

## Ewellix applications

Linear motion solutions from Ewellix give customers in the factory automation, medical and mobile machinery sectors the ability to increase the performance, functionality and capability of automation systems and processes.

### 1. Medical

Ewellix's components and systems for core medical equipment are found in imaging, surgical and laboratory equipment. Products meet the highest safety standards in the sector, while creating opportunities for customers to develop new and innovative linear motion solutions.

#### **Typical applications:**

##### **Procedure chairs and surgical tables**

Electrical actuation and linear guide systems are used in a wide range of procedure chairs and surgical tables. The electrical components – actuators, pillars and control boxes – are UL certified and easy to integrate, providing a robust design in a cleaner way compared with traditional fluid power systems.

##### **Imaging tables and equipment**

Ewellix's linear motion applications are robust, reliable and ergonomic and used in nearly all imaging technologies, including CT, SPECT, PET, MRI, Angiography, Mammography, mobile C-arm and standard x-ray applications as well as oncology treatment equipment.

##### **Laboratory equipment**

Ewellix's linear products are used in clinical laboratories worldwide. The company's newest range of high-performance miniature ball screws and profile rail guides provides lower noise, smooth running, high speed and reliable precision, driving automation performance throughout the lab, from robotic workstations to clinical chemistry, immunoassay and



hemostasis analysers. Results include streamlined workflows, improved processes and more reliable analytics.

**Benefits:**

**Actuation system products**

- A wide medical range covering actuators, telescopic pillars, control boxes and accessories, plus components and sub-systems
- Tailor-made innovation to medical applications, from basic mechanical motion to internet connected solutions

**Linear guide products**

- A complete linear guide range, in an extensive range of sizes and designs, from medium to high precision and stiffness.
- Performance optimisation, minimising noise and friction, while maximising rigidity, service life and safety

**2. Industrial Automation**

Ewellix's wide range of linear motion products and electromechanical actuators are ideal for all automation applications, helping customers increase productivity, quality and safety, while reducing total cost of ownership.

**Key application areas:**

- Materials forming, such as metal forming servo-presses and plastic injection moulding
- Material joining, including spot welding, riveting, gluing, clinching
- 7th axis robot for automation handling, for instance in the field of cobotic



**Benefits:**

- High speed with exceptional positional accuracy
- Improved safety and machine usage via connected sensors
- Reduced system footprint to optimise machine layout
- Energy savings due to higher efficiency and power-on demand
- Low or no maintenance required

**3. Mobile machinery**

Ewellix's wide range of electro-mechanical actuators are used in a wide range of mobile machine applications to improve productivity, energy efficiency and safety while reducing operating costs. Ewellix works closely with OEMs to develop technical and commercial solutions for their customers.

**Key application areas:**

- Agricultural and off-highway equipment such as combine harvesters, rounded baler, and construction machines
- Lifting equipment such as scissor lifts and platforms
- Special vehicles including, fire vehicles, refuse trucks, road sweepers and golf cars

**Benefits:**

- Complete process control with position feedback and IoT sensors
- Higher system efficiency and power-on demand operation
- No fluids in high pressure applications
- Low noise in operation
- No leakage and risk of pollution from hydraulic fluids
- Enabler for full-electric equipment
- Increased efficiency for reduced CO2 emissions

**4. Linear Motion**

Ewellix's major strength lies in its ability to combine its linear motion components knowledge and expertise to design the best and most suitable actuation solutions.



The company has extensive experience providing the market with high performance and customised linear solutions to enhance customer applications. Its leadership position in ball and roller screws technologies and the wide range of guiding solutions allows it to design modular solutions for any type of customer applications in the field of medical, industrial automation, automotive assembly or servo presses.

**Benefits:**

- High load and high duty cycle products with access to the roller screws technology to replace fluid power technologies.
- Low noise and smooth running for miniature linear motion range
- Wide range of solution of screws (ball and roller) and guidings (ball bearings, profile rail guides, precision rail guides
- Ability to develop tailor made innovating linear motion solutions
- Global manufacturing set up and adaptation to local needs

**5. Controls, sensors and analytics solutions**

Ewellix is at the forefront of innovation and placing digitalisation in its DNA and value proposition for its products. Ewellix has extensive experience working with controls and motors solutions. Its full range of controls are medically approved, guaranteeing a system that is robust and stable over time.

Ewellix has a wide range of motors and attachments to ensure the right match between customer needs and the performances of the actuators.

Digitalisation is opening up fantastic opportunities to improve the behaviours of actuators in customer applications. Indeed, by being able to consistently measure, transfer and analyse the temperature, vibration, or force of a running actuator, Ewellix can improve the condition monitoring of the actuator integrated into the machine. This includes increasing lifetime, protecting machines, improving reliability and planning maintenance.

**For further information, visit [www.ewellix.com](http://www.ewellix.com)**