Greater speed, precision and reliability to increase production throughput.

Feeding technology components and systems Maximize operational performance with standardized, flexible and precise part feeding and sorting technologies.



Feeding technology components and systems

Feeding technology systems

- CAD/CAM feeding systems
- Clean room feeding systems
- Flexible feeding systems
- Disentangling systems



Feeding technology components

- Linear feeders
- Bowl feeder drives
- Feeding bowls
- Refilling units
- Control devices
- Chrome-Line feeding components

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- Flexible feeding
- Diagnostics and training





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Feeding technology

Movement/Drives/ Buffering

Vibratory feeders with reactive force compensation technology from Emerson compensate the vibration forces in the drive unit. This prevents vibrations from being transferred to other environments and any reciprocal interference when multiple drives (cross-talk) are used.

All components offer stand for the highest levels of precision. Interfaces have minimal gaps, as rubber buffers are not required for the linear feeders. This guarantees reliable operation and maximizes the availability of the entire feeding system.











Linear feeder HLF

- Large installation surface for the conveyor track
- Long and heavy conveyor tracks can be inserted (up to 600 mm in length)
- 115 V/60 Hz or 230 V/50 Hz
- Maximum speed 7 m/min

Bowl feeder drives BF/WV

- 115 V/60 Hz or 230 V/50 Hz
- Permissible bowl weights from 0.16 kg to 30 kg
- Clockwise or counterclockwise rotational direction
- Throwing angle in 12° and 18° for BF- and 20° and 25° for WV drives.

Feeding bowls BB/BB FDA

- Perfect adjustment to tool sizes and tolerances
- Complete reproducibility
- FDA version available
- Optionally available three designs of standard helix (radial, grooved or step helix)

Refilling units NVB/NVD/NBB

- · Vibration and belt-driven hopper
- Fill quantities from 0.5 liters to 40 liters
- Fill weights from 1.7 kg to 40 kg
- Hopper interior with variable incline (NVB model)

Flexible feeding component aflex qc

- Time-optimized bulk material separation
- Especially for part sizes/product variants that change frequently
- Standardized interfaces for robot and axis systems

Control concepts



IRG1-D

IRG1-MS

SmartBox

Control concept

- Smart Box enables autonomous operation of feeding systems
- IRG1-D for 115 V/60 HZ or 230 V/50 Hz vibration conveyors
- IRG1-MS motor control unit, 230/115 VAC, 2A



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Frequency control units PSG1/SIGA

- PSG1 controller for HLF-P model piezo linear feeders
- SIGA controller for vibration feeders (magnetic drive)

Standardized modular components

The optimized quality and modular design of the standardized Chrome-Line components for feeding stations helps to reduce costs and delivery times. These feeding technology components utilize uniform, corrosion-protected surfaces and are specifically designed for use in the most common and standardized station layouts allowing easy integration during the planning stage.



Customer-specific drives

- Application-based development co-operation including designing, prototype construction and series production
- Customer-specific linear and spiral conveyors with 24 V/115 V/230 V AC operating voltage
- For special applications in diverse sectors such as
 - Providing connection elements in riveting and welding technology
 - Crimp processes in cable processing
 - Counting, weighing and dosing in packaging technology



Services

- Training and work-shops about drive technology and applications
- Maintenance and spare parts
- Diagnostics using innovative QRG1 laboratory measurement device
- Controlled production with quality assurance thanks to drive check and documenting of relevant drive-specific parameters





CAD/CAM feeding systems

- 100% engineered
- Maximum system availability
- Complete reproducibility
- 5-axis simultaneous processing and computer aided manufacturing (CAM) ensures high precision manufacturing
- Industry proven primary polymer feeder bowl material





Clean room feeding systems

- Verified clean room suitability according to ISO class 7
- Construction standards for medical applications guarantee
 easy cleaning
- Multiple part provision, preferably with Emerson electrical handling systems
- Feeder bowls made of FDA polyamide, aluminum or stainless steel
- Use of medically-suitable materials with material certificate
- Sorting bowls made of high-alloy, polished stainless steel



Flexible feeding systems

- Wide range of system variants
- Short changeover times
- Active 3-dimensional conveyance material manipulation
- Combination of aflex modular components and electrical handling systems
- Standardized vision and control concept
- Unlimited reuse of system components



Disentangling systems

The range of disentangling systems from Emerson enables ideal adjustment to the individual application

- Reliable disentangling and separation of springs and other conveyed materials
- Innovative approaches for difficult part sizes
- High reliability thanks to automated suppression mechanisms
- Autonomously usable electrical spring separation with linear motor technology
- Decentralized integrated control system (drum feeder)







Increase the accuracy, speed and reliability of your small and micro part feeding application.





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