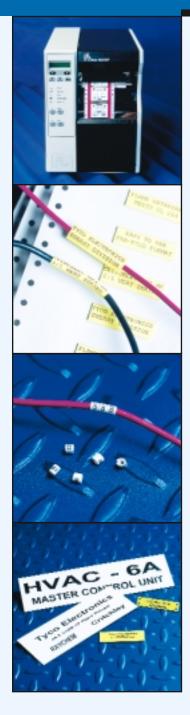


Energy Division



Identification Solutions

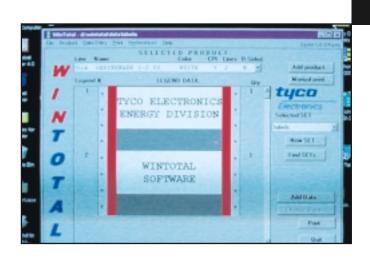
Tyco Electronics Corporation offers a comprehensive line of identification systems and products that meet a broad range of requirements for a variety of applications.

We are committed to becoming the world leader in cable identification. With the merger of Raychem, the company that pioneered the development of heat-shrinkable marker sleeves, and Critchley, an established world leader in wire and cable identification, Tyco Electronics now offers a total solution to your identification needs.

Raychem



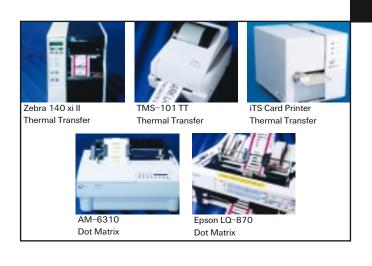
Software and Hardware



WinTotal Software

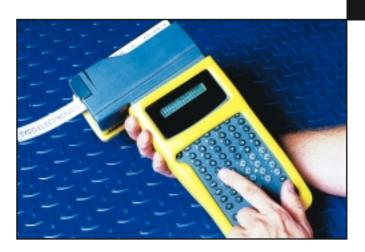
WinTotal software is a powerful Windows based package that makes identification marking quick and easy. The Windows environment gives access to a huge array of font options, including non-English fonts and also allows simple importing and manipulation of graphics and logos.

- · Pre-loaded with all of Tyco Electronics' identification products
- · Powerful import and export functions: reads wire lists from
- spreadsheets, databases, and text files from CAD systems
- Incremental alpha and numeric fields
- · Double-sided marker printing
- · Automatic or manual routing to multiple printers



System Printers and Ribbons

These printers have been selected to suit a range of identification requirements and offer excellent legibility and mark permanence. An extensive range of ribbons has been designed for use with the Tyco Electronics' identification products. These ribbons ensure excellent mark permanence and legibility to applicable military and industry specifications.



Portable Identification Marking Kit (Thermal Transfer)

- Assortment of media available, including heat-shrink tubing, diecut labels, and self-laminating labels in a variety of sizes and colors
- Minimum media width of 3.2mm (0.125"). Maximum media width of 25mm (1.0").
- · 67 point size ranging from 6 point to 72 point
- · 10 resident bar codes
- · Alphanumeric sequencing
- \cdot Battery-operated or AC power supply-operated
- · Product comes housed in cartridges

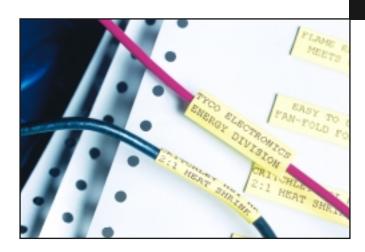
Heat Shrink Sleeves



ShrinkMark Heat-Shrinkable Sleeves (Dot Matrix and Thermal Transfer)

ShrinkMark sleeves are suitable for a wide variety of applications. Heat-shrink sleeves provide legible identification for all types of cables used by electrical contractors, and instrumentation and control manufacturers.

- Shrink ratio of 3:1
- Expanded sleeve diameters from 3.125mm (.125") to 38mm (1.50")
- \cdot Sleeves come in 50mm (2.00") lengths
- · Flame retardant. Sleeves meet UL 224
- Print performance to military requirements
- ShrinkMark sleeves can be supplied pre-scored for a more economical use of material
- Several packaging options to choose from: 250, 1,000 or 2,500 pieces per box
- · Standard colors are white and yellow



HK Heat-Shrinkable Sleeves (Dot Matrix)

HK is a durable heat-shrinkable sleeve that also meets the same UL 224 and military requirements as ShrinkMark sleeves. The HK sleeves come arranged in an easy to use fan-fold format for easy kitting and marker selecting.

- · Shrink ratio of 2:1
- · Fan-fold format makes kitting and marker selecting easy
- Expanded sleeve diameters from 3.125mm (.125") to 38mm (1.50")
- · Flame retardant. Sleeves meet UL 224 and ASTM D 2671
- Print performance to military requirements
- Sleeves come in 38mm (1.50") lengths and can be pre-cut for a more economical use of material
- Standard colors are white and yellow

Pressure Sensitive and Self-Laminating Labels



Wire and Cable Pressure Sensitive Labels (Dot Matrix and Thermal Transfer)

White vinyl and nylon cloth labels are excellent labels that conform to round or flexible surfaces such as tubing, wiring or cables. The white vinyl cloth label is designed for use with a dot matrix printer while the nylon cloth and white vinyl labels are designed specifically for use with a thermal transfer printer.

- · Labels are made of either vinyl or nylon cloth to provide
- the best surface material for dot matrix or thermal transfer
- Permanent acrylic adhesive provides excellent bond to many surfaces: tubing, wiring or cables
- · No heat curing process required
- · Standard color is white



Self-Laminating Labels (Dot Matrix, Thermal Transfer, and Laser Printable)

Self-Laminating labels offer a fast and inexpensive way to identify wire and cables. Because these labels wrap over themselves, creating a seal, the printed surface is protected from solvents and abrasives.

- Manufactured with a white coated area for printing or writing on and with a clear wrap to wind around a wire or cable over the printed surface to seal and protect the printed label
- Protects printed information from chemicals and frequent handling
- Designed to withstand exposure to oil, solvents, and water

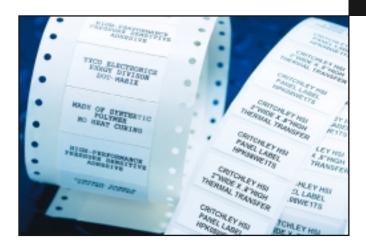
Signs, Plates, and Panel Labels



ITS Card Stock Printer (Thermal Transfer)

The ITS card stock printer allows you to produce high quality equipment identification plates, rating plates and inserts within frames, cases, buttons and switches. The high-performance adhesive back makes this product a great alternative to screw, rivet fixed, and plastic engraved signs. All of this can be done on-demand.

- Robust thermal transfer card stock printer with 300 DPI (graphics and bar-coding)
- \cdot Use PVC or ABS (low halogen) card stock
- · Color ribbons are specially designed for the ITS printer and are of a resin quality available in white, red, green, and blue
- \cdot High resistance to abrasion, solvents, and chemicals
- Standard colors are white, yellow, red, and silver



Panel Labels (Dot Matrix and Thermal Transfer)

Tyco Electronics' Panel Labels comes in a wide range of sizes ideal for control panels and rating plates.

- 50mm (2") wide and from 6.25mm (.20") to 25mm (1.0") high
- Manufactured of polypropylene film for thermal transfer and synthetic polymer for dot matrix
- · High-performance, pressure sensitive adhesive
- · Standard color is white



ProjectMark (Thermal Transfer)

ProjectMark is a durable high strength polyester material that can be used as warning and service labels, rating plates, and a way to identify cable trays—all of which can be produced on demand.

- · High tack acrylic adhesive
- \cdot UV resistant
- · Resistant to moisture /humidity
- · 4 printable continuous widths in 8 standard colors
- Material comes on a 100' reel and ranges from 25mm (1.0") to 100mm (4.0") wide

Cable Markers and Multi-Mark



ShrinkMark CM Cable Markers (Dot Matrix)

ShrinkMark cable markers provide a reliable method of identification of larger cables and bundles. They can be installed using standard nylon tie wraps.

- Cable markers are a standard 55mm (2") length that come in a 6.25mm (.25") or 12.5mm (.50") width
- · Flame retardant. Cable Marks meet UL 224
- Print performance to military requirements
- · Standard color is white



HL Cable Markers (Dot Matrix and Thermal Transfer)

HL cable markers are a cost effective way to identify cables already terminated. Like ShrinkMark CM cable markers, cable ties are used to secure the label to cables or bundles.

- Easy to use fan-fold format for easy kitting and marker selection
- Cable markers are available in 44mm (1.75")–87.5mm (3.50") lengths and 9.4mm (.375")–25mm (1.0") widths
- · Standard colors are white and yellow



Multi-Mark (Dot Matrix)

Protected by a clear PVC carrier that slides onto the cable, Multi-Mark is ideal for post-termination identification or when re-labeling is required.

- \cdot Suitable for post-termination labeling and re-labeling
- · Easy to use fan-fold format for ease of marker selecting and kitting
- Pre-marked color coded numbers available for inserting into carrier
- \cdot Standard colors are white and yellow

Pre-Marked Wire and Cable Markers



K-Type Markers and Carrier Strips (Pre-Marked)

K-Type markers and carrier strips are ideal for identifying larger cables, conduits, and pipes either before or after termination. The standard carrier has slotted ends that allow application with cable ties or cable strapping.

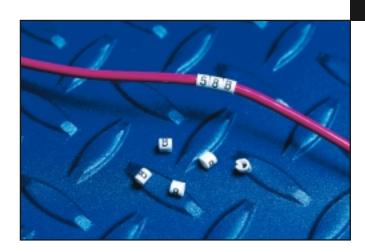
- Versatile marking system for cables, cable bundles, pipes, and conduits
- · Large pre-printed characters provide excellent legibility
- Excellent resistance to sea water, gasoline, diesel fuel, and kilfrost fluid
- Markers come in a white or yellow body with black print. Color-coding options available for markers 0-9



Snap-On Markers (Pre-Marked)

Snap-on markers represent the best snap-on wire marking system available. Convenient and easy to use, these markers are supplied on a "wand" applicator that simplifies and reduces installation time and saves on the cost of marking.

- Perfect way to permanently and rapidly mark cables and wires after installation
- · Resistant against oils, cleaning agents, and fuels
- Markers come in white with black print. Color-coding options available for markers 0–9



Z-Type Markers (Pre-Marked)

The Z-Type cable markers have been designed to allow each size of marker to fit a wide range of cable diameters.

- Expandable design enables each size of marker to accommodate a wide range of cable sizes
- \cdot Easy manual installation
- · Zero halogen also available (G-Type)
- Markers come in white or yellow with black print. Colorcoding options available for markers 0–9

Pre-Printed Services



Pre-Print Identification Service

Tyco Electronics offers a pre-print service for all of your identification needs. Simply send us a wire list on disk or by e-mail and we will deliver your defined kits. Call for quote: 1-800-327-6996.

- · No hardware or software investments reduced labor costs
- · Door-to-door service to meet your delivery schedule
- · No excess inventory after completion of job
- Product packaged before dispatch, meeting customerspecific needs



Permark 316

Permark stainless steel markers and identification plates are designed to withstand the most hostile environments. Using state-of-the-art technology and no inks, the marking process produces a permanent, deep surface mark. Permark markers are produced to individual customer requirements on a fast turn-around basis.

- · Pre-marked to customer requirements
- · Transfer of data files electronically or via fax
- · Excellent chemical, abrasion, corrosion, and weather resistance
- · One-piece, 316 stainless steel construction
- · Stainless steel and Polyketone cable ties are also available

Tyco Electronics offers a wide range of accessories including heat-guns, printer accessories, payoff cradles, cable ties, and power adaptors for our portable printers. Please call the Sales office at 877-268-3700 with any questions, sample, or literature requests.

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for this product is set forth in our standard terms and conditions of sale. Raychem, Critchley, and ShrinkMark are trademarks of Tyco Electronics Corporation.

tyco

Electronics

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