Focus on
Industrial automation
Pneumatic system
- Complex system of compressor, pumps, valves, filters, lubricators, flow controls etc.
- Elaborate installation due to many components
- Per default no integrated positioning
- Requires routine maintenance
- High energy consumption

Electric actuator system
- Simple system of actuator, control and power connection
- Easy installation due to few components
- Integrated positioning
- Maintenance-free
- Low energy consumption
Electric Actuators - energy efficient solutions for industrial automation

LINAK® improves productivity with simple, safe and powerful electric linear movement for a variety of industrial automation applications. For soldering ovens, packaging, welding and textile machines, bar feeders, conveyor belts, material handling devices and many other industrial automation applications LINAK delivers:

- reliable products
- a good alternative to pneumatic systems
- a turnkey supplier of complete electric linear movement solutions
- cutting-edge technology when more sophisticated controls and precise motion is required
- close collaboration between your team and our application engineers, represented in over 30 countries

From small, light and compact actuators for space savings, to powerful robust systems able to lift up to 15,000 N, LINAK electric actuators are built for long-lasting durability.

Furthermore, our actuators are tested to the highest standards and can be delivered in protection classes up to IP66 and IP69K – water, dust and dirt proof and tested for high-pressure cleaning.

Go electric and spot the difference

In numerous small and large applications LINAK electric actuators are a low-energy, cost and resource reductive alternative to pneumatic systems. Due to the technological development and increasing energy prices, linear electric actuators are becoming more and more attractive also in the industrial sector where pneumatics and hydraulics usually dominate. LINAK electric actuators work on low voltage DC, provide a high self-locking ability and optional manual operation, creating a safer work environment for the operator. Furthermore, an electric linear system requires no maintenance, which reduces the downtime of the application.

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LINAK offers service worldwide

Please contact your local LINAK office with your enquiry
What LINAK actuators do for the soldering oven

Due to their high control, electric actuators from LINAK® provide precise parallel movement ideal for lifting the hood of soldering ovens. Furthermore, TECHLINE® actuator systems offer simple installation, multiple feedback options and an ‘all in one package’ solution, which is easy and cost-efficient.

Additionally, safety is high when choosing an electric actuator solution, because LINAK provides brake and self-locking functions to hold the hood in position to ensure that it will not collapse in case of current cut-offs.

LINAK electric actuators also offer an environmentally clean solution with no leakage, which prevents destruction of products.
Hood
Opening and closing of the hood
What LINAK® actuators do for the packaging machine

TECHLINE® offers electric actuator solutions for packaging machines allowing simple customisation with the press of a few buttons. E.g. it is possible to adapt the machines to various product types, shapes, sizes and weight in order to make the machines more productive. Furthermore, LINAK actuators can adjust the height of the whole line either to suit the operator or to connect to another machine.

LINAK actuators are energy saving, easy to control due to feedback options, simple to fit in the product assembly and maintenance-free.
Sealing unit
Adjustment and adaptation to suit different packages
What LINAK® actuators do for the textile machine

LINAK electric actuators are easy to fit into textile machine applications due to their small sizes and few cables with customised connection and plugs.

The actuators provide e.g. accurate parallel positioning of the cradle ensuring precisely stacked fabric and minimised waste of cloth.

LINAK actuators also offer an accurate overview of their position with feedback signals. Furthermore, the actuators only use power when they are moving, which means that no standby power is necessary.
Positioning
Raising/lowering of the cradle to easily place a new textile roll

Adjustment
Adjustment of the cradle sideways to ensure that the textile will be precisely stacked to decrease the amount of wasted cloth
What LINAK® actuators do for the bar feeder

Through easy electric linear movement, high control and simple operation TECHLINE® actuator systems provide efficient automation in bar feeders, enabling the machine to run automatically without human help as long as there are enough bars in the system.

With LINAK actuators it is possible to automate the feeding of the bars into the bar feeder as well as the adjustment of the height of the bar feeder.

LINAK actuators are small, easily integrated into the bar feeder with programmable control systems and require no maintenance compared to more complex hydraulic systems.
Bar feeding
Automation of the feeding of the bars into the machine
What LINAK® actuators do for the AGV

TECHLINE® actuator systems provide electric solutions for Automated Guided Vehicles (AGV) enabling the lifting of heavy loads as well as the transport and transfer of these weights to the next station within a production unit.

TECHLINE actuator systems are energy efficient, as no auxiliaries like e.g. hydraulic pumps and air compressors need to be kept in a constant operating mode, and oil and air leakages are non-existing in an electric system.

Furthermore, electric actuators are maintenance-free and easy to install. This saves costs and increases the simplicity of the application.
Extension and retraction
Extension and retraction of the transport tray

Activation
Activation of the locking mechanism
What LINAK® actuators do for labelling equipment

Through the flexibility and user-friendliness that the electric actuator solutions from TECHLINE® provide, automatic height adjustment and positioning of labelling equipment is made easy. This offers the possibility to adapt the machine automatically depending on the product that needs to be labelled.

The robustness and rigidity of LINAK columns effectively prevent any movement of the application, ensuring high precision during the labelling process.

Furthermore, the simple LINAK plug and play solution provides a quick installation and exchange of the actuator, which reduces the downtime of the application.
Positioning adjustment
Sideways adjustment of the position of the labelling machine
What LINAK® actuators do for industrial automation

Welding machine
Opening and closing of the machine cover

Plastic machine
Conveyor belt

Height adjustable conveyor belts, switching belts and adjusting belt widths

Tooling machine

Library automation
Explore the rich technology behind actuators

At the Actuator Academy™, you will find a library of videos and information about actuator components, actuator testing, and intelligent actuator control.

Find out what you should expect of a good industrial actuator, what affects its performance and efficiency, and how to best utilise your linear motion actuator.

We hope to inspire you and ultimately make you wiser on the moving electric revolution we are all part of.

Happy exploring!

Check out the Actuator Academy
LINAK.COM/ACTUATOR-ACADEMY
Enhance the value and performance of your application with the intelligent movement of IC actuators.
LINAK® actuators with Integrated Controllers (IC) present you with various feedback outputs, smart actuator control, customisation, and monitoring possibilities.

IC actuators unlock the benefits of a true Plug & Play™ solution, making external control boxes and relays superfluous and reducing the wiring complexity.

A comprehensive testing programme ensures that the integrated electronics are well protected for use in tough environments.

If you are looking for a movement solution that will help you stay competitive in the future, then go for LINAK actuators with integrated controller, and Move for the Future.

For industrial automation, actuators with IC provide intelligent and cost-effective performance:

- Simple installation with built-in electronics.
- Precise control of actuator movement
- Feedback and movement customisation
- On-site configuration
- Easy actuator status monitoring

For more information on IC, please please visit LINAK.COM or scan the QR code
LINAK® industrial actuators offer a versatile array of movement solutions for industrial automation.

With **thrusts up to 15,000 N, max speeds up to 160 mm/s, and strokes between 20 and 999 mm**, the actuators are highly adaptable for a wide variety of applications.

Industrial actuators with **heavy-duty aluminium housings** are very suitable for use in corrosive environments. Having been thoroughly salt spray and chemical resistance tested and approved for ratings up to **IP66 and IP69K static**, these actuators will work reliably for years, even when exposed to salt, water, wind, and sun.

**Operating temperatures between **-40°C to +85°C** make them fit for work in numerous settings.**

By using an integrated controller, industrial actuators are **configurable** and offer **relative or absolute position feedback** as well as **performance monitoring.**

Actuator LA37  
Actuator LA36  
Actuator LA33
Testing programme

In each industrial application, the actuator is just one component of many, but at LINAK® we fully appreciate that it is of utmost importance to you and your customers. Not a single actuator leaves the factory until it has undergone a 100% function test.

Depending on the actuator type, various tests have been carried through. Please consult your local LINAK office or take a look at the actuator data sheet in question to get a thorough test overview.

This is your guarantee that a solution based on LINAK TECHLINE electric actuator systems is a solution that will work reliably for years and years.

“Our actuators must never malfunction. Therefore, it is important that all our products are tested inside and out, and to the extreme in a wide range of tests.”

- Claus H. Sørensen, Director R&D

Climatic tests:
In the climatic test the actuators are tested to operate in extreme temperatures as well as to endure rapid changes in temperature. In a dunk test, the actuators have to withstand repeating temperature fluctuations between +85°C to -40°C and still maintain full functionality and ingress protection.

- EN60529-IP6X - Dust
- EN60529-IPX6 - Water
- ISO16750- IP69K - High pressure cleaning
- IEC60068-2-3 - Moisture storage
- IEC60068-2-30 - Operation in moisture
- ISO16750-4:2010 - Dunk test
- EN60068-2-52 - Salt spray
- BS7691 Section 6.11.2.4 - Chemicals
**Electrical tests:**
All electrical parts are tested i.e. power supply, power and signals cables, control signals etc. Electrical immunity is tested according to industrial standards i.e. for radio noise, electrical discharge and burst.*

- **EN/IEC 61000-6-4** - Generic standard emission industry
- **EN/IEC 60204** - Electrical equipment of machinery
- **EN 50121-3-2** - Railway applications - Rolling stock apparatus
- **94/25/EC** - Recreational crafts directive
- **EN/ISO 13766** - Earth moving machinery
- **EN/IEC 61000-6-2** - Generic standard immunity industry
- **2004/104/EC** - Automotive Directive
- **EN/ISO 14982** - Agricultural and forestry machines
- **EN/ISO 13309** - Construction machinery

* These tests do not apply to third party products!

**Mechanical tests:**

**Vibration:** The actuator must withstand continuous vibration in three directions.

**Shock:** The shock test puts the actuator through 3 shocks of up to 50 G in each of six directions.

**Bump:** The actuator receives bumps of up to 30 G in each of six directions several hundred times.

- **EN60068-2-64 (Fh)** - Random vibration
- **EN60068-2-27 (Ea)** - Shock
- **EN60068-2-29 (Eb)** - Bump

Find out more about how we test actuators to the extreme:
linak.com/segments/techline/tech-trends/testing/
LINAK has a world-class sales and service organisation. Today we are present in 35 countries all over the world. For further information, please visit our website: LINAK.COM