

OEM AUTOMATIC



**MACHINE VISION &
CODE READING**

2020

5 PRODUCT AREAS – 1 TRUSTED PARTNER



PANEL

Electrical components for inside and outside control panels



SENSORS & SAFETY

Sensors, encoders, connection systems and machine safety components



MACHINE VISION & CODE READING

Components and software for machine vision applications



PRESSURE & FLOW

Components to measure and control the pressure, flow and level of liquids and gases



MOTORS

AC and DC motors, electronic drives and linear solutions

WIDE PRODUCT RANGE – SPECIALISED ORGANISATION

We are a competent and effective partner, organised into business areas with their own sales, product and customer support staff.

By organising in this way we have the advantage of specialist staff with specialist knowledge of the wide product range in each area.

MANUFACTURERS

Manufacturers who collaborate with OEM are guaranteed a strong UK sales and marketing partner with:

- Local market knowledge
- Promotion of brand
- Local technical & sales staff
- Fast response to customers
- Feedback about customers' needs
- Efficient logistics operation

OEM

CUSTOMERS

Customers who buy from OEM have access to market leading products from a solid and reliable partner with:

- A wide & deep product range
- Opportunity to reduce the number of suppliers
- High product & application knowledge
- Lower overall cost
- Accurate & on-time deliveries

PRODUCT RANGE

OEM Automatic offers a unique comprehensive range from leading manufacturers.

SALES PROCESS

OEM Automatic has an efficient sales process through personal selling and extensive product knowledge.

MARKETING COMMUNICATION

OEM Automatic promotes brands and products over multiple platforms to achieve the best results.

LOGISTICS

OEM Automatic has world class logistics.

OEM Automatic Ltd is part of the Swedish Group OEM International AB which is a public company listed on the Swedish stock exchange.

OEM AUTOMATIC LTD

- Established 1989
- Head office & warehouse in Leicester
- Turnover £12 million
- 50 employees
- 2,500 customers
- 50 suppliers

OEM INTERNATIONAL

- Established in 1974
- Headquarters in Tranås, Sweden
- Group turnover €300m
- More than 800 employees
- 30,000 customers
- 400 suppliers
- 34 companies in 14 countries

OFFICES

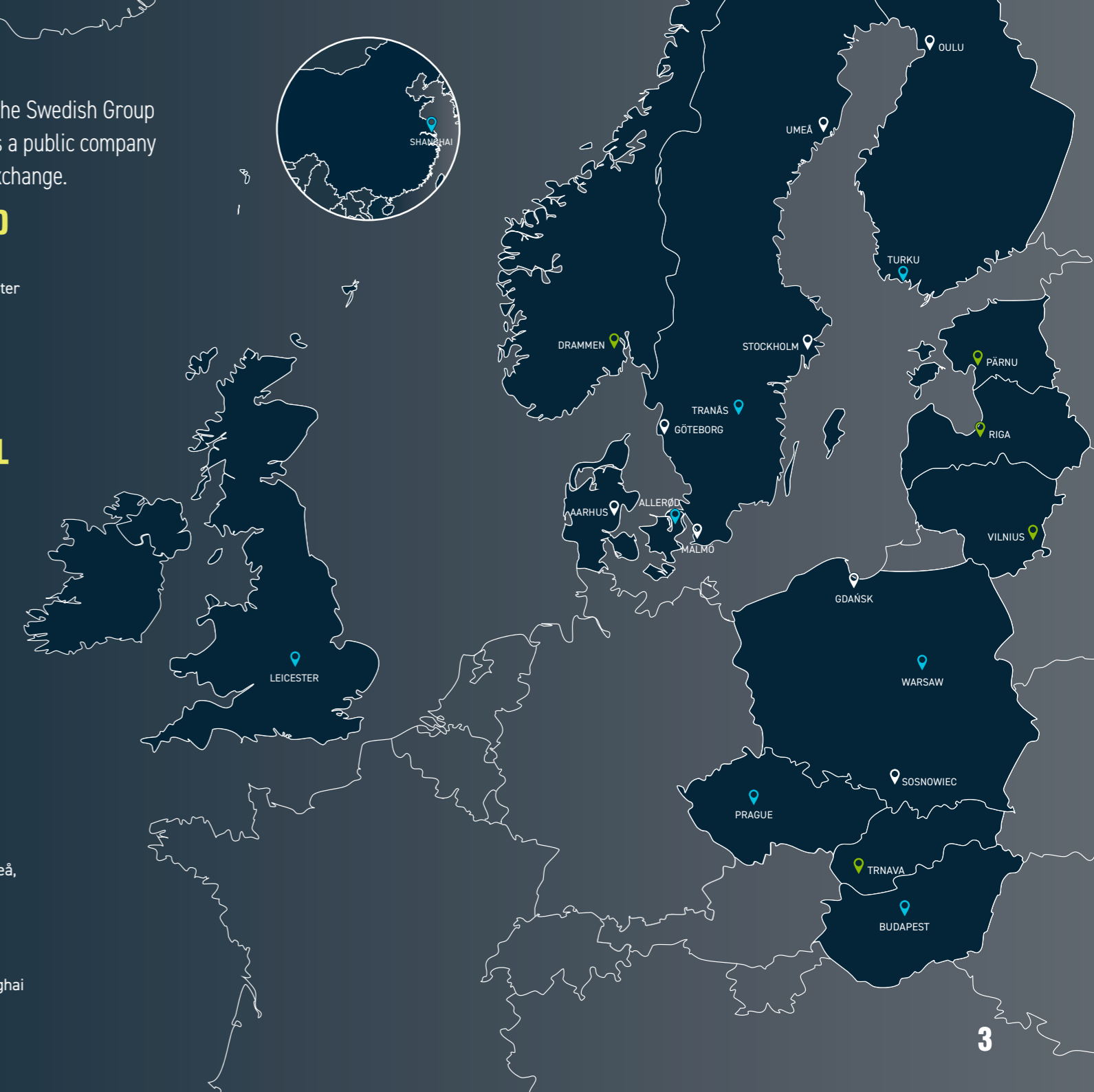
Drammen, Pärnu, Riga, Vilnius, Trnava

SALES OFFICES

Stockholm, Göteborg, Malmö, Umeå, Aarhus, Oulu, Gdansk, Sosnowiec

OFFICES & WAREHOUSES

Tranås, Allerød, Leicester, Turku, Warsaw, Prague, Budapest, Shanghai





MACHINE VISION & CODE READERS

OEM Automatic represents specialist leading brands within the machine vision, identification and code reading solutions sector. We offer a wide range of high-quality products at competitive prices.

Providing full technical advice on all aspects of product selection, we supply standard and customised products for demanding applications. A large selection is available from stock from our UK and European logistics centres.

Key factors

- Extensive application knowledge and experience
- Large range of products from leading manufacturers
- Guidance on product selection
- Development and demonstration facility
- Technical support

Support and service

Our team works closely with you from initial enquiry to project completion. We supply individual component parts of the hardware and software required for a complex multi-camera vision system.

Needs analysis

The requirement is closely assessed and the most suitable products recommended. Where appropriate, OEM Automatic will undertake in-house testing and involve component suppliers for their technical expertise.

Quotation

Once the technical aspects of an enquiry have been resolved, OEM Automatic will provide a formal fully itemised quotation.

Stock and call-off

OEM Automatic will stock frequently used items for same day despatch. We can offer scheduled delivery, order call-off and a kitting service to meet your production requirements.

Product training

We work in conjunction with our suppliers to offer a range of product training courses and materials.

After-sales support

Our customer commitment does not finish when an order leaves our premises. We are available to help in the unlikely event that issues arise.

GARETH FORD
BUSINESS AREA MANAGER



CODE READERS – LASER

- Excellent high speed 1D code reading
- Linear or Raster
- Built in Profinet & ETHERNET/IP*
- Full omni-directional pallet scanning

High performance laser scanners for 1D industrial barcode applications.

* on certain models



CODE READERS – IMAGE BASED

- Robust omni-directional 1D/2D code reading
- High power, DPM & polarised lighting options
- Built in Profinet & ETHERNET/IP*
- Easy to set up via DL.CODE

High performance 1D/2D imagers for industrial barcode applications.

* on certain models



CODE READERS – HANDLED AND EMBEDDED

- DPM options
- 1D & 2D scanning options
- Industrial IP rating and enclosure rating
- Embedded scan engines for Kiosk and OEM installations

Industrial, general purpose and embedded hand held 1D/2D scanners.



CAMERAS

- VGA to 61MP
- GigE, USB3, Camera Link, CoaXPress, BCON
- Up to 520fps
- Colour & Mono

Machine vision cameras from Basler, Datalogic & Sony.



SMART CAMERAS

- P, A & T series from Datalogic
- OCR & object-specific systems
- Modular design for total flexibility
- High IP rating

All-in-one smart vision camera solutions.



TIME OF FLIGHT CAMERAS

- Precise optical measurement over a large measuring range
- 2D and 3D data in one shot
- Light and contrast independent (within standard operating parameters)
- Real-time streaming of pre-processed 3D point clouds and 2D intensity images

3D camera operating on the pulsed Time-of-Flight principle.



LENSES

- High quality and cost effective
- Manual & Auto Iris
- 10MP+ models
- High vibration models
- Specialist model and custom configurations

Wide range of machine vision lenses from Azure, Basler, Kowa and Ricoh and many more.



OPTICAL FILTERS

- Bandpass, longpass, shortpass
- Polarising, chromatic and neutral density
- Range of sizes for thread mount and slip mount
- Non-standard shapes and sizes available

Optical filters from Midwest Optical, Effilux and Ricoh.



ILLUMINATION

- Huge and varied product range
- Large choice of wave lengths
- High IP rating options
- Adaptable and configurable

Vast range of machine vision lighting from Advanced Illumination, Basler (CCS), Effilux and others.



INDUSTRIAL PCS & MONITORS

- Atom to i9 processors
- Configurable to user requirements
- GPU options for advanced machine vision and AI (deep learning)
- Windows or Nvidia Jetson computer architecture

High quality and well supported range for industrial PC's and monitors.



FRAME GRABBERS

- CameraLink
- CoaXpress
- GigE
- USB

Interface cards, optimised for image transfer between camera and computer.



MACHINE VISION ACCESSORIES

- Camera mounting kits
- Ethernet switches
- Interconnection cables
- I/O modules
- Enclosures

A wide range of complimentary accessories for a total machine vision solution.



MACHINE VISION SOFTWARE

Adaptive Vision Studio

Powerful data-flow based software designed for all machine vision applications. Adaptive Vision Studio does not require programming skills, but it is still extremely fast, highly flexible and allows the rapid development and deployment of vision inspection solutions.

- Image Processing
- Blob Analysis
- Contour Analysis
- Planar Geometry
- Shape Fitting
- Camera Calibration
- Fourier Analysis
- Hough Transform
- Barcode Reading
- Data Code Reading
- Corner Detection
- 1D Profile Analysis
- 1D Measurements
- 2D Measurements
- Template Matching
- Histogram Analysis
- OCR

Drag & drop programming – Choose the analysis tool and connect them with each other. You can focus all your attention on computer vision and not coding.

You can see everything - Inspection results are visualized on multiple configurable data previews; and when a parameter in the program is changed, you can see the previews updated in real time.

HMI Designer - You can easily create custom graphical user interfaces (GUI) and thus build the entire machine vision application using a single software package.

Powerful - Over 1000 ready-for-use analysis tools.

Hardware acceleration – tools are aggressively optimized for the SSE/AVX/NEON technologies and for multicore processors. Adaptive Vision Studio implementations are some of the fastest in the world.

Loops and conditions - There is no coding, but you can still create custom and scalable program flows. Loops, conditions and subprograms (macrofilters) are realized with appropriate data-flow constructs in the graphical way.

Machine Vision Library for C++ and .NET

Adaptive Vision Library is a machine vision library for C++ and .NET programmers. It provides a comprehensive set of functions for creating industrial image analysis applications – from standard-based image acquisition interfaces, through low-level image processing routines, to ready-made tools such as template matching, measurements or barcode readers. The main strengths of the product include the highest performance, modern design and simple structure, making it easy to integrate with the rest of your code.

The functions available in Adaptive Vision Library closely correspond to the tools within Adaptive Vision Studio. Therefore, it is possible to prototype your algorithms quickly in a graphical environment and then translate them to C++ or .NET, or even generate the C++ code automatically.

Adaptive Vision Library gives you instant access to highest quality, well optimized and field-tested code that you need for your machine vision projects.



Deep Learning Add-on

Deep Learning Add-on is a new breakthrough in machine vision applications. It is a set of ready-made tools which are trained with Good and Bad samples, and which then detect defects or features automatically. Internally it uses large neural network structures, designed and optimized by our research team for use in industrial inspection systems. For the user, however, they are provided as simple filters with very few parameters, and with easy-to-use graphical tools for convenient execution of the training process.

Deep Learning Add-on truly embodies the main principles of Adaptive Vision Studio:

- Intuitive - can be used even by users with no programming skills
- Powerful - unleashing advanced capabilities of neural networks
- Adaptable - deep learning models can be retrained to include new features.

Datalogic Impact Software

With over 120 inspection tools and 50 user interface controls, Impact Software allows users to create unique inspection programs and develop user interfaces quickly and easily. All this can be done without the loss of flexibility like traditional configurable systems, or the need for vast amounts of development time like traditional SDK environments. Impact Software powers the full line of integrated vision solutions, from simple to complex. The investment in software and training is preserved as inspections grow. Programs for the same inspections can be easily shared or transferred across multiple inspection points within the factory.

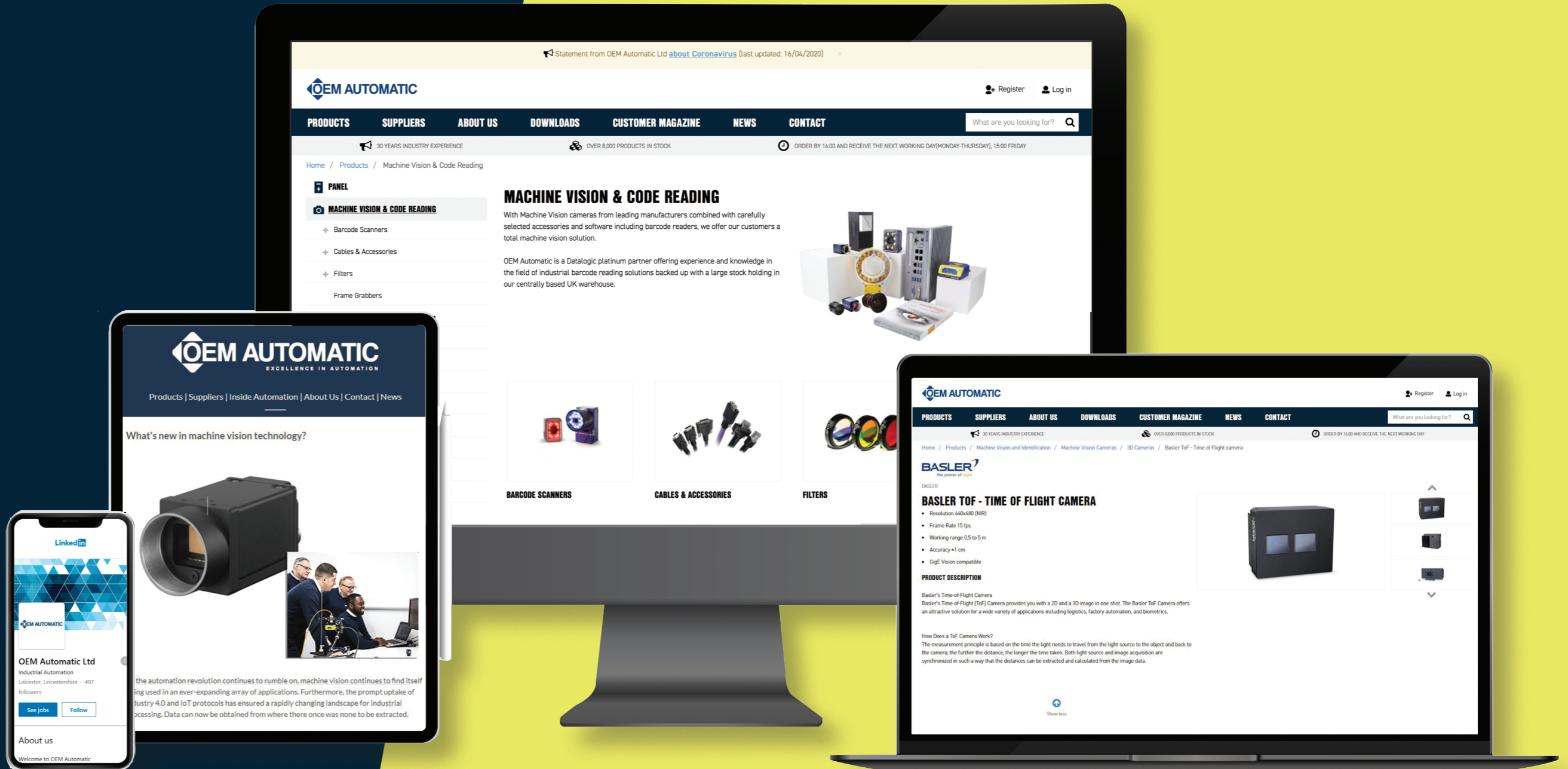
Impact Software has hundreds of image processing and analysis tools which make it easy to:

- enhance images
- locate features
- measure objects
- check for presence
- read text and bar codes.

ENHANCED DIGITAL COMMUNICATIONS

With a clear focus on the digital world, our website offers a customer portal where stock availability and product pricing can be viewed. We host thousands of product solutions with detailed technical information, downloads and access to 2D and 3D files in a wide range of formats.

Our Product Managers drive the product development and, in tandem with our Marketing Team continually develop our website offer, launching information on new and developing products via email campaigns and also on a host of social media platforms for immediate access.



FIRST CLASS SUPPORT & LOGISTICS

WITH A DEDICATED CUSTOMER SUPPORT TEAM TO HELP AND GUIDE ALL INCOMING ENQUIRIES, AND A WORLD-CLASS LOGISTICS TEAM ENSURING ON TIME DELIVERIES – ACCURACY AND EFFICIENCY ARE KEY FOCUS AREAS FOR US.

Our trained Customer Support Team is the main point of contact for all incoming calls. They enter customer orders into our ERP system and guide customers to the correct technical Product Manager if their requirements are more complex.

By utilising six state of the art vertical storage lifts, we have 1,200m² shelving space from our overall floor space footprint of only 72m². These lifts, together with high rise pallet racking for larger components, ensure stock is handled with a high level of efficiency and accuracy to meet customer demands for service.





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