

A Schaeffler Company



# Solutions for food and beverage



# The heritage of innovation

Ewellix is a global innovator and manufacturer of linear motion and actuation solutions. Our state-of-the-art linear solutions are designed to increase machine performance, maximise uptime, reduce maintenance, improve safety and save energy. We engineer solutions for assembly automation, medical equipment, mobile machinery, distribution and a wide range of other industrial applications.

#### Technology leadership

We earned our reputation through decades of engineering excellence. Our journey began over 50 years ago as part of the SKF Group, a leading global technology provider. Our history provided us with the expertise to continuously develop new technologies and use them to create cutting edge products that offer our customers a competitive advantage.

In 2019, we became independent and changed our name to Ewellix. We are proud of our heritage. This gives us a unique foundation on which to build an agile business with engineering excellence and innovation as our core strengths.

#### Global presence and local support

With our global presence, we are uniquely positioned to deliver standard components and custom-engineered solutions, with full technical and applications support around the world. Our skilled engineers provide total life-cycle support, helping to optimise the design, operation and maintenance of equipment thus improving productivity and reliability while reducing costs. At Ewellix, we don't just provide products; we engineer integrated solutions that help customers realise their ambitions.



# Schaeffler Group – We pioneer motion

Ewellix is since 2023 owned by the Schaeffler Group. As a leading global supplier to the automotive and industrial sectors, the Schaeffler Group has been driving forward groundbreaking inventions and developments in the fields of motion and mobility for over 75 years.

With innovative technologies, products, and services for electric mobility,  $CO_2$ -efficient drives, Industry 4.0, digitalization, and renewable energies, the company is a reliable partner for making motion and mobility more efficient, intelligent, and sustainable.

Schaeffler manufactures high-precision components and systems for powertrain and chassis applications as well as rolling and plain bearing solutions for a large number of industrial applications.



### **EWELLI**×

# Spice up your food processing

The food and beverage industry is currently facing major challenges related to an evergrowing population. The need to significantly reduce energy consumption and the amount of waste, as well as the increasing labour shortages, reinforce the demand for higher productivity and automation.

Ewellix offers innovative and energy-saving linear motion solutions with the highest safety standards, enabling the food and beverage industry to overcome many of its challenges and increase operational efficiency.



Ewellix offers a full range of linear motion solutions suitable for food and beverage equipment that provides:

- Fast, precise and reliable linear motion
- High productivity
- Excellent repeatability with high positioning accuracy
- Oil free solutions
- Compact and robust design
- Long service life
- Virtually maintenance-free

# Ewellix value proposition

- High performance products with high reliability
- Extensive industry experience and knowledge
- · Energy saving solutions
- Strong customisation and engineering capabilities
- Global presence and support

### **Filling stations**

Filling and dosing stations are measured on precision and efficiency. Different container sizes, liquid types and dosages require flexible machine settings.

Ewellix offers linear motion solutions with increased efficiency, higher precision, and more flexibility compared to mechanical and pneumatic valve control solutions.

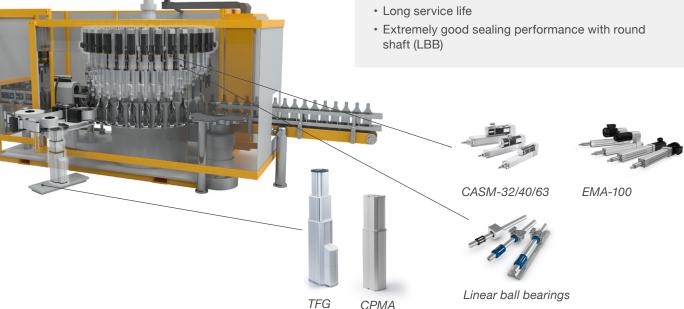
#### **Ewellix solutions**

#### Features

- · High dynamics and high speed, force capacity
- System efficiency (energy), reliability (work hours), productivity (output)
- Easy integration
- High rigidity
- Robust actuator
- Food grade grease

#### **Benefits**

- · Easy position control and accurate positioning
- · Cost effective position control
- · Short set up time



#### Lifting columns

	TFG	СРМА
Rated push load	2500 N	up to 2000 N
Bending load	up to 500 Nm	up to 250 Nm
Retracted length	Stroke + 130 mm	Stroke + 160 mm
Speed	up to 19 mm/s	up to 15 mm/s

#### High-performance actuators

#### Linear ball bearings

	CASM-32/40/63	EMA-100		LBB
Dynamic axial force	up to 5.4 kN	up to 82 kN	Size and range	3 to 80
Dynamic load capacity	up to 21 kN	up to 106 kN	Dynamic load rating	up to 37,5 kN
Speed	up to 1 067 mm/s	up to 890 mm/s	Speed	up to 5 m/sec
Stroke	up to 800 mm	up to 2 000 mm	Acceleration	up to 100 m/ see

## **Commercial grills**

Commercial grills can be found in most professional kitchens, from fast-food to fine dining restaurants. With the increasing shortage of skilled workers and rising wages, more and more restaurant operators are looking for ways to simplify their work and improve the consistency and quality.

There are commercial grills on the market that perfect the art of grilling skewers, burgers and vegetables by carefully controlling the temperature, time, pressure and spacing between the top and bottom grill plates depending on the food being cooked.

Ewellix linear actuators with smart control and force sensing is a core part of these new generation of grills. Ewellix has both a standard range available for direct integration and the ability to customise a solution to meet the needs of your machines.

#### **Ewellix solutions**

#### **Features**

- · Ingress protection against water, dust and oil
- Position and force control with BLDC motor
- Long service life with large ball screw and BLDC motor
- Food grade grease
- High safety standards (self-locking, overload protection, thermal switch)
- · Stainless steel push tube and fittings
- Actuator ensures perfect gap accuracy between upper and lower grill plates
- Virtually maintenance-free

#### **Benefits**

- Ensures consistent food quality, standardised cooking
- Simple handling
- Cost effective solution
- No maintenance cost
- · Safe operation with and without power
- · Long service life



CAT 32B



CAP 43B

#### Linear actuators

	CAT 32B	CAP 43B
Rated push load	up to 4 000 N	up to 4 000 N
Rated pull load	up to 4 000 N	up to 4 000 N
Speed	up to 52 mm/sec	up to 65 mm/sec
Retracted length	S+167/175/206 *	S+167/175/206 *

\*Dimension depends on selected front attachment

### **Boilers and mixing tumblers**

Fast and automated kitchens are becoming increasingly popular, and equipment needs to be automated and optimised to ensure high production output with consistent quality and controlled functions.

The boiler can be tilted by the actuator to drain liquids. In addition, the lid can be opened effortlessly with the help of an actuator. A plug-and-play and cost-effective solution that offers safety and convenience in handling.

#### **Ewellix solutions**

#### Features

- Easy integration
- Robust actuator
- High safety standards
- · Enable effortless opening of the upper lid
- Low energy consumption
- · Virtually maintenance-free

#### **Benefits**

- Safety and comfort in handling
- Easy integration plug-and-play-system
- Cost effective solution
- · Easy standardised cooking
- Long service life



Runner

#### **Linear actuators**

	Runner	MAX7
Rated push load	up to 12 000 N	up to 8 000 N
Rated pull load	up to 8 000 N	up to 6 000 N
Speed	up to 15 mm/sec	up to 18 mm/sec
Retracted length	S+215/315 mm) *	S + 215/280 mm) *

\* S≤ 500 mm; L = S + 215 S≤ 500 mm; L = S + 315

## **Automated professional kitchens**

Fast and automated kitchens are becoming increasingly popular, especially for restaurants, as they help to close staff gaps, speed up processes, shorten waiting times and extend opening hours.

Thanks to the extended reach of the plug-and-play SLIDEKIT, one robot can operate between different kitchen appliances. Automated kitchens allow hygienic cooking with consistent quality at any time.



#### **Ewellix solutions**

#### Features

- Longest stroke on the market to extend the operating range of the robot by up to 3 times
- Compact footprint
- Plugin included
- Emergency stop connection to robot up to safe torque off (STO) PLe, Cat.4
- Silent and smooth motion
- General purpose version available for all cobots, controlled via digital I/O or Ethernet TCP/IP
- · Speed control and acceleration of the SLIDEKIT
- · High accuracy and repeatability

#### **Benefits**

- Extension of the reach enables the use of a cost-effective robot
- Enhanced integration in the customer application
- 7th axis range extender control integrated into cobot software and teach pendant
- Plug-and-play solution reduces time to market
- Fast safety certification process
- Increased productivity and shorter return on investment
- · Flexible and precise motion



SLIDEKIT

#### 7th axis for robots

	SLIDEKIT
Max. dynamic payload	10 900 N
Max. speed	1 000 mm/s
Max. stroke	3 000 mm
Accuracy	± 0,01 mm

# Labelling machines

Product labelling is a fully automated process and used in many industries in food and beverage. The labels need to be fixed on products at different positions. Ewellix linear ball bearings and profile rail guides are perfect solutions for precise motion at labelling stations. Different stainless steel variants and coatings are available on demand.

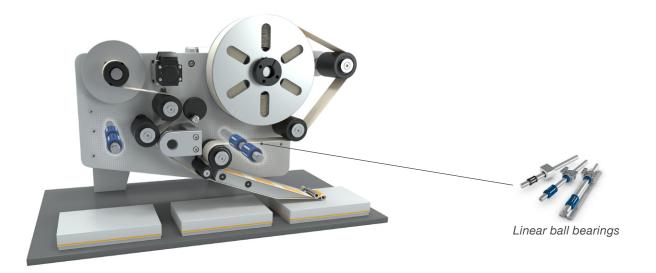
#### **Ewellix solutions**

#### Features

- Stainless steel variant of linear ball bearing and shafts
- H1 graded grease options
- Simple integration
- Reliable product

#### **Benefits**

- · Easy realisation with standard bearing units
- · Shafts used as guide and structure element
- · Corrosion resistant
- Low maintenance as bearings are pre-lubricated
- Very long service time



#### Linear ball bearings

	LBB
Size and range	3 to 80
Dynamic load rating	up to 37,5 kN
Speed	up to 5 m/sec
Acceleration	up to 100 m/ sec <sup>2</sup>

### **Coffee machines**

Comfort and ease of use are a must for many devices. They need to be equipped with advanced features that improve handling and comfort. As in the coffee machine example, the linear ball bearings ensure smooth movement to adjust the height of the filling head to the cup size to avoid splashing at different dispensing heights for increased comfort and ease of use.

#### **Ewellix solutions**

#### Features

- Simple integration
- Low friction
- · Ready to install factory pre-lubricated products

#### **Benefits**

- Easy product integration
- · Virtually maintenance free
- Low friction and robust design
- Wide assortment for almost every application
- Very long service time



Linear ball bearings

#### Linear ball bearings

	LBB
Size and range	3 to 80
Dynamic load rating	up to 37,5 kN
Speed	up to 5 m/sec
Acceleration	up to 100 m/ sec <sup>2</sup>

# Your engineering partner

### Customisation

With more than 50 years of experience, Ewellix provides customers with tailor-made solutions that fit any application needs. Our extensive product knowledge, combined with engineering expertise, transforms customer needs into tailored solutions. Focusing on client-specific requests, our engineers help customers develop and implement cost-effective solutions to optimise the performance of the application.



EMA made of stainless steel



CASM with spring around the push tube



Cylinder with very long stroke length

### **Testing capacities**

All our products are extensively tested for their key parameters according to a comprehensive test plan that covers all regulatory and environmental requirements and meets the most stringent industry standards. We are able to test all components down to the ball or roller screw. In addition, we can simulate mechanical, electrical and environmental application conditions.



Vibraton test



EMA testing



Roller screws testing

# Supporting tools

### **Digital tools**

Ewellix has developed numerous online tools to help customers select and calculate the most suitable Ewellix product for their application.

#### Actuators select

- Product selection
- Performance calculator
- Cost-saving calculator

https://www.ewellix.com/en/product-selectors/actuator-select

#### Linear guides

- Product selection Product calculator
- Cross-reference
- Product search

### **Publications**

Supporting documents are available for downloading on ewellix.com on each product page under the technical data section:

- Operating manual
- Mounting instructions

EMA-100



Click to open

#### CASM-32/40/63

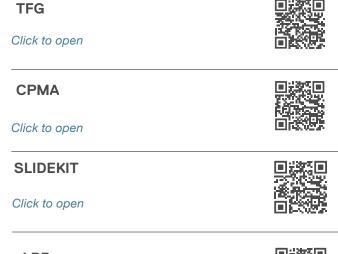
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MAX7

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LBB

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