

Domino – Extrusion Ink Coding Station

Product handling combined with treatment systems providing high-quality codes in most challenging extrusion applications

Domino's new and innovative **Extrusion Ink Coding Station** offers with its **EICS50** or **EICS250** different modular and expandable coding and marking solutions.

Clear, crisp, and readable codes are most important. A product handling system combined with Domino's **Ax-Series** CIJ printers, and a selection of pre- and post-treatment systems, makes Domino's Extrusion lnk Coding Station ideal for many applications.

Ink coding on multiple substrates and surfaces, of uncut products in extrusion and rewinding applications, including cables, wires, pipes, hoses, and tubes with

diameters of 0.8 to 50mm or 20 to 250mm at speeds of up to 500m/min.





Seamless product handling

Domino's new **guidance system** combines a **product guiding unit** with a **head mounting unit** for product diameters of 0.8 to 50mm. This unique and innovative system helps to provide seamless product handling and disturbance-free lump and knot transfer. This reduces the risk of printhead damage and poor coding, reduces waste, and minimises downtime during product changeovers.

Coding and Marking Solutions for continuous applications

Domino – Extrusion Ink Coding Station in a range of possible configurations **EICS50** for products with diameter from 0.8 to 50mm **EICS250** for products with diameter from 20 to 250mm



* **Ax I 50i** only possible with the Print Stand





| Options & Features | EICS Print Stand | EICS Print Stand EICS Control Rack Lite | EICS Compact Rack Comfort |
|---|---|--|------------------------------|
| Domino Products* | Ax350i and Ax550i with i-Pulse or i-Pulse RS printhead, nozzle sizes 40, 50, 60 and 75 µm | | |
| Space requirements (Width x Depth) | 420mm × 790mm | 540mm × 910mm 420mm × 790mm | 730mm × 850mm |
| Product level heights | 800mm to 1300mm | 800mm to 1300mm | 950mm to 1400mm |
| Head Mounting Unit | V | ✓ | ✓ |
| Product Guiding Unit or Encoder Unit | V | v | v |
| Control Unit – Lite | X | ✓ | × |
| Control Unit – Comfort | X | × | ✓ |
| Pre-treatment Plasma or Corona System | × | ✓ | ✓ |
| Post-treatment Separate UV curing rack | × | × | ~ |
| General notes | Width optimized due to limited space in | production lines. Optional jacking castors | |

Flexible. Modular. Expandable.

- ◆ Designed for line speeds up to 500m/min (300m/min with lump and knot transfer)
- ◆ Modular and expandable to encompass different treatments, functions, and options
- Flexible arrangement for printing on the top of products, and material flow from the left or right

Waste reduction. Minimising downtime.

- ◆ An innovative guidance system passes lumps and knots up to 50mm diameter
- ◆ No printhead adjustment needed with different product
- ◆ Inline wash station for fast printhead cleaning



Head Mounting Unit

- Deflection plate to reject lumps and knots
- ◆ Optional precise head adjustment: +/- I5mm in depth and height
- ◆ Inline wash station ensures fast printhead cleaning with a precise repositioning of the printhead to the print position

Product Guiding Unit for EICS50

- V-wheels for precise product guiding before printing
- ◆ No printhead adjustment needed over a wide range of diameters in combination with the head mounting unit
- ◆ Easy line integration into loaded production lines without the need of cutting the product

Post-treatment system

- ◆ UV curing rack for challenging substrates with speeds of up to 150m/min
- ♦ Extraordinary print resistance
- ◆ Blue wool scale of 7–8, which is >100 years lightfastness under normal conditions
- ◆ 360° radiation for print curing on rotating products



Pre-treatment systems

- ◆ Surface activation improves ink adhesion and abrasion resistance
- Consistent print resistance results when using different masterbatches
- Possibility of using two plasma or corona heads

Encoder Unit for EICS250

- ◆ Helps to achieve precise printing position
- Easy mechanical encoder adjustment
- ♦ Easy line integration into loaded production lines withouth the need of cutting the product



Pedestal

- ◆ Remote operator panel
- Flexible placement in production lines where space is limited



| | Control Unit Lite | Control Unit Comfort | |
|---|--|---|--|
| System beacon | Yes | Yes | |
| Maximum controllable equipment | I printer; I pre-treatment with 2 heads | Up to 3 printers, I pre-treatment with 2 heads, UV-curing | |
| Operation / User Interface Printer and pre-treatment on its user interfaces | | Common operation on the EICS user interface | |
| Technical solution | Controlled by a programmable logic unit | Controlled by a programmable logic unit | |
| Line running signal | Required encoder signal | Required encoder signal | |
| Pre-treatment fan unit | Active factory suction with >300m³/h or optional available | Active factory suction with >300³/h or optional available | |





Value of using pre- and/or post-treatment

Materials in extrusion processes with low surface energy can be difficult to print on. High-quality print resistance requires an increase in the surface energy.

Domino's Extrusion Ink Coding Station can be equipped with plasma or corona pre-treatment technologies to increase the surface energy of the material. Additionally, Domino offers a range of high contrast inks to further support the advantages of pre- and post-treatment.

Pre-treatment?

Surface activation may be necessary with cross-linked, or difficult-to-print materials, or instead when using special additives or lubricants. Pre-treatment significantly improves adhesion, abrasion, and solvent-resistance of a printed code.

Post-treatment?

High demands on abrasion resistance, high liquid resistance, and lightfastness requirements can make UV curing necessary. Our specially developed UV curing rack system and UV curing inks for our **Ax-Series** printers help to improve ink adhesion and abrasion on many materials.







TALK TO AN EXPERT

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