

TECHLINE  
IMPROVING FLEXIBILITY

Focus on  
the food and beverage industry

[LINAK.COM/TECHLINE](http://LINAK.COM/TECHLINE)

**LINAK**®   
WE IMPROVE YOUR LIFE



# Understanding your needs

Companies within the food and beverage industry face many daily challenges. Besides the constant attention to process optimisation there has come ever more focus on ergonomic working conditions. Investigations indicate that an ergonomically correct working posture can be a contributory factor to preventing work-related injuries.

Furthermore, electric actuators contain no toxic or potentially harmful oil, which makes electric actuator systems the perfect solution for the food industry.

The stainless steel actuators from LINAK® offer advanced automation and optimal adjustment of working facilities within the food and beverage industry.

## What can LINAK offer you:

- The ideal electric actuator solution for adjustments, tilting, pushing, pulling and lifting with thrusts up to 15,000N
- An environmentally friendly design – no risk of leakage of dangerous liquids causing contaminated food
- Maintenance-free products that have been thoroughly tested to withstand strong detergents and other cleaning demands
- A wide product range
- Actuators that are easy and fast to operate by means of hand controls, remote controls or switches
- High speed and low power consumption
- Actuators that are designed to operate under harsh and rugged conditions with vibrations
- Low noise level

*“With an electric linear actuator system from LINAK, there is no risk of leakage of dangerous liquids causing contaminated food. Also, an ergonomic work environment can prevent work-related injuries.”*

## LINAK as your partner

We do not want to be merely another supplier to our customers. We want to be your partner.

When partnering with LINAK® you get more than just a product in your hands. All members of the TECHLINE team of engineers and consultants have vast product and application expertise and it is our goal to create added value to our customers by offering innovative solutions, extensive knowledge, world-class production and global presence.

## LINAK offers service worldwide

Please contact your local LINAK office with your enquiry



# What LINAK actuators do for the mixer kettle

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The food and beverage industry relies heavily on manual processes, but electric linear actuators from LINAK® make it possible to replace manual work with automated solutions. To the user of a mixer kettle this means easy operation of the machine when e.g. tilting the kettle.



## Tilting function

Easy tilting of the mixer kettle



# What LINAK actuators do for the industrial kitchen table

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LINAK® products need no maintenance and are an ideal choice for stainless steel kitchen tables that are exposed to water and different kinds of grease on a daily basis.

Furthermore, with an automated actuator solution from LINAK, employees can be spared straining work postures as the kitchen tables can be individually adjusted according to demand. This improves the working environment for the individual employee and can contribute to reducing the absenteeism in the long run.



### Height adjustment

Adjustment of the table height for an ergonomically better working posture



# What LINAK actuators do for the industrial dishwasher

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Actuator solutions from LINAK® provide safe and easy electric linear movement in various industrial environments. LINAK actuators are lightweight and precise and have smooth motion control as well as reliable performance.

For the industrial dishwasher, LINAK actuators offer automated opening and closing of the hood, which improves ergonomics and ensures simple operation of the machine.



### Hood opener

Easy opening and closing  
of the dishwasher hood

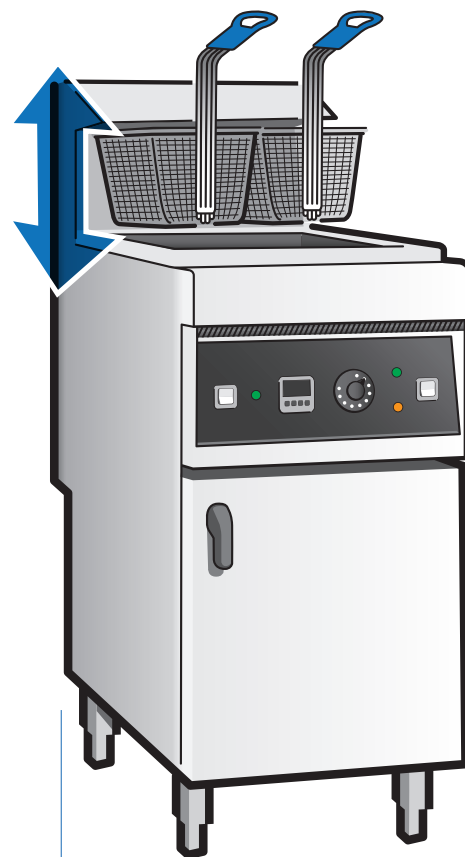
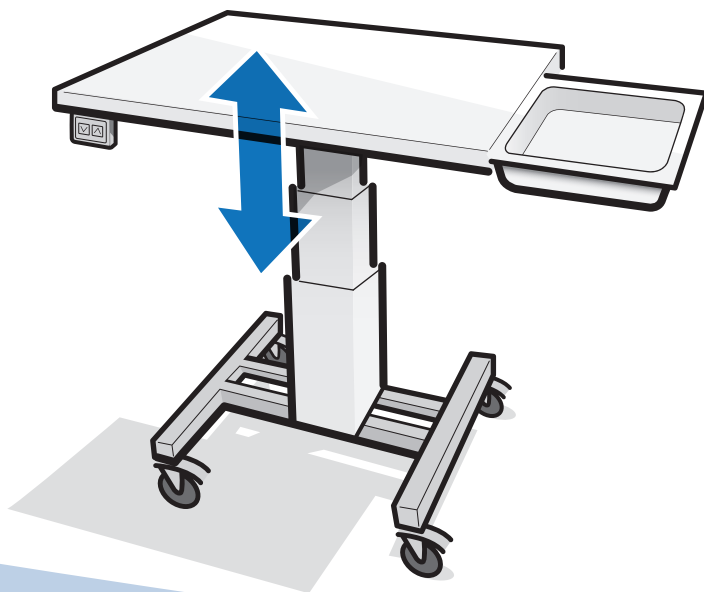
# What LINAK actuators do for the food and beverage industry

LINAK® actuators ensure user-friendly operation as well as high-quality and long lasting performance in various applications within the food and beverage industry.

Due to their high flexibility the actuators can easily be customised for a specific solution. Their small size and ability to interface with programmable control systems makes installation into applications even easier.

## Kitchen trolley

Height adjustment of the trolley, ensuring optimal working posture



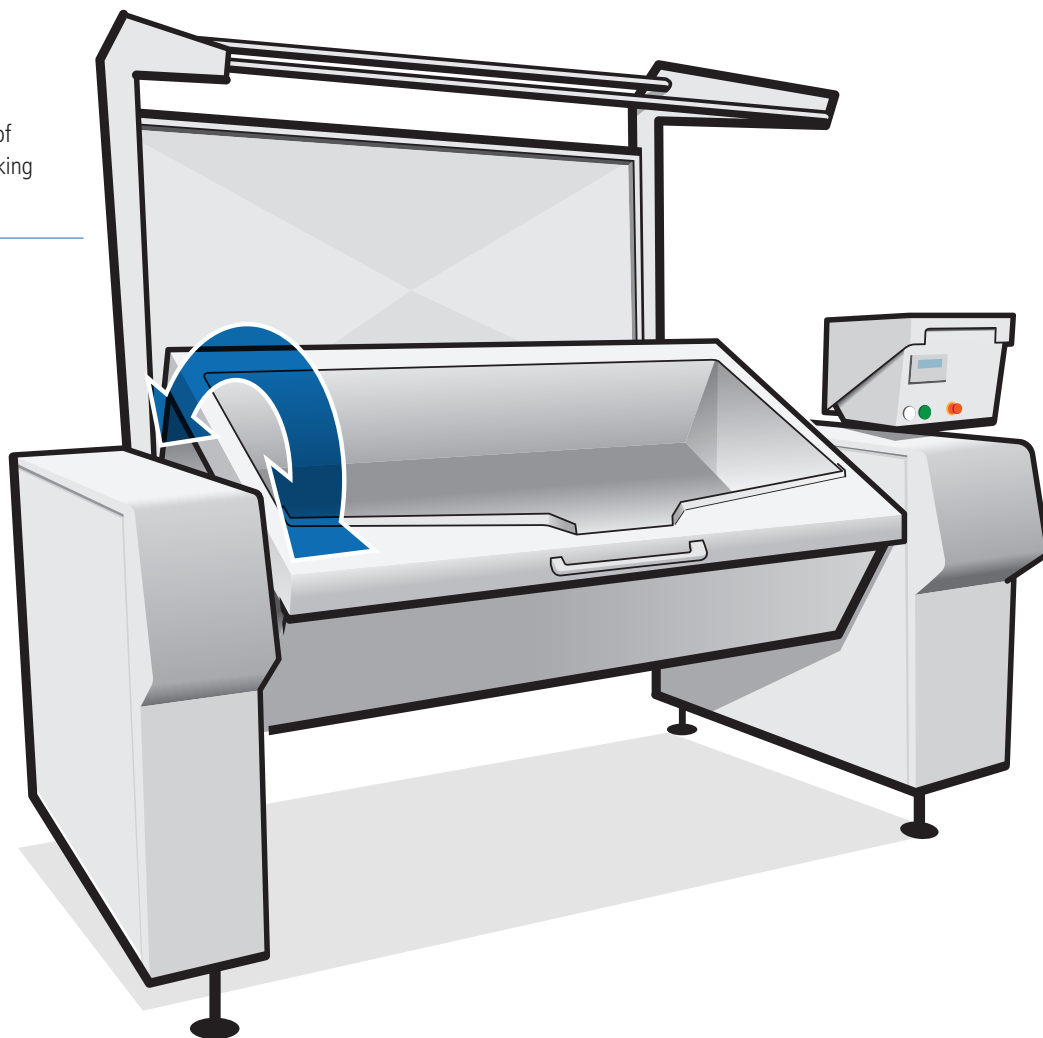
## Fryer

Automated lifting of the frying basket when the food is ready

### Bratt pan

Height adjustment and tilting of the pan, ensuring optimal working posture and easy cleaning

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# Explore the rich technology behind actuators

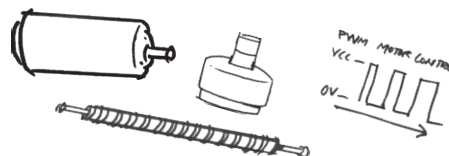
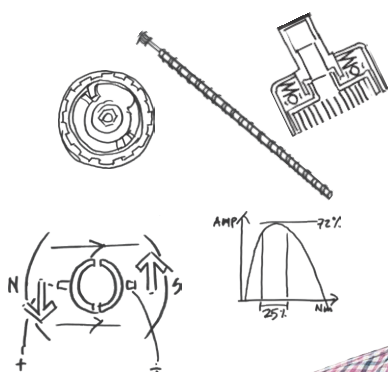


At the Actuator Academy™, you will find a library of videos and information about actuator components, actuator testing, and intelligent actuator control.

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.

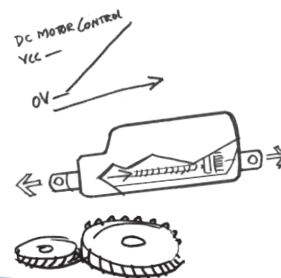
We hope to inspire you and ultimately make you wiser on the moving electric revolution we are all part of.

**Happy exploring!**

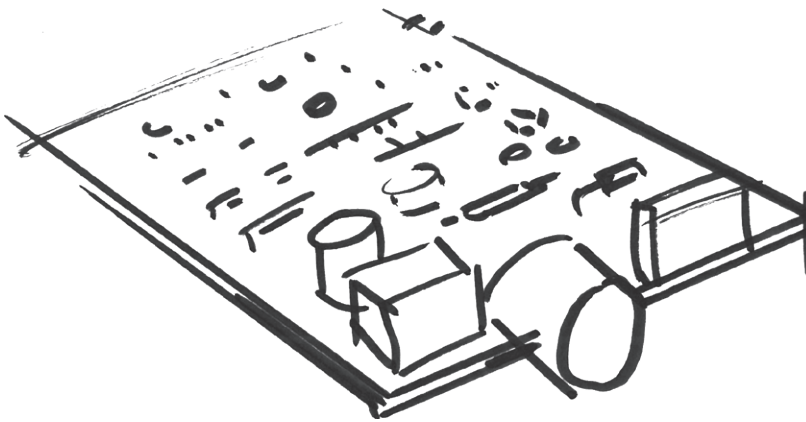


Check out the  
Actuator Academy

**LINAK.COM/  
ACTUATOR-ACADEMY**



# Intelligent movement for food and beverage



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 food and beverage, 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

## IC INTEGRATED CONTROLLER™

- Plug & Play and customisation
- Parallel run
- BUS communication (CAN, MOD and LIN)

For more information on IC, please visit [LINAK.COM](http://LINAK.COM) or scan the QR code



# Actuators for the food and beverage industry

LINAK® industrial actuators offer a versatile array of movement solutions for food and beverage.

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



Actuator LA31



Actuator LA25



Actuator LA23



Actuator LA14



Actuator LA12



Accessory SMPS-T160





We understand your business

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On the cooperational side, it must be easy for our customers to do business with LINAK®. Therefore, we offer both standard components and customised solutions according to demand. In close cooperation with our sales engineering team you can develop an optimal solution that fits perfectly to your task and demands.

Our LINAK TECHLINE® division is committed to offering innovative solutions that help improve life for you and for the end-user of the system.



In-depth knowledge of the market and the market trends makes LINAK a true solutions provider.

# Testing programme

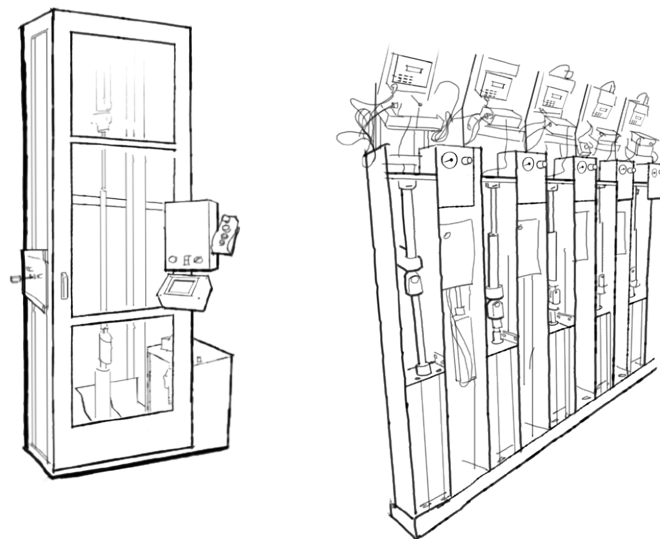
In each industrial application, the actuator is just one component of many, but at LINAK® we fully appreciate that it is of utmost importance to you and your customers. Not a single actuator leaves the factory until it has undergone a 100% function test.

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**

**EN60529-IPX6**

**ISO16750- IP69K**

**IEC60068-2-3**

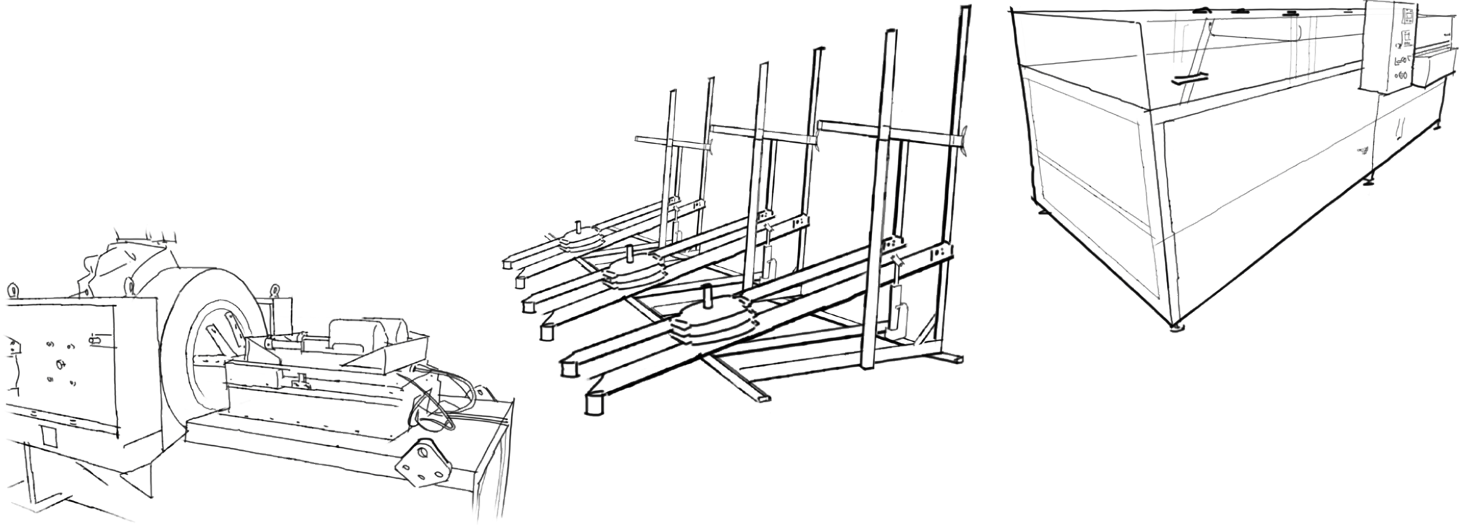
**IEC60068-2-30**

**ISO16750-4:2010**

**EN60068-2-52**

**BS7691 Section 6.11.2.4**

- Dust
- Water
- High pressure cleaning
- Moisture storage
- Operation in moisture
- Dunk test
- Salt spray
- 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. \*

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

### 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/](https://linak.com/segments/techline/tech-trends/testing/)



\* These tests do not apply to third party products!



For further information, please visit our website:  
**LINAK.COM/BUSINESS-AREAS/INDUSTRIAL-AUTOMATION/FOOD-AND-BEVERAGE-AUTOMATION/**

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Built by market leading experts, using state-of-the-art technologies and perfected production methods, you can expect the same quality worldwide.



Innovation is in our core. We take the lead and have the courage to make it real.



We are responsible in what we do – towards customers, employees and environment. Creating trust and taking care is in our DNA.



From global presence to local understanding. We believe in world-wide support and being close to our customers.