



Feeding More than Motion.

Yesterday. Today. Tomorrow.



Feeding technology systems

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



Feeding technology components & systems

Feeding technology components

- › Linear feeders
- › Bowl feeder drives
- › Feeding bowls
- › Refilling units
- › Control devices
- › Afag-Chrome-Line feeding components
- › Flexible feeding
- › Diagnostics & training



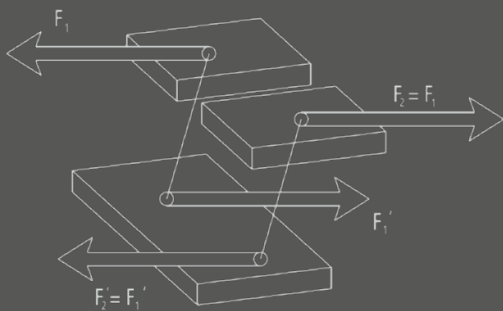
› For more information and technical details,
see our "Modular feeding technology" catalog.

Feeding technology

Movement/Drives/ Buffering

Afag vibratory feeders with reactive force compensation compensate vibration forces in the drive unit and therefore prevent vibrations being transferred to the environments, as well as reciprocal interference on multiple drives (cross-talk).

They stand for the highest precision interfaces with minimum gaps, as rubber buffers are not required for the linear feeders in particular. This guarantees reliable operation and highest 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
- › Max. 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
- › Available in FDA version
- › Optionally available with 3 designs of standard helix (radial, grooved or step helix)



Refilling units NVB/NVD/NBB

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



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



SmartBox IRG1-S IRG1-MS



SIGA

PSG1

Control concept

- › Autonomous operation of feeding systems via the Smart Box
- › IRG1-S for 115 V/60 HZ or 230 V/50 Hz vibration conveyors
- › IRG1-MS Motor control unit, 230/115 VAC, 2A

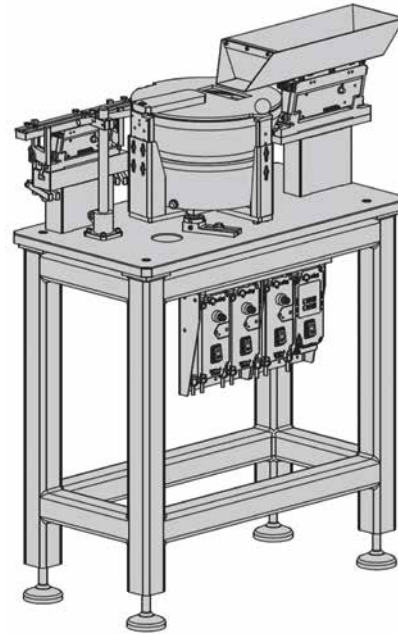
Frequency control units PSG1/SIGA

- › PSG1 for piezo linear feeders in the HLF-P range
- › SIGA for vibration feeders (magnetic drive)

Standards

Chrome-Line components

The standardized Chrome-Line components reduce costs and delivery times thanks to optimized quality in conjunction with a modular design for the feeding stations. Well-known station layouts, and therefore standard stations that can already be integrated in the planning phase, as well as uniform, corrosion-protected surfaces complete the Afag building block principle with regard to the feeding technology components.



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, dosing in packaging technology



Services

- › Providing drive technology basic training and workshops about drives and applications
- › Maintenance, spare and wear parts service
- › Diagnostics with innovative QRG1 laboratory measurement device
- › Controlled series production with quality assurance thanks to drive check and documenting relevant, drive-specific parameters



CAD/CAM feeding systems

- › 100% engineered
- › Maximum system availability
- › Complete reproducibility
- › Cost benefits for repeat orders
- › High precision manufacturing thanks to 5-axis simultaneous processing and using CAM
- › Primary polymer feeder bowl material proven 10,000 times



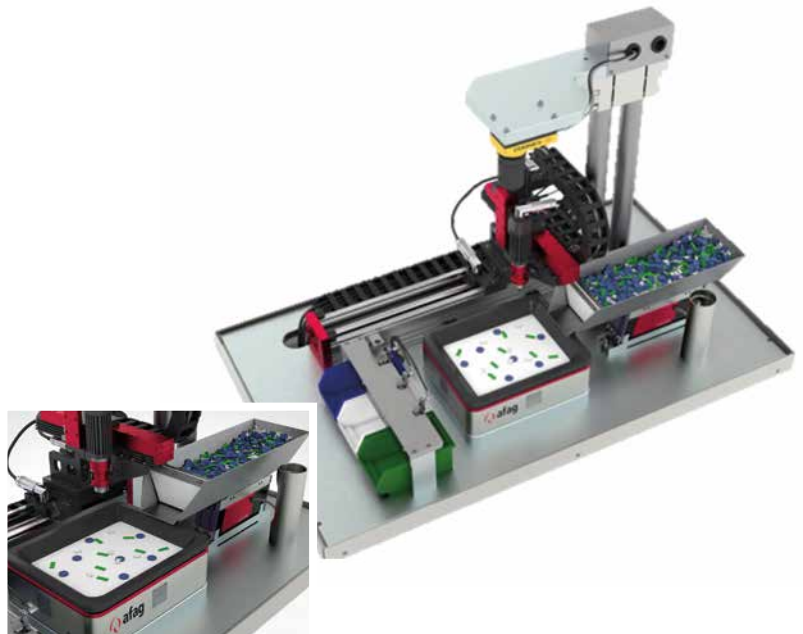
Clean room feeding systems

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



Flexible feeding systems

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



Disentangling systems

- › The range of disentangling systems available 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)





Product Overview

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We are Afag

As a leading provider, Afag has been developing and producing components for assembly automation in the areas of feeding, handling and transport for more than 65 years.

Afag has made it its target to use state-of-the-art technologies and innovative solutions to meet the high demands of the global automation industry. Thousands of handling modules as well as feeding and transport systems sold by Afag represent the very good quality and reliability of our products.

We have more than 300 employees in our subsidiaries in Switzerland, Germany, China and the USA. There, we produce solutions that are used in all producing industries: From automotive to consumer goods, food, machines, medicine, pharmaceuticals and cosmetics to the watch-making industry.

Thanks to our sales partners in more than 30 countries, our customers around the world can enjoy professional consulting, planning and service.

By choosing the Afag Group, you have selected a reliable, internationally operating provider of feeding, handling and transporting equipment. But Afag is no longer just a pure provider of automation technology components. Through its professional engineering, installation and commissioning services, we now also offer you solutions for your subtasks.

As an innovative partner, we want to design the future with you. For example, you can talk to us about our IOL-capable components, flexible feeding or robotics.

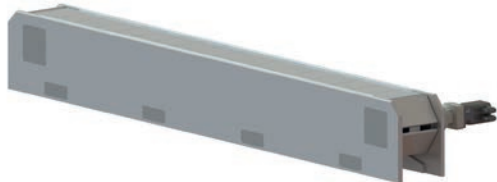
Our service

- › Product training at the customer's facilities or at Afag
- › Repair service
- › Phone support
- › Consultation and optimisation of applications on site
- › Remote maintenance via TeamViewer
- › Calculations and design of applications
- › Implementation of OEM solutions



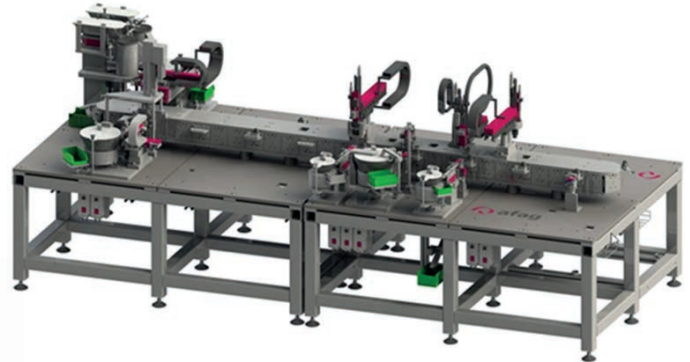
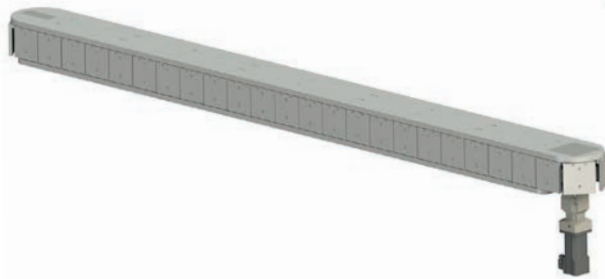
Linear transport module (vertical) (LTM-V)

Flexible infeed lengths, high payloads, two standard workpiece carrier widths. Optional motor interface with third-party motors.



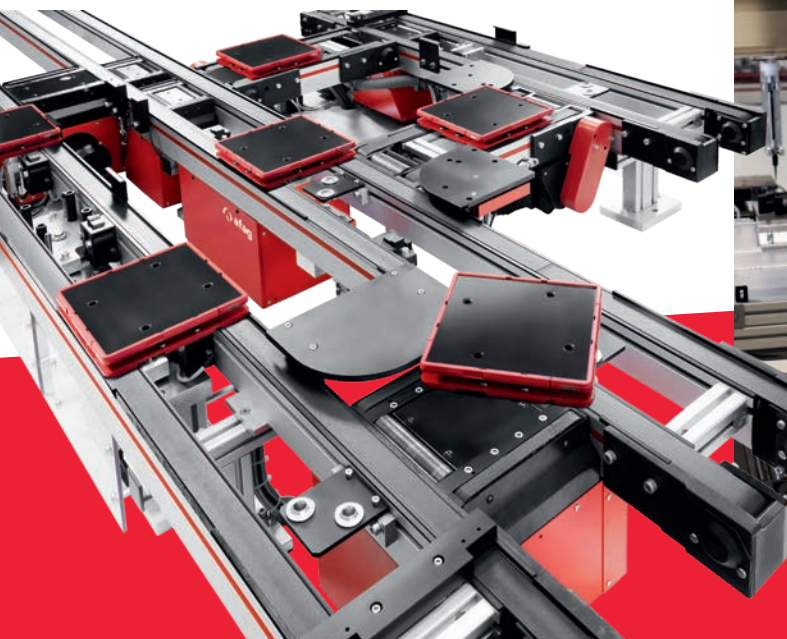
Linear transport module (horizontal) (LTM-H)

The alternative to the rotary indexing table. The horizontal structure facilitates the circumferential allocation of all workpiece carriers. The varied installation possibilities allow different workpiece machining. Increased repeat accuracy.



Linear transfer system (LTS)

Standard modular kit with high-quality components.



aflex qc

Diverse application possibilities



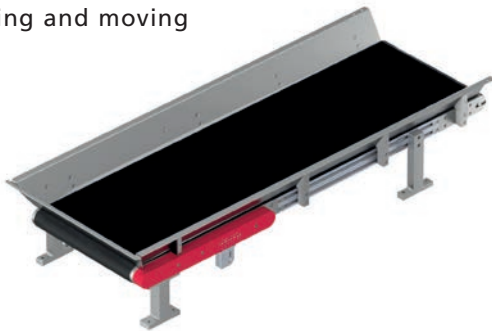
aflex 400 lv

Reactive force compensation, tool-free quick-change system and numerous integration options



Flip conveyor

Flipping and moving



Linear feeder

Compact design with optimised reactive force compensation



Bowl feeder drives

Reactive force compensation



Refill hoppers

Vibration and belt hoppers



Feeding bowls

Wear-free polymer in black and FDA version



Control devices

Modular combination design with Afag control units



feeding technology solution

100% reproducible
manufacturing



feeding technology solution for clean rooms

Particle emissions
checked



Flexible feeding technology solution

Top variant flexibility with the
aflex vibration platform



Multi track feeder

Multi-lane feeding with
hopper system



Smart FEG

Air turbulence in
the parts container



Drum conveyor

Stand-alone disentangling
system with decentralized,
integrated control system and
intelligent separation



Handling

Gripping

GM

Drive/pliers
combinable



SG

Programmable
stroke range



UG

Parts detection
sensor



PG 16 NN/NO/NC

High-precision chuck
guidance, miniature
design, gripping force
securing



GE

Compact, fast
and a high output
density



NEW



NEW



NEW

Handling

Turning

RE

High
torque



RA

Endless rotation
without moving
cables



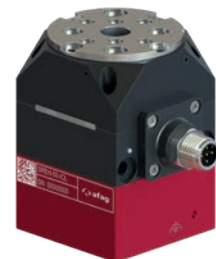
DG

Shortest rotating
gripper within
its performance
class



SREH-50-IOL

Smart rotary module, inte-
grated controller, highly
flexible implementation,
embedded technology



NEW

CR

Compact style



RM

Optional
intermediate
positions



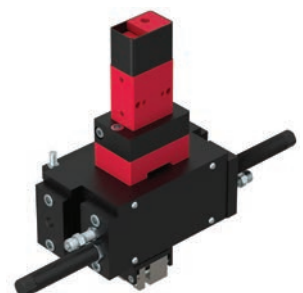
GMQ/RE

Endless turnable
Pneumatic
grippers



GM/RM

Modular combination



Handling

Linear



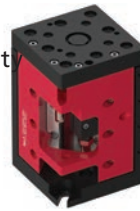
PDZ

Toothed belt axis,
max. length
5260 mm



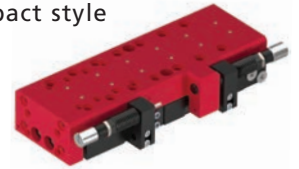
HM

Torsional rigidity
Short style



CS

Compact style



OZ

Highly dynamic
cantilever axis



LM

Extremely
robust



ES

Freely programmable



SA

Flexible engine
mounting



PDL

High torsional rigidity
by double brackets



LE

High-dynamic
and precise



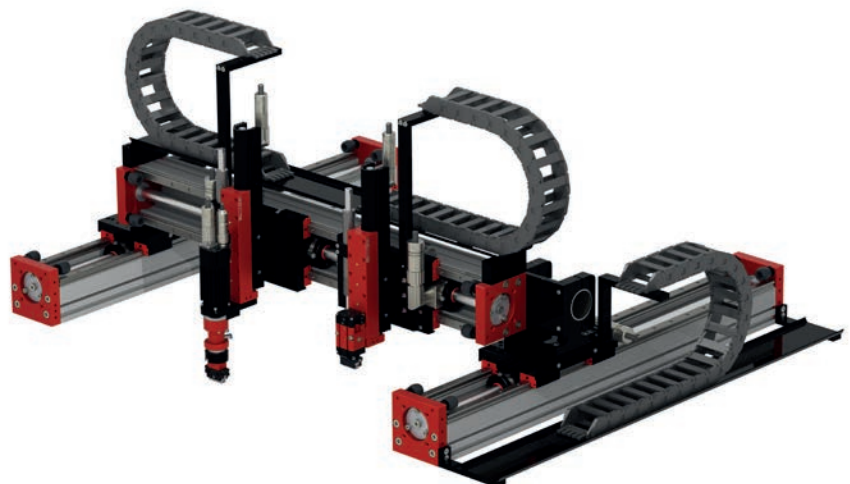
Handling

Systems



EPS midi XYZC

Dynamic even at
higher loads



H-Portal with two slides

Dynamic for large areas
and higher loads

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