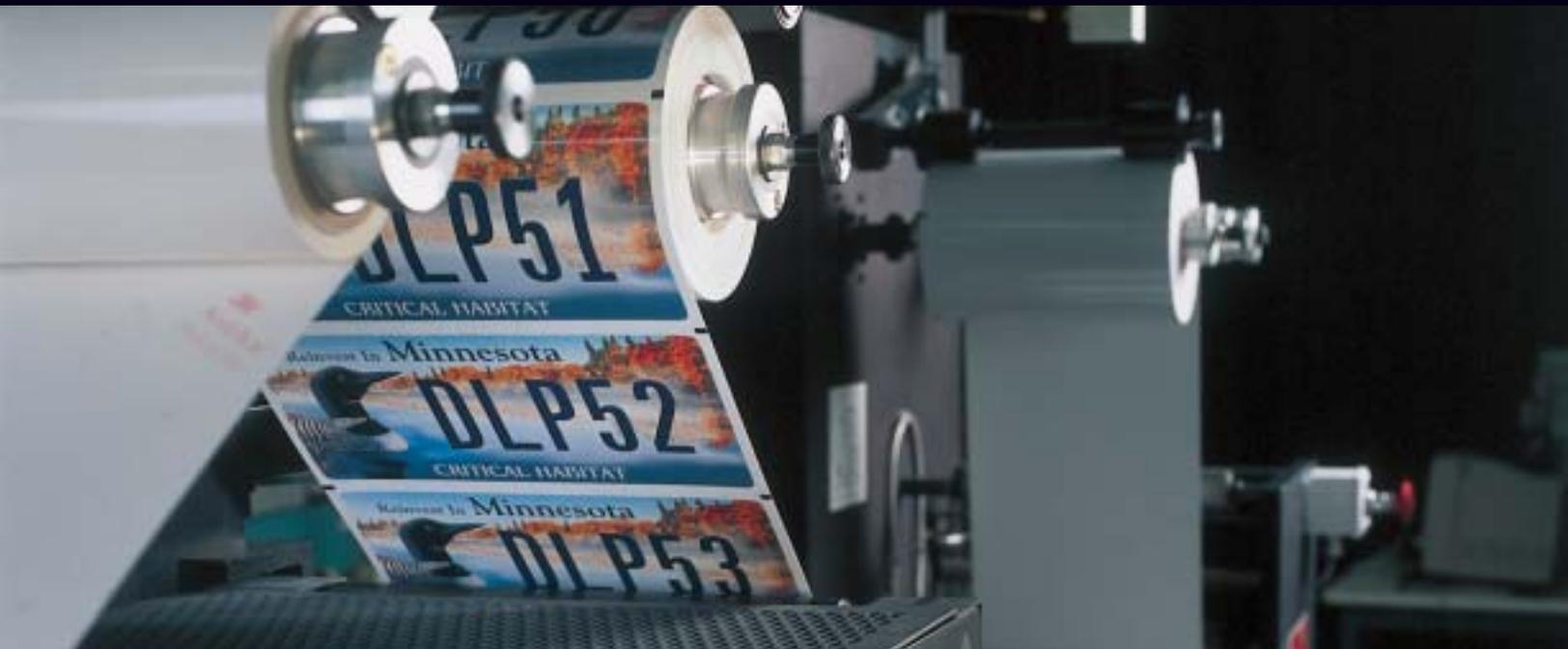


Digital License Plate System

reduce the cost of issuing
plates and improve
customer service



3M Vehicle Registration Solutions

Meeting today's delivery demands



With e-government initiatives quickly moving into the transportation arena, more and more motorists are registering their vehicles online, anytime it's convenient. Just as they can now order quickly, they also expect to receive their documents, stickers and plates quickly. The demand is putting increased pressure on motor vehicle authorities and their production partners, especially those with outdated equipment.

A solution? The 3M™ Digital License Plate System. It seamlessly integrates your vehicle registration data with plate production to quickly and accurately produce high-quality plates. The flexible, automated system lets you print plates on demand and print bar codes on plates to augment logistics functions. It can also be linked to 3M's Digital Registration and Renewal Systems to provide a complete vehicle registration solution.

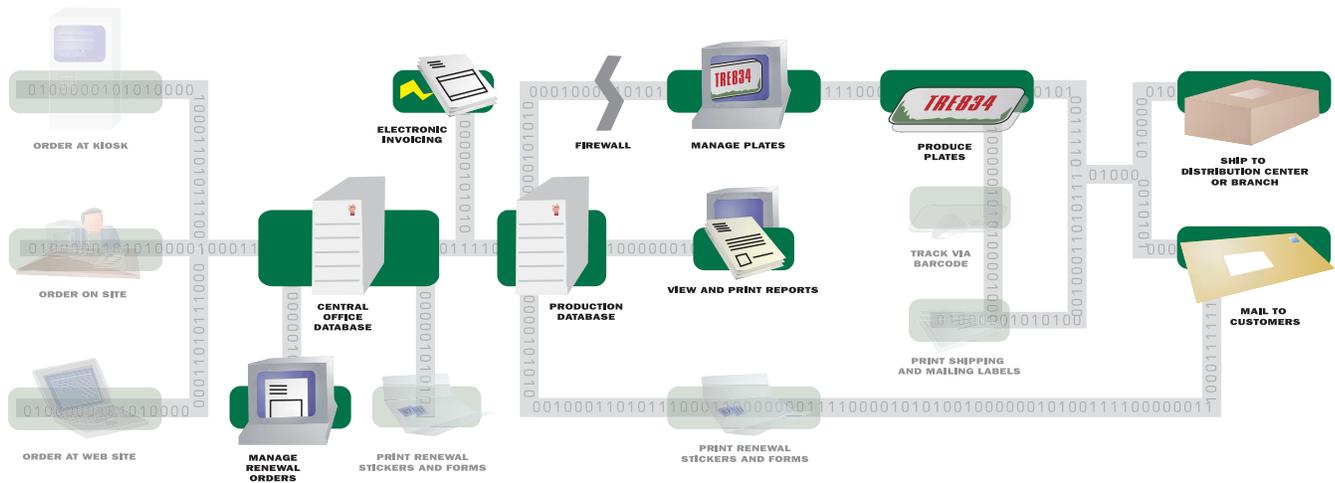
The 3M system also accommodates today's tight government budgets. In fact, we'll provide a detailed ROI analysis, showing how your initial investment is largely offset by cost savings and revenue opportunities including:

- Reduced inventory
- Lower mailing costs
- Lower aluminum costs
- Less energy consumption and clean up
- Added specialty plate revenue from improved design capabilities
- Faster personalized and non-sequential plate production

3M. Partnering with motor vehicle authorities worldwide to create solutions that meet the demands of today – while building new possibilities for tomorrow.

Using tomorrow's technologies

The 3M™ Digital License Plate (DLP) System uses digitized information to drive the production of vehicle license plates to meet growing demands for service and delivery. Components of the DLP System include:



PCs, kiosks and software allow motorists and office representatives to enter registration and renewal orders via your Web site or other ordering interfaces.

A production database and information management software are integrated with your central office database.

Firewalls and other security measures meet your specific security needs.

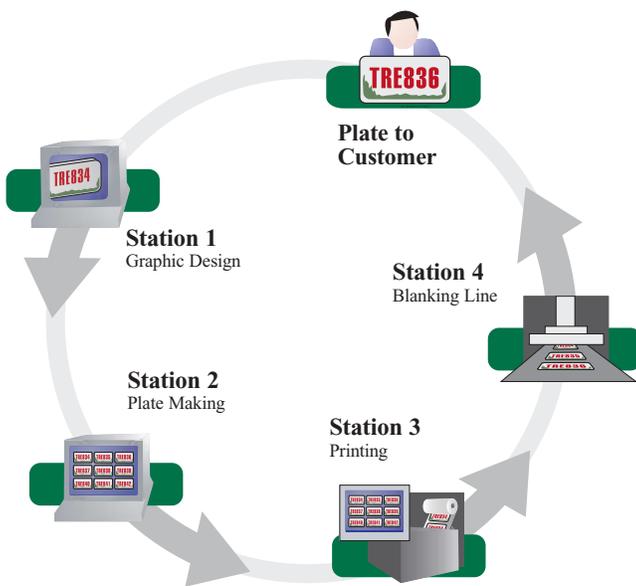
Production control software allows you to process plates and print bar-coded labels for boxes, pallets and shipments.

The plate making station allows you to design plate graphics. The reporting software lets you track and analyze production, while electronic invoicing reduces paperwork and speeds payment.

Electronically entered plates can be printed and mailed the same day.

A comprehensive process

If you need assistance managing the information flow associated with license plate production and shipment, 3M is available to help with our Information Management System. Our DLP System includes:



Graphic Design Station

The Graphic Design Station includes computer hardware and industry standard software to create the background images and color separation(s) for processing color printing.

Plate Making Station

Orders can be entered manually by an operator, or downloaded from the Information Management Database. Multiple text fields are allowed with variable position, size, font and color. The Plate Making Station is capable of handling hundreds of different graphic designs. Text fields are combined with graphics and sent to the DLP Print Station.

Print Station

The Print Station includes a roll handling unit and a high-speed thermal transfer printer to produce license plate graphics and variable information on reflective sheeting. One to four spot or process colors can be printed on white or preprinted graphic sheeting. The final stage of the Print Station is a laminator that applies a durable protective film over the printed graphics and information.

Blanking Line

At the blanking line, rolls from the DLP Print Station are applied to the aluminum substrate and cut into plates with an optional depressed flange rim. Finished plates exit via a conveyor. Traditional plate making would require additional steps for embossing, roll coating and drying after this operation. Plate sequential order is maintained from scheduling to packaging.

When combined with 3M's Information Management System, digital printing allows the use of bar code technology to track and identify individual plates. Plate ID's are cross-referenced in a database to access and update production information such as order number, box number, production status and destination. The use of bar codes greatly facilitates remaking defective plates.

See your 3M representative for specific features and components of each station.

Quality components mean quality plates.

When you partner with 3M, you get a proven process for transitioning to a digital operation.

3M™ Scotchlite™ Reflective Sheeting DLP Series 9250 is available in white for specialty plate production or preprinted graphic format for economical printing of large volume plate types requiring only one ribbon to print variable information.

3M™ Thermal Transfer Ribbon Series 1300 are available in process colors and a variety of spot colors. Custom colors are also available.

3M™ Clear Protective Film Series 9097 contains an adhesive layer that is laminated to the printed sheeting. It provides a tough, weather-resistant outer layer that protects sheeting and graphics in the demanding exterior vehicle environment.

3M™ DLP matched component print heads transfer color from the ribbons to the sheeting. Up to four heads are used per printer. The heads contain 300 individually-addressable elements per inch. The average print head life is 80,000 plates.



An assortment of benefits equal better service



Imagine reducing plate production time by weeks, even months! Whether specialty plates with exciting graphic designs or sequentially numbered general issue plates, the automated, process color printing system can eliminate paper orders and produce plates within minutes after an electronic order is entered. Integrating plate production with the DMV database means better production control, fewer errors caused by wrong plate numbers, and better tracking of orders.

Plates produced on demand

Eliminate the need to maintain inventories of specialty sheeting -- the DLP system uses process color printing that allows several multi-color designs on a single roll of plain white reflective sheeting. With the DLP System, personalized plate orders which can take several weeks to complete with conventional manufacturing methods, can be made as quickly as general issue plates.

Sequential or non-sequential production is a snap

Because both sequential and non-sequential plate numbers are printed with equal efficiency, inactive plate numbers can be re-used; owners can receive replacement plates with the same numbers as their old plates; and large inventories of general issue plates need not be kept on hand.

Bar codes add value

More DMVs are automating their branch offices. Use of bar codes on plates can improve inventory control in branch offices eliminating overstock or understock situations. In addition to better inventory tracking, bar codes printed on plates also provide faster distribution to the customer.

Easier on the environment, – energy efficient

Most motor vehicle departments currently maintain high inventories of plates that are manufactured in an embossing and solvent-based coating process that dates from the early 1900s. The DLP System uses solvent-free thermal transfer ribbons. Elimination of solvents from the manufacturing process means that volatile organic compounds are not released into the atmosphere, there is no hazardous waste disposal problem and workers are not exposed to potentially harmful vapors. The oven-drying step is also omitted resulting in significant energy and space savings. It also eliminates the messy clean-up associated with the solvent-based inks.

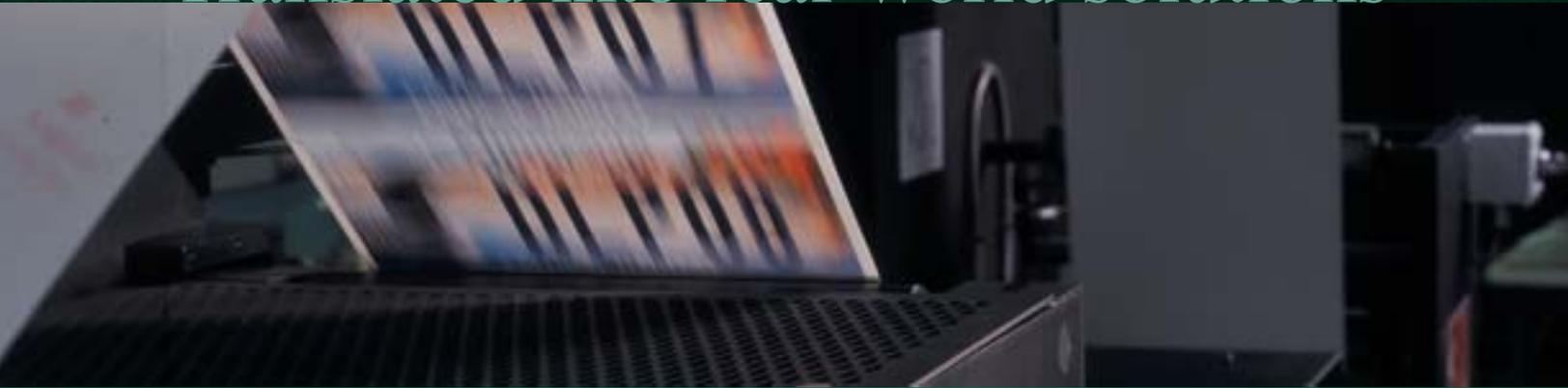
Lower storage and mailing costs

Digitally printed flat plates use a thinner, harder, lighter aluminum substrate that reduces mailing costs. Because the flat plates nest together better than embossed plates, they require less than half the storage space.

More effective for law enforcement

Digitally printed plates can incorporate larger, bolder characters than conventional embossing. This helps law enforcement see plates more clearly. Digital printing also allows the use of fonts that are compatible with optical character recognition technology used for toll collection and red light enforcement. Our reflective sheeting embedded with a 3M™ Ensure™ Security Image, deters counterfeiting. Finally, digital printing means bar codes can be applied easily to plates, which assists parking enforcement using hand-held scanners.

Translated into real-world solutions



Added Revenue

Increase revenue from specialty plate sales by creating more attractive designs. In Minnesota sales of the “Critical Habitat” plates soared when the new digitally printed loon design was issued. The DMV collected an extra \$18 for every special plate that was issued. This added revenue can help alleviate budget cutbacks. In most states an additional \$20 to \$30 per year goes to the organization that sponsors the plate.

3M’s service is unsurpassed

As with all its products, 3M stands behind its Digital License Plate System. In addition to complete system installation and personnel training, 3M provides top-notch technical service with trained specialists ready to assist in any situation. The 3M DLP system carries a complete parts and service warranty, and plates produced on the system are guaranteed for a minimum of five years.

If you’re ready for dramatic results today—and want more possibilities for tomorrow—contact us at 1-800-553-1380 or tcm@mmm.com.



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