

components, systems and support

- LABORATORY AUTOMATION
- TEST & DEVELOPMENT
- SCIENTIFIC RESEARCH
- PROCESS AUTOMATION



motion
TECHNOLOGY



LG Motion motion solutions for the professional



motion

TECHNOLOGY

Providing the enabling motion control and automation technologies for leading manufacturers and research enterprises around the world.

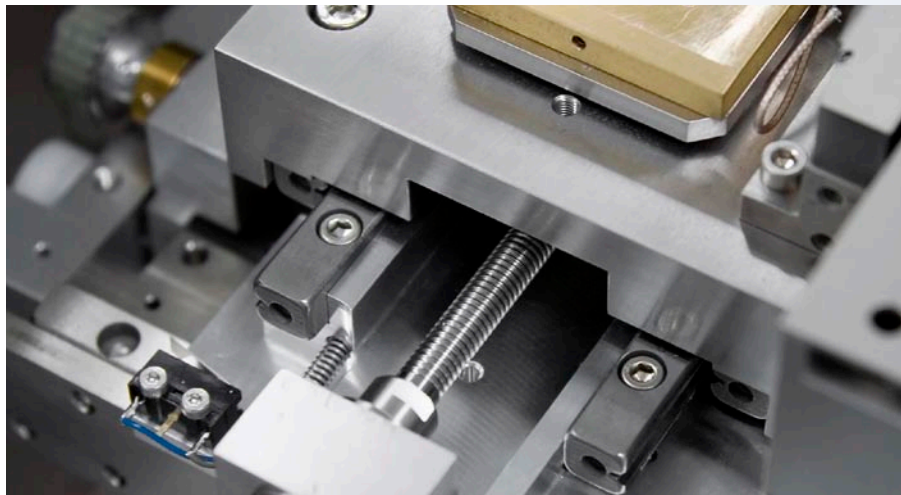
Enabling high technology through design and manufacturing innovation

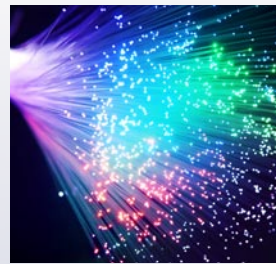
LG Motion Limited is ready to supply you with motion technology components, mechatronic assemblies and complete motion sub-systems. As a leading designer and manufacturer of high precision automation equipment, we successfully work with leading manufacturers and research institutes across all areas of industry and science.

Our value-add service allows you, the manufacturers and scientific institutes, to reduce the time and cost of development, production and research



by concentrating on your own area of technological expertise. This keeps you safe in the knowledge that the important 'enabling technology' functions of precision positioning, motion and machine control are designed and tested to your own exacting specifications, fully tested and with complete support.





Engineering excellence - by design

Our positioning and machine automation system solutions improve productivity, increase manufacturing flexibility and raise throughput rates, helping you, our customers, to reinforce the important value propositions that you need your own clients to embrace.

LG Motion's design and manufacturing capability is complemented with distribution partnerships that bring the latest advances in motion technologies and component design techniques from a select number of globally recognised suppliers. Our fully-equipped facilities are supported by 3D-CAD resources and the expertise that enables a complete design, visualisation and manufacturing service.

Commitment to service

LG Motion's engineering excellence is matched by a devotion to service, defined by complete focus and attention to detail at all stages of the project ensuring a long and successful relationship with you.

From first contact, through specification, design and manufacture to delivery and commissioning, LG Motion guarantees a high quality of service that extends to design review, maintenance plans and comprehensive training.

Recognising the growing importance of integrated systems, our software specialists are able to provide customised GUIs based on the latest software platforms as well as bus-based communication protocols for a broad range of process and machine control.

- Design
- Manufacture
- 3D visualisation
- Installation
- Training
- Programming
- Panel builds
- Maintenance
- Distribution
- Custom systems

“ Thank you for a very quick and very productive response, very much appreciated... ”
Thales



motion

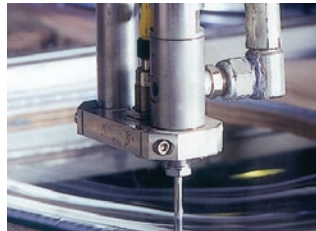
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World-class motion solutions

LG Motion design, manufacture and deliver tailored solutions across a wide range of technologies and markets.

Goods received, amazed at quick turn around, thank you

Rutherford Laboratory



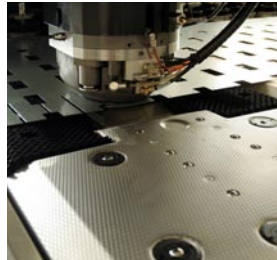
You can tap into our valuable application experience. LG Motion successfully work across production, inspection and test equipment projects in market sectors that include aerospace, defence and automotive manufacturing, medical devices, semiconductor, pharmaceutical production machinery and many more.

LG Motion also contributes innovative micro-positioning solutions for research that enable ground breaking studies in areas such as nanotechnology, biomedicine and high energy particle physics. Many of the current projects have long development timescales and will not be realised by the 'man in the street' for several years.





Typically combining precision mechanics, linear and/or rotary motors, control electronics and software as complete mechatronics assemblies, our applications are as diverse as positioning biomedical sensors to within a few thousandths of a millimetre for cancer drug research, helping film makers precisely synchronise the movement of multiple cameras for the latest generation of 3D movies, or providing packaging machine manufacturers with innovative cost reducing multi-axis motion controls. Our applications expertise aims to give you a distinctive market edge.



Some of the wide range of industries benefiting from LG Motion technology:

- *Life sciences*
- *Aerospace*
- *Semiconductor*
- *Medical*
- *Research*
- *Defence*
- *Nuclear*
- *Automotive*
- *Packaging*
- *Process*



“As with all your work, a beautiful piece of kit!”
Guy Hilton
Research Centre



motion

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Leader in motion technology engineering

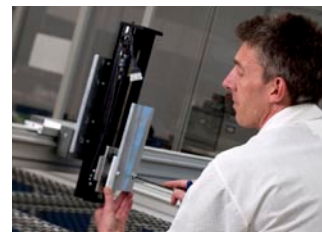
We maintain links with other specialist manufacturers and suppliers around the world so that you have a unique resource to call on.

LG Motion provides you enviable access to the technical resources of some of the major motion technology companies in the industry through our active co-operation with international distribution partners.

As mechanical and electronic disciplines merge into an integrated whole, LG Motion provide you with a comprehensive service that embraces all aspects of system engineering. Our creative approach to system integration positions us as a leader in full service motion control engineering and system design.

Thanks for a great job; if all our suppliers gave the same level of service life would be a lot easier!

AWE



Advanced positioning equipment range

The range of motion products from LG Motion offer size and technical advantages whether for a new application or an established process.



LG Series

The LG series of precision Linear, Rotary & Elevator stages offer compact size, high accuracy and exceptional value. The design versatility allows units to be easily configured to meet unique requirements from the very basic to the highly complex.

Features

- Precision linear bearings, loading up to 1000kg
- Modular design to make multi-axis combinations simple to assemble
- Encoder feedback, motor types and environmental rating options



Linear Dovetail Slide Assemblies

Linear dovetail slides continue to be one of our most successful products. Their simple design and versatility enables them to be used as manual or motorised units, in single- or multi-axis configuration. Over 1 million units successfully proven in thousands of applications across science and industry.

Features

- Unique rigid and impact resistant dovetail design
- Non-magnetic and corrosion resistant
- Suitable for vacuum, 10^{-6} torr



Schneberger Linear Bearings

SCHNEEBERGER laid the foundations for the worldwide linear technology of today. The most important manufacturers of machine tools, high-tech plants and medical equipment all over the world rely on units from Schneberger.

Features

- Precision linear bearings, guides and slide assemblies
- Complete integrated measurement system options
- Vacuum and cleanroom compatible options

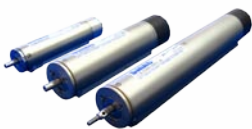


Heidenhain Optical Encoders

HEIDENHAIN develops and manufactures optical feedback devices. These include the measuring and inspection devices supplied for many of the world's standards laboratories as well as angle encoders for various telescope projects and satellite receiving antenna.

Features

- Linear, rotary and angular encoders
- Accuracy grades $\pm 0.5\mu\text{m}$ (linear) and $\pm 0.4''$ (angular)
- Measuring steps to 1nm (linear) and 0.018'' (angular)



SMAC Moving Coil Actuators

The SMAC moving coil actuators are unique and give unprecedented programmable control of speed, position, and force, solving many problems found in a variety of industries. Superb for positioning, measuring, inspection and pick & place applications.

Features

- Absolute control over: force, position, acceleration and velocity
- Accuracy to 50nm and acceleration to 50g
- Exceptionally long lifetime – 100million life cycle without maintenance



PMDi

PMDi is a global leader in high performance motion control. Serving the fast moving growth industries of aerospace, automotive, advanced machinery, data storage, medical, military, semiconductor, optics and photonics.

Features

- World's leading platform for the control and synchronisation of servos
- High frequency control loops of 200kHz for picosecond synchronisation
- Advanced computation and data acquisition



Empire Magnetics 'motors that survive'

Empire Magnetics design and manufacture quality motor products to perform in environments and applications where ordinary motors are unsuitable.

Features

- Vacuum, radiation hardened, waterproof, dustproof, hazardous area, cryogenic
- Custom systems, combinations and modifications are available upon request



LG Motion

“...where individuals
can experience the
emotion of achievement
by applying knowledge
and technology...”

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ISO 9001:2000
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