

TOPAS 3 (7335)



Date

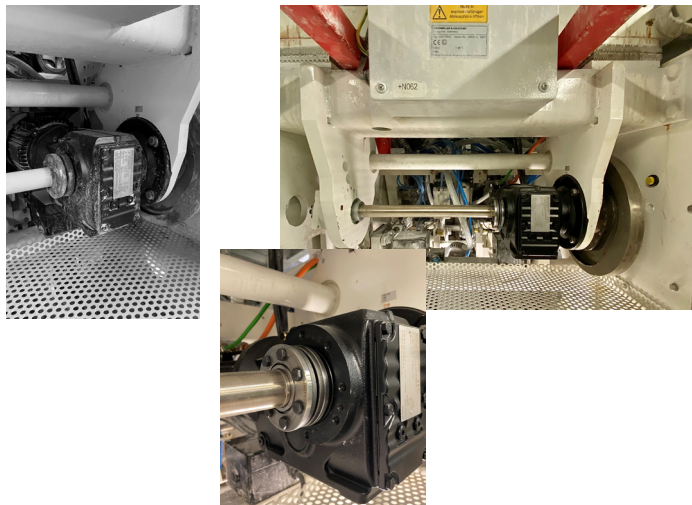
Equipment number

Product data
☐ Granulates
☐ S-PVC
☐ Pastilles / Tablets
☐

ATEX / explosion proof
☐ Yes ☐ No

Performance & Retrofit Solutions	Page	Smart Choice	Should have	Must have	Please quote
Main drive (from 800 b/h)	2			•	
Main drive (up to 800 b/h)	3			•	
Intermittent draw drive	4			•	
Continuous draw drive	5			•	
Outfeed conveyor forward (TOPAS)	6		•		
Control system S7-1500 (PLC)	7		•		
Touch panel TP1200 (HMI)	8			•	
Weigher control system	9			•	
Welding controllers RES-5006	10			•	
Top seam cleaning	11		•		
Valve terminal (incl. vacuum switch)	12		•		
Bag opening from SL/SF (incl. pre-opening device)	13	•			
Pre-opening device	14	•			
Divisible filling hopper	15	•			
Automatic pre-dosing	16		•		
Remote Service Router	17	•			
Dedusting unit	18		•		
Q-Connect	19	•			
AVENTUS Weigher	20	•			

RETROFIT SOLUTION



ADVANTAGES

- guaranteed spare parts availability
- State-of-the-art drive technology
- higher energy efficiency
- environmentally friendly operation
- proven technology

As part of our solution, we offer modern, future-proof drive technology to increase the efficiency and long-term operational reliability of your system. Using proven components and current technologies guarantees the availability of spare parts, enables more energy-efficient and environmentally friendly operation, and increases overall system availability.

The technology currently in use (converter and motor) has been discontinued and is no longer available as a spare part. In the event of a malfunction, a complete retrofit is required, which can lead to longer downtimes. The retrofit must be carried out on-site by AVENTUS service technicians. An early retrofit significantly reduces this risk and ensures long-term availability.

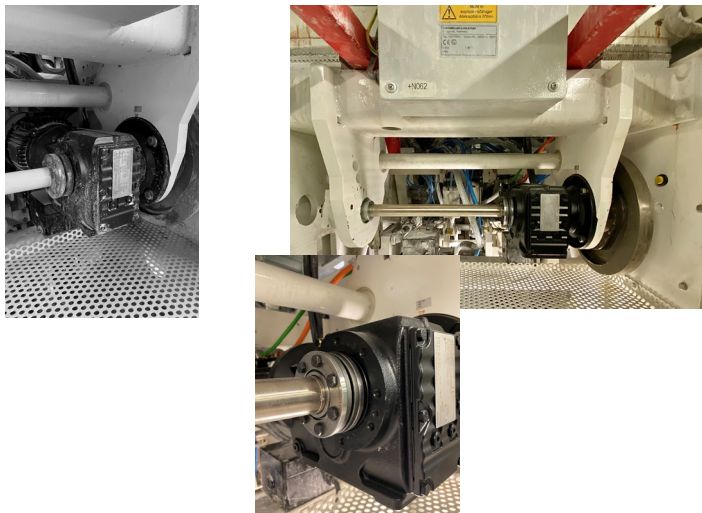
The scope of delivery includes a frequency converter, a suitable servo motor, a shaft including wear parts, pre-assembled cables, as well as all small parts and installation materials required for a smooth retrofit.

MAIN DRIVE (FROM 800 B/H)

Must have



RETROFIT SOLUTION



ADVANTAGES

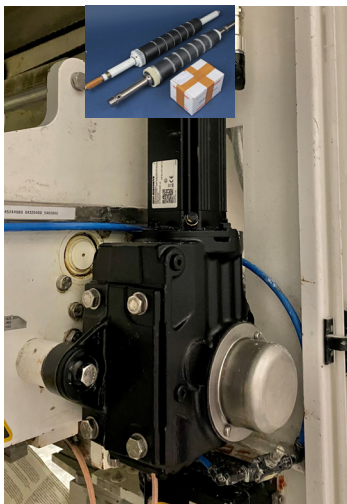
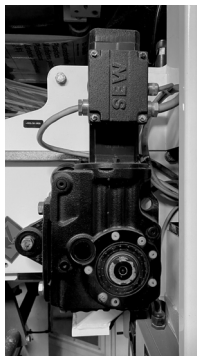
- State-of-the-art drive technology
- reduced maintenance
- no brake wear
- more precise positioning
- guaranteed spare parts availability
- higher energy efficiency
- environmentally friendly operation
- proven technology

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The technology currently in use (three-phase motor) has been discontinued and is no longer available as a spare part. In the event of a malfunction, a complete retrofit is required, which can lead to longer downtimes. The retrofit must be carried out on-site by AVENTUS service technicians. An early retrofit significantly reduces this risk and ensures long-term availability.

The scope of delivery includes a MovMot (motor with integrated frequency inverter), a shaft including wear parts, as well as all small parts and installation materials required for a smooth retrofit. Unlike the classic three-phase motor, the MovMot motor requires less maintenance because it does not contain a mechanical brake and regulates itself. This prevents brake wear and enables precise positioning.

RETROFIT SOLUTION



ADVANTAGES

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- State-of-the-art drive technology
- higher energy efficiency
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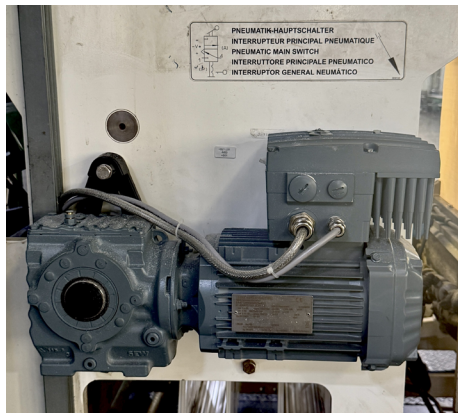
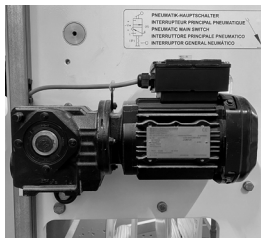
The scope of delivery includes a frequency inverter, a suitable servo motor, pre-assembled cables, as well as all small parts and installation materials required for a smooth retrofit. Additionally, timing rollers including bearings and mounting parts are included. The new version of the gears reduces noise, while the new rollers enable more precise bag length, contributing to improved production quality.

INTERMITTENT DRAW DRIVE

Must have



RETROFIT SOLUTION



ADVANTAGES

- State-of-the-art drive technology
- reduced maintenance
- no brake wear
- more precise positioning
- guaranteed spare parts availability
- higher energy efficiency
- environmentally friendly operation
- proven technology

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The scope of delivery includes a Movimot (motor with integrated frequency inverter), a roller including wear parts, as well as all small parts and installation materials required for a smooth retrofit. Unlike the classic three-phase motor, the Movimot motor requires less maintenance because it does not contain a mechanical brake and regulates itself. This prevents brake wear and enables precise positioning.

RETROFIT SOLUTION



ADVANTAGES

- State-of-the-art drive technology
- reduced maintenance
- no brake wear
- more precise positioning
- guaranteed spare parts availability
- higher energy efficiency
- environmentally friendly operation
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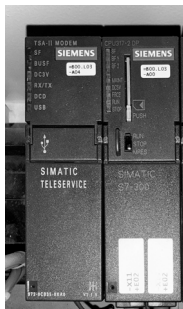
The technology currently in use (three-phase motor) has been discontinued and is no longer available as a spare part. In the event of a malfunction, a complete retrofit is required, which can lead to longer downtimes. The retrofit must be carried out on-site by AVENTUS service technicians. An early retrofit significantly reduces this risk and ensures long-term availability.

The scope of delivery includes a MoviMot (motor with integrated frequency inverter) as well as all small parts and installation materials required for a smooth retrofit. Unlike the classic three-phase motor, the MoviMot motor requires less maintenance because it does not contain a mechanical brake and regulates itself. This prevents brake wear and enables precise positioning.

OUTFEED CONVEYOR FORWARD (TOPAS)
Should have



RETROFIT SOLUTION



ADVANTAGES

- guaranteed spare parts availability
- proven technology
- improved diagnostics and faster trouble-shooting

As part of our solution, we offer you future-proof control technology that not only increases the efficiency of your system but also ensures its long-term operational reliability. By using current technologies, you benefit from guaranteed spare parts availability, integrated diagnostic functions, and significantly simplified maintenance.

The central processing unit of the S7-300 series currently in use has been discontinued and is no longer available as a spare part. In the event of a malfunction, a complete retrofit would therefore be required, which can lead to longer downtimes. An early retrofit minimizes this risk and ensures long-term availability. The retrofit must be carried out on-site by an AVENTUS service technician.

The scope of delivery includes a central processing unit of the S7-1500 series as well as all small parts and installation materials required for a smooth retrofit. Upgrading to the S7-1500 series enables improved diagnostics and faster troubleshooting via the AVENTUS hotline. In addition, the new central processing unit offers significantly higher performance for complex calculations and shorter response times to process events.

CONTROL SYSTEM S7-1500 (PLC)
Should have



RETROFIT SOLUTION



ADVANTAGES

- guaranteed spare parts availability
- proven technology

As part of our solution, we offer you a future-proof operating device that ensures the long-term availability of your system. By using proven components, you benefit from stable and reliable operation as well as guaranteed spare parts supply.

The currently used operating device has been discontinued and is no longer available as a spare part. In the event of a malfunction, a complete retrofit would therefore be required, which can lead to longer downtimes. An early retrofit minimizes this risk and ensures long-term availability. The retrofit must be carried out on-site by an AVENTUS service technician.

The scope of delivery includes an operating device TP1200 as well as all small parts and installation materials required for a smooth retrofit.

TOUCH PANEL TP1200 (HMI)
Must have

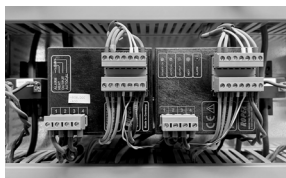




- guaranteed spare parts availability
- proven technology
- improved diagnostics and faster troubleshooting

The scope of delivery includes the SIWAREX ET200SP-WP351 weighing control system as well as all small parts and installation materials required for a smooth retrofit. Upgrading to the ET200SP-WP351 enables improved diagnostics and faster troubleshooting via the AVENTUS hotline.

RETROFIT SOLUTION



ADVANTAGES

- guaranteed spare parts availability
- proven PROFIBUS technology

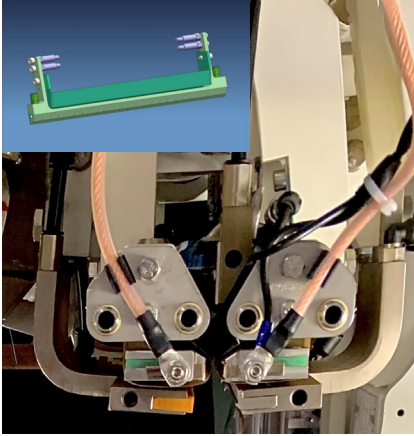
Our solution provides guaranteed spare parts availability and the use of proven PROFIBUS technology for stable and reliable communication.

The welding controllers currently in use have been discontinued and are no longer available as spare parts. In the event of a defect, a complete retrofit would be required, and delivery and installation could lead to extended downtimes. To minimize this risk and ensure the long-term availability of your system, we recommend an early retrofit. The retrofit must be carried out on-site by AVENTUS service technicians.

The scope of delivery includes a new welding controller for head and bottom seam welding, as well as a suitable monitoring unit for ATEX machines.



RETROFIT SOLUTION



ADVANTAGES

- filled bags are cleaned with compressed air before sealing
- improved welding quality
- no material trapped in the welding seam

Our solution offers significant benefits for filling dusty products:

Before sealing, the filled bags are specifically cleaned with compressed air, effectively removing contaminants in the area of the top seam welding. This greatly improves weld quality and reliably prevents material from being trapped in the seam. The result is an even, clean welding seam, reducing waste and increasing process reliability.

The scope of delivery includes an air nozzle bar as well as all pneumatic small parts and installation materials required for a smooth retrofit. The retrofit must be carried out on-site by AVENTUS service technicians.



RETROFIT SOLUTION



ADVANTAGES

- guaranteed spare parts availability
- cost optimization
- proven technology

Our solution provides guaranteed spare parts availability and uses proven FESTO technology, which we also successfully implement in our new systems. In addition, you benefit from cost optimization in spare parts procurement.

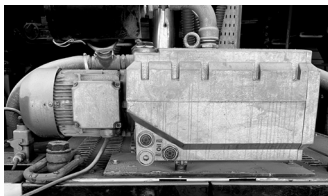
The valve terminals and vacuum switches currently in use have been discontinued and are no longer available as spare parts. In the event of a defect, a complete retrofit would be required, and delivery and installation could lead to extended downtimes. To minimize this risk and ensure the long-term availability of your system, we recommend an early retrofit. The retrofit must be carried out on-site by AVENTUS service technicians.

The scope of delivery includes new valve terminals, vacuum switches for bag suction, as well as all pneumatic small parts and installation materials required for a smooth retrofit.

VALVE TERMINALS (INCL. VACUUM SWITCH)

Should have

PERFORMANCE SOLUTION



ADVANTAGES

- reduced maintenance
- noise reduction
- increased performance
- reliable bag opening
- dual vacuum control
- environmentally friendly operation

By using a side channel blower (ring blower) instead of the previous vacuum pump, maintenance requirements are significantly reduced while creating a clean, oil-free working environment. The low-noise operation further improves working conditions.

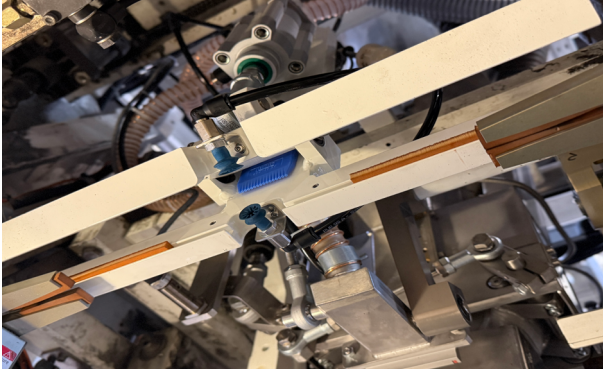
Empty bags are reliably opened using the [pre-opening device](#), effectively preventing production interruptions and double suction. Proper bag opening eliminates empty bags and reduces material waste. Two vacuum switches with digital displays enable precise and redundant monitoring of the opening process, ensuring additional process reliability.

The scope of delivery includes a side channel blower to replace the previous vacuum pump, newly designed levers with optimized geometry for improved bag opening, two newly developed suction boxes, vacuum switches with digital display, double pneumatic cylinders, as well as various small parts and installation materials. The retrofit must be carried out on-site by AVENTUS service technicians.

BAG OPENING FROM SL/SF (INCL. PRE-OPENING DEVICE)
Smart Choice



PERFORMANCE SOLUTION



ADVANTAGES

- reliable bag opening
- consistently high machine performance
- environmentally friendly operation
- guaranteed spare parts availability
- proven technology

The pre-opening device significantly improves the reliability of the machine's processes. It reliably prevents production interruptions and double bag suction, ensuring stable, consistent operation. It also reduces the occurrence of empty bags and minimizes material waste, which is an important step towards efficient and sustainable production.

The scope of delivery includes a pre-assembled pre-opening device, as well as small parts and installation materials. The retrofit must be carried out on-site by AVENTUS service technicians.



RETROFIT SOLUTION



ADVANTAGES

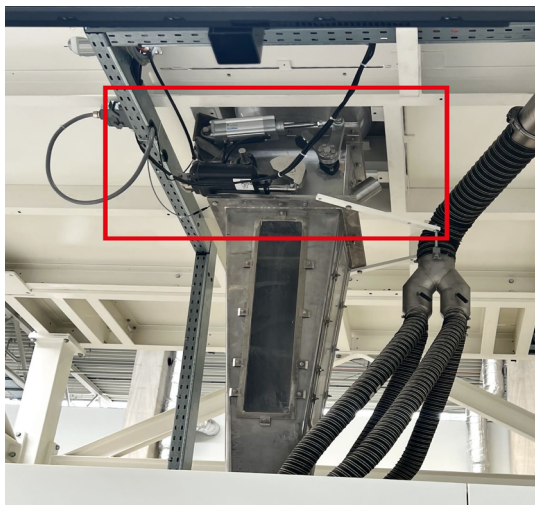
- faster repair in case of defect
- significantly reduced production downtime
- increased workplace safety
- guaranteed spare parts availability
- proven technology

The currently used filling hopper is not divisible and must be completely dismantled, repaired, and reassembled in the event of a defect. Experience shows this results in a machine downtime of one full day. To minimize this risk and ensure the long-term availability of your system, we recommend converting to the divisible version. This allows repairs to be completed within one hour, significantly reducing production downtime. Repairs can be carried out at a safe height without the need for scaffolding or fall protection.

The scope of delivery includes a fully pre-assembled filling hopper with the separate unit of the filling hopper flaps, an additional pre-assembled unit of filling hopper flaps, as well as small parts and installation materials. The retrofit on-site should preferably be carried out by AVENTUS service technicians.



PERFORMANCE SOLUTION



ADVANTAGES

- potential performance increase
- self-optimization technology
- less product spillage
- environmentally friendly operation
- proven technology

As part of our solution, we offer an innovative automatic pre-dosing system located below the net weigher, equipped with self-optimization technology. This feature enables automatic adjustment of the flow opening, ensuring optimal filling times and consistent product flow, regardless of product characteristics or operator experience. The compact discharge minimizes product spillage and keeps the surrounding area clean.

Automatic pre-dosing significantly contributes to performance improvement: it enables higher throughput and faster processing of various products.

The scope of delivery includes a fully pre-assembled pre-dosing unit, a new discharge hopper, and a new drop pipe, as well as small parts and installation materials. The retrofit must be carried out on-site by AVENTUS service technicians.



RETROFIT SOLUTION



ADVANTAGES

- faster troubleshooting
- increased system availability and productivity
- reduced repair and maintenance costs
- lower time requirements

Implementing remote service allows for faster troubleshooting, higher system availability and increased productivity. At the same time, repair and maintenance costs are significantly reduced and the necessity on-site time requirements are minimized.

This service is integrated into a Remote Service Agreement, enabling early fault detection and targeted support without the need of an on-site presence. This increases response speed and ensures maximum operational safety with minimal effort.

The scope of delivery includes a new router, as well as small parts and installation materials. The retrofit must be carried out on-site by AVENTUS service technicians.



RETROFIT SOLUTION



ADVANTAGES

- continuous machine operation
- improved dust extraction performance
- environmentally friendly operation
- increased workplace safety
- automatic filter cleaning

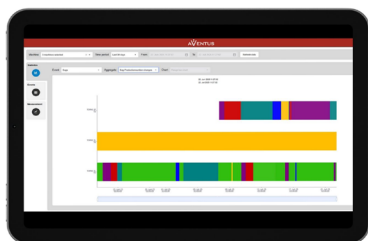
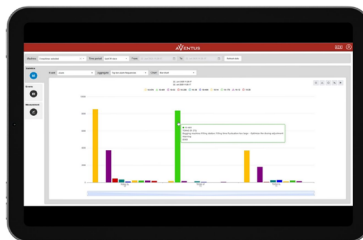
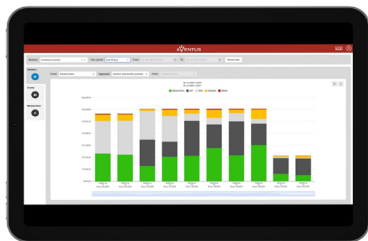
This solution includes four filter bags, each of which can be cleaned automatically and independently. This ensures continuous operation of the TOPAS system.

Significantly reduced dust emissions not only contribute to the operational safety of the machine but also improve protection for operating personnel, thereby increasing workplace safety.

At the same time, environmental impact is reduced, promoting sustainable and responsible plant operation.



DIGITAL SERVICES



ADVANTAGES

- Clear visualization of machine status
- Customizable dashboards
- Centralized real-time data for multiple sites
- Immediate identification of performance issues
- Data hosted on own IT infrastructure
- Scalable and secure

Q-Connect provides a comprehensive solution for monitoring and analyzing machine and production data. The platform enables clear visualization of current machine status as well as detailed insights into produced quantities, weights, and speeds. Frequent errors and their impact on downtime are transparently displayed, allowing performance issues to be identified quickly.

The intuitive interface offers both an overview and in-depth analysis. Customizable dashboards ensure that all relevant information is readily available. Data remains within the organization's own IT infrastructure and is accessible from any location.

Q-Connect supports the operation of single machines as well as complex systems across multiple sites. Centralized real-time data enables continuous productivity optimization and predictive maintenance. The solution is simple, scalable, secure, and fully customizable – a key component for efficient and future-oriented production.



RETROFIT SOLUTION



ADVANTAGES

- Higher performance up to 2,650 bags/hour with very high weighing accuracy
- Self-optimizing system
- Operation of the weigher via the touch panel of the FFS machine
- No second panel required
- Recipes for different products include both machine and scale parameters
- State-of-the-art drive technology with a servo motor for dosing
- Eliminates the need for two pneumatic cylinders or a step motor for dosing, as commonly used by LIBRA
- All mechanical parts are made of stainless steel, instead of just the product path
- Increased safety is achieved through the installation of safety limit switches on all doors and flaps.
- Bottom flaps are equipped with a self-locking mechanism, ensuring they remain closed in the event of pressure loss and preventing any uncontrolled discharge of the product.
- Possibility of remote troubleshooting or optimization
- Guaranteed spare parts availability
- Higher energy efficiency
- Environmentally friendly operation

GENERAL FUNCTION

The product is supplied to the dosing system by a product load removal. A servo motor driven dosing slide fills the weighing vessel below with the product via coarse and fine feeds until the target weight is reached. Once the FFS machine requests the product, the weigher's bottom flaps open to empty the vessel, directing the product to the FFS machine via a discharge hopper with a filling pipe.

A modern weighing controller controls the weighing process by processing data from the load cells and controlling the servo drive motor of the dosing system.



RETROFIT SOLUTION



As part of our solution, we offer you modern and future-proof weighing technology that increases the efficiency of your system and ensures its long-term operational reliability. By using proven components and current technologies, you benefit from high performance and weight accuracy, guaranteed spare parts availability, more energy-efficient and environmentally friendly operation, and overall higher system availability.

Please note that the weigher currently in use is no longer supported by AVENTUS. The conversion must be carried out on-site by our qualified AVENTUS service technicians. An early conversion can significantly reduce risk and ensure long-term availability. Even if your FFS machine is later replaced by a new AVENTUS TOPAS, this weigher can be easily integrated into the system.

The scope of delivery includes a pre-assembled and tested weigher consisting of a product load removal, a dosing unit with servo drive motor and an enclosed weighing vessel. For your safety, all doors and flaps are equipped with safety switches. Additionally, if necessary, a new discharge hopper with a matching filling pipe will be supplied.

The weigher control system will be integrated into the existing control cabinet of the FFS machine and connected to the weigher and operator panel via pre-configured cables. Commissioning with product will be carried out by AVENTUS service technicians. Upon request, multiple recipes for different products and weights can also be set up.

