XACT

Performance Coding & Marking
for the Construction Industry

www.xactpack.co.uk

ABOUT XACT

Xact is a leading provider of specialist coding and marking systems to the construction industry sector. We offer both off-the-shelf and customised systems to suit a wide range of product applications, operating effectively in the harshest manufacturing environments.

As the exclusive UK distributor for Matthews Marking Products we have been providing high quality ink jet marking systems for the construction industry since 1980.

We offer proven high performance systems manufactured by an industry leader and supported across the UK and Ireland by our own dedicated team of Technical Sales and Engineering personnel. Their expertise ensures customers receive the highest levels of service, starting with the initial specification process through to installation and on-going support.

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Xact have always recognised that minimal downtime is essential to the smooth running of your business, so our systems undergo rigorous development and testing to ensure utmost peace of mind and unrivalled levels of reliability.

Our manufacturing partners, Matthews Marking Products, are a global innovator of printing systems and inks for applications requiring general product identification, regulatory and industry compliance, as well as logos and corporate branding. Established as the world leader in Drop-On-Demand marking technology, the range also includes high resolution Thermal Ink Jet (TIJ) and Piezo technologies and small character Continuous Ink Jet (CIJ).

Matthews product development and manufacturing is carried out in their facilities in Gothenburg, Sweden and Pittsburg, USA, along with their own dedicated ISO 9001 accredited ink manufacturing plant.

Initially designed to meet the harsh operating environments of the timber and paper industries when the first systems were launched in 1980, Matthews systems have for many years successfully provided product identification and traceability across a range of industrial sectors. Construction materials remains the focus when designing new systems, ensuring high levels of efficiency and reliability for operation in areas where dust, vibration and variable operating temperatures are an issue to other printing technologies.

XACT TECHNOLOGIES

Our technologies comprise of:

Drop-On-Demand Ink Jet (Valve Jet) – VIAJet V-SERIES

The most robust systems on the market and proven in areas where dust, vibration and variable operating temperatures are an issue for other printing technologies. Offering small and large character printing options for applications comprising of text, logos, graphics and barcodes, the systems are also capable of high print speeds using single or multiple heads as well as marking both porous and non-porous substrates using a wide variety of inks and colours.

Piezo High Resolution Ink Jet – VIAJet T-SERIES

High resolution printing of variable data, text, logos, graphics and bar codes onto porous and semi-porous building products. Options for single and multi-head operation for the application of small and large character print formats, particularly suited to marking processes requiring high resolution company branding.

Thermal Ink Jet (TIJ) – VIAJet L-SERIES

Compact maintenance free cartridge based system with a range of inks to suit porous and non-porous materials. Capable of operating in challenging industrial environments for the application of variable data, text, logos, graphics and barcodes.

Continuous Ink Jet (CIJ)

Small character printing of variable product information for non-porous materials and high speed production lines.

Typical Construction Applications Include:

Xact provide product identification and traceability for a wide range of construction materials including:

- **Plastics**
- **Glass**
- **Aggregates**
- **Timber & Engineered Wood**

- **Concrete & Clay**
- **Ceramics**
- **Insulation**
- **Films**

- **Metals**
- **Environmental Products**
- **Gypsum Products**
- **Foams**

Other applications include product identification to the outer packaging of construction materials such as films, strap, boxes, bags, sacks & pallets.

Benefits of Our Ink Jet Systems

Our systems have different specifications, but are all designed to offer the same fundamental benefits of:

- High levels of reliability in tough operating environments
- Low running & operating costs
- High & consistent print quality
- User-friendly operation and uncomplicated design

- The flexibility to grow with your business
- Excellent networking capabilities and easy integration with other production line systems
- Extensive range of inks to suit all applications & substrates

Labelling Systems

Xact supply a range of labelling systems, which are also designed to operate effectively in the tough operating conditions often found within the construction materials industry. In addition to the standard range of equipment we also provide customised solutions to suit specific application requirements. For further information on these systems contact Xact on **0151 479 3020** or **info@xactpack.co.uk**

CONCRETE & CLAY
AGGREGATES

CONCRETE & CLAY

Typical Applications

- Roof Tiles
- Bricks
- Blocks
- Pavers
- Concrete Panels
- Concrete Pipes
- Boards
- Lintels & Beams
- Packaging & Strap

Typical Marking Requirements

- Date, time, shift and batch codes
- Product Code/Description
- CE marking
- Company name/Logo
- Industry Logos and Graphics
- Product Specification
- Product count

Our printing systems are the preferred technology for marking masonry products, offering benefits such as:

- Eliminate wear and tear on the head from dust and abrasive substrates
- Printing onto inconsistent product shapes and sizes, as well as moist substrates
- Printing variable product information (e.g. date, time, batch & count codes) without manual intervention
- High levels of reliability despite systems typically located at the exit of the plant where they are subjected to variable operating temperatures, as well as dust.
- Working with a wide selection of UV stable inks in a variety of colours to ensure long term visibility on products subjected to the elements
- Printing the primary material and/or the protective film shrouding the product
- Providing consistent and reliable printing for applications that require movement of the printhead(s)

AGGREGATES

Typical Applications

- Cement bags
- Gypsum bags
- Bags of sand
- Bags of stone
- Gravel bags
- Grout

Typical Marking Requirements

- Product description/code
- Date, time, shift and batch codes
- Product Count

Known for long-term and dependable print performance, our printers offer a wide number of benefits including:

- Flexible printing options, printing small or large character information relative to the pack size (for small or bulk bags)
- Robust modular design means heads can be mounted to traversing or spring loaded assemblies allowing movement of the head relative to the position/dimensions of the pack without affecting print quality or incurring downtime
- Durable print heads operating successfully in areas where dust and vibration are standard (key when the system is located next to the filling process)
- High print speeds without any depreciation of character height or resolution
- Wide selection of ink types and colours compatible with porous and non-porous packaging materials

GYPSUM PRODUCTS
INSULATION

GYPSUM PRODUCTS

Typical Applications

- Back marking boards
- Edge & Taper printing on boards
- Pack printing (stacked boards)
- Laminated boards
- Coving products
- Bagged products
- Compounds

Standard Marking Requirements

- Date, time, shift, count & batch codes
- Product name/Description
- Product Specification/Classification
- End-user information/Fitting aids & instructions
- Industry/Company logos and graphics

Water resistant inks and Drop-On-Demand printers are the perfect combination for complying with industry regulations and marking other product information onto gypsum products.

In response to the increasing demand for corporate branding to work in conjunction with the application of general product information, our range can provide small and large character printing to suit all product types and marking processes. This includes the flexibility to utilise the same printing technology or a mix of our technologies, all managed by one operating system to help standardise on equipment and inks across the plant.

Other benefits for the gypsum product manufacturer include:

- High print speeds
- Excellent logo and branding capabilities
- Options for standard and high resolution formats and variable print heights to suit each product
- Multiple lines of print can be applied from a single print head, with the facility to operate multiple heads for increased lines of print or precision stitching for large scale branding
- Delivering long-term and dependable print performance
- Manage all your print files locally at the line or from a central location, including the facility to network to your own database to synchronise the process, eliminating operator errors and timely product changes.

INSULATION

Typical Applications

- Matt
- Rolls
- Slabs
- Panels
- Foams
- Foils
- Expanded Polystyrene
- Packaging Films

Standard Marking Requirements

- Product code/Description
- Building codes
- Thickness & Density
- Certification
- Fitting instructions (including graphics and symbols)
- Date, time, shift, batch & count codes
- CE marking
- Industry/company logos
- Reject marking

Proven within the harsh operating conditions of insulation material production, our range of small and large character printheads offer flexibility to apply product information to a wide range of materials of various shapes and sizes.

Information can be applied to individual products or to a continuous flow of product using single or multiple print heads mounted across the line, all operated from a single controller.

In addition to the above, our systems provide:

- High contrast print formats for low and high density products
- Fast drying dye, pigmented and UV inks to suit the wide range of substrates used within the industry
- Large character printing and high contrast inks for clear visibility of product codes on finished products and unitised packs, as well as reject marks.
- Excellent throw distance ensures high print quality is achieved without having to position the head within close proximity of the product.
- Manage all your print files locally at the line or from a central location, including the facility to network to your own database to synchronise the process, eliminating operator errors and timely product changes.

PLASTICS & FILMS

TIMBER & ENGINEERED WOOD

PLASTICS & FILMS

Typical Applications

- Rigid, flexible & corrugated pipes
- Profiles
- Sheets & panels
- Technical films & membranes
- Cables
- Strap
- Packaging
- Mouldings

Standard Marking Requirements

- Date, time, shift, batch and count codes
- Product code/Description
- Product dimensions
- Length marking
- Specifications
- CE marking
- Industry and company logos
- Installation guidelines

From small diameter rigid and flexible tubing to large corrugated pipe, our range offers single and multiple lines of print with characters anywhere between 1mm and 128mm high from a single print head.

Other advantages of our print systems include:

- Printing using single or multiple heads across one or more production lines from a single controller
- A full range of standard and specialised inks designed specifically for the various plastic substrates including fast drying inks, high contrast pigmented inks for marking dark surfaces, dye based inks in a variety of colours and UV stable inks.
- Systems capable of switching between different colour inks in seconds for users who manufacturer different colour products on the same production line and wish to reduce downtime and the level of hardware required.
- Non-contact printing onto inconsistent product shapes and sizes eliminates wear and tear on the head
- Excellent throw distance and high print quality

TIMBER & ENGINEERED WOOD

Typical Applications

- End grain marking timber
- Panel board, OSB, chipboard,
- Joists, flanges, billets
- Doors & Frames
- Stacked lumber
- Plywood
- MDF
- Panelling & mouldings
- Pallets & packaging
- Planed timber
- Rough sawn timber

Standard Marking Requirements

- Dimensions and Specifications
- Length marking
- Structural ratings
- Stress grade test results
- Species identification
- Date, time, shift, batch and count codes
- Pack Marking (including company branding)
- Product codes
- Company logos
- Barcodes
- Association trademarks

Our range of printers were initially designed to operate effectively in the harsh production environments associated with the timber industry, and since 1980 we have been the market leader in this sector.

The benefits of these systems include:

- Small and large character printing in any orientation for top, bottom or edge marking
- High resolution printing of text, graphics, logos and barcodes
- Facility to stitch print heads for large scale company branding
- Easy integration with other production line devices including PLC's, cutting, measuring, grading, scanning and reject systems
- Hand held devices for marking static products
- Full range of industry inks in a variety of colours
- Excellent throw distance means print heads don't have to be positioned too close to the product to achieve a quality print
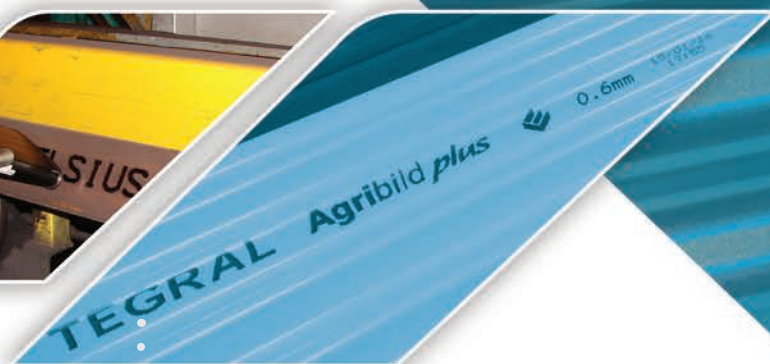
METALS
GLASS

METALS

Typical Applications

- Sections & profiles
- Stud, track & purlins
- Bars & tubes
- Wall ties
- Expanded metal panels
- Iron ductile pipe
- Flexible pipe
- Floor panels
- Ingots
- Corrugated and flat sheets
- Cable management Systems

Standard Marking Requirements

- Date, time, shift & batch codes
- Product dimensions & specification
- Part number
- CE marking
- Industry & company logos
- **COLOUR MARKING for company logos and identifying gauge**

Advantages of our printing systems for the metals industry include:

- The facility to print in any orientation, offering flexibility on installation
- A range of fast drying and UV stable inks in a variety of colours
- High print speeds without compensating on print height or resolution
- Small and large character printing to suit varying product dimensions and sizes
- Easy integration with production line PC's , plc's or other production line devices (as standard)
- The facility to move printheads relative to the desired print area on each product, without downtime for cleaning, re-priming or re-aligning jets
- Excellent throw distance ensures high print quality is achieved without having to position the head within close proximity of the product

COLOUR MARKING
For company logos and identifying gauge

GLASS

Typical Applications

- Sheet glass
- Mirrored glass

Standard Marking Requirements

- Date, time, shift & batch codes
- Product description
- Product specification
- Industry and company logos

Typically sheet glass is marked with water removable inks as the information applied is relevant only to warehousing and conversion, and is removed prior to, or at the point of fitting.

Conversely, back marking mirrored glass requires a permanent mark. Multiple printheads are positioned across the width of the product and print repeatedly through the length of the sheet.

In addition to the non-contact marking systems detailed in this brochure, our range also includes contact marking systems specifically suited to this industry.

CERAMICS

ENVIRONMENTAL
PRODUCTS

ENVIRONMENTAL PRODUCTS

Most commonly used within the construction industry as part of water and waste management systems.

Typical Applications

- Geosynthetic liners
- Geotextiles
- Geomembranes & composites

Standard Marking Requirements

- Company name, including logos
- Date, time, shift & batch codes
- CE and other industry logos
- Product description/specification
- Information relative to laying or fitting

Our systems provide consistent and reliable printing in tough operating conditions.

Multiple printheads are often a requirement to apply product information at set positions across the width of the material, all managed by a single controller

CERAMICS

Floor and wall tiles form a unique product segment in that they are only manufactured in a few countries.

Standard Marking Requirements

- Date, time & batch codes
- Product name/description

This information, including barcodes, are also printed to the outer box holding the tiles.

Our systems provide quality and reliability despite the dusty operating conditions, typical of the industry.
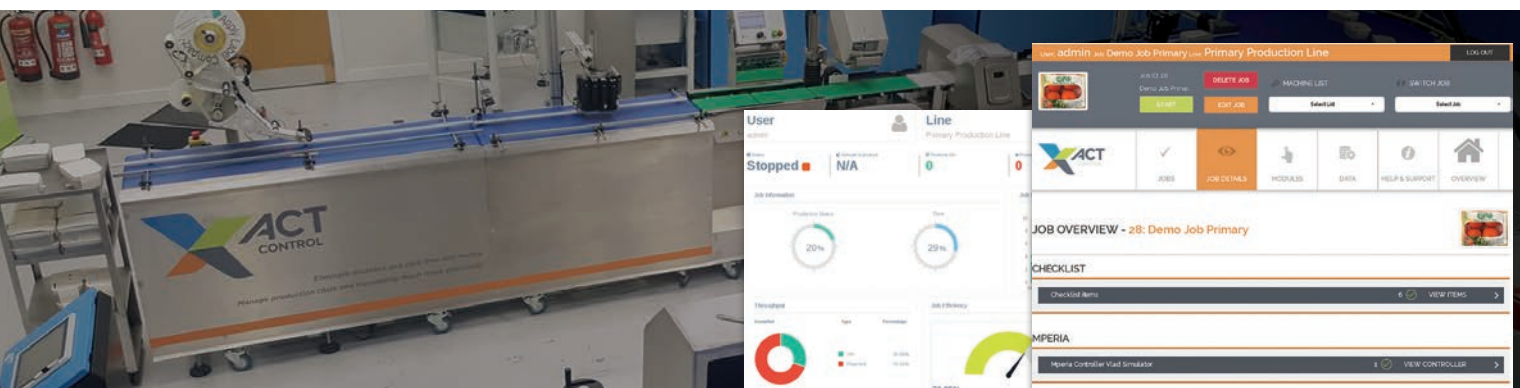
- ✓ **Flexible**
- ✓ **Reliable**
- ✓ **Future Proof**

MPERIA™

Performance Controlled Marking and Coding from Matthews Marking Systems

Developed as a universal platform for our various printing technologies, MPERIA™ allows you to manage print files and settings for multiple printers across one or several production lines or packaging locations.

The system is completely scalable, allowing your business to grow as your product marking requirements change, ensuring your initial investment is secure.

Pairing an intuitive, touch screen GUI with PC-based hardware, the MPERIA™ controller is simple to use and is available in several standard sizes to meet your needs (7", 12" and 15" touchscreen panels).   MPERIA™ provides unrivalled flexibility, offering the facility to drive multiple technologies (including a mix of technologies) across one or more production lines, from a single interface. Seamless integration with other production line devices as well as ERP/WMS systems and databases is also a key feature, helping to improve productivity, eliminating coding errors and costly product re-calls.

XACT CONTROL

XactControl™ is a highly scalable multi-line controller which integrates with higher level production systems (factory networks, ERP, MRP, production planning systems, databases).

 The system includes OEE management, performs validation, rejection and control of production equipment via a modular configuration. The user can integrate multiple printing, labelling and packaging technologies to one system to help eliminate production errors and costly product re-calls.

Acting as a single point of control, Xact Control enables integration of the aforementioned technologies (and more), working alongside other machine controllers or control software to extract/export information wherever needed. XactControl™ is accessible on a vast array of devices via its intuitive, easy to use web based interface.

www.xactpack.co.uk/control

CUSTOMISED SOLUTIONS

Our systems are modular, and as such offer unrivalled flexibility for customised solutions to meet specific application requirements.

Typical Applications Include:

- **Traversing systems**
- **Spring loaded devices**
- **Multi-printhead assemblies**
- **Enclosures, stands & brackets**
- **Conveyors & turntables**
- **Product handling**
- **Multi-head assemblies**
- **Software & controls**

INKS

Matthews standard and range of performance inks are all manufactured in a dedicated ISO 9001 accredited manufacturing plant and are available in a range of colours for use on both porous and non-porous substrates.

We provide an extensive range of ink types, including;
- Water, ethanol, MEK, acetate and acetone based inks
- Pigmented inks
- UV based formulas
- Non VOC
- Thermo-chromic
- Alkaline removable
- Re-odorised based formulas

Matthews inks are all tested in real-life marking environments using the full range of printers and heads. Rigorous quality control systems ensure all standards are maintained in the areas of adhesion, drying time, viscosity, maximum shelf life and printing performance.

The reliability and maximum efficiency of a machine is maintained using the right consumables. Matthews inks and cleaners are manufactured to the highest quality with batch to batch consistency to ensure long-term trouble-free operation of your printing system. Most inks have a 2 year shelf life, as standard.

MAINTENANCE & SERVICE

All systems are fully supported by Xact's own team of specialist engineers and technical sales personnel. Their expertise ensures customers receive the highest levels of service from initial specification, installation and commissioning of systems through to achieving and maintaining optimum performance levels throughout their operating life.

Xact have always recognised that high quality products demand high quality after sales and technical support. We also understand that reliability and minimal downtime is essential to the smooth running of your business. All equipment undergoes rigorous testing before installation to ensure utmost peace of mind.

- **Internal** - Technical Service Managers based at our head office controlling engineering support
- **Field** - highly trained specialist engineers, based across the country, carry out all installations and service calls
- **Quality assurance** - BSI quality management accreditation, and ISO 9001 accredited manufacturing plants
- **Preventative maintenance plans** - through customised service agreements

Following installation, on-site training programmes can be tailored to suit your requirements.

With spares available from stock and also carried by our Field Engineers we aim to progress your requirements as efficiently as possible to minimise downtime.

ONE SOURCE.
ONE SUPPLIER.
ONE PARTNER.