly defines what you as a customer can expect from our service department, and what conditions must be met to obtain this service level.

Application Engineering

Optimizing system performance is part of our standard preventive maintenance tasks, but it is usually limited in time and processed materials. We offer specific application engineering where one of our top-level engineers spends time on-site during normal production, going over all recipes and optimizes them for maximum performance and quality. This can lead up to a +30 % increase in production capacity, depending on the situation.

We aim to minimize downtime and provide the best possible service. We provide this through our global service network, which is based on employing highly qualified, experienced and solution-oriented service engineers.

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