

EXTREME LABELS

Innovative imaging and cutting technology with the Catalyst V8e laser label marking system.

The Catalyst V8e laser label marking system, from DTM Print, allows fast and easy production of highly durable, synthetic labels for a wide range of rough service applications. Labels produced with marking lasers, including the Catalyst V8e, are typically used to replace metal plates or far less durable labels produced by resin thermal transfer printers on polyester substrates.

Typical applications requiring such high durability labels include UDI labels for medical devices and healthcare equipment, automobile VIN and under hood part number, warning and instruction labels, aerospace and solar panel labels, serial tags for outdoor power equipment, vehicle and marine spare parts, building tools and materials and other industrial labels that need to withstand harsh environmental conditions for many years.

INNOVATIVE

Text, graphics, and linear or 2D/3D barcodes are laser imaged onto Color Laser Film (CLF), developed and manufactured by Schreiner ProTech GmbH in Germany. CLF labels are explicitly designed for extreme environment applications and do not require extra lamination to withstand extended exposure to UV light, chemicals, liquids, and temperatures of -40°C to 120°C .

Instead of ink, the Catalyst V8e uses fibre coupled laser diodes along with matched, high precision lenses to image onto CLF. Bundled fibre lasers have never before been used in a roll fed, desktop laser label imager, making the Catalyst unique in its class.

The Color Laser Film (CLF) is pre-laminated for maximum label resistance to environmental factors. The lamination helps to prevent the label degradation due to environmental damage and chemical exposure. After imaging the CLF material, Catalyst's built-in digital die cutting system cuts the labels to any shape, eliminating the need for pre-die-cut labels. Unlike other laser based marking systems, it uses a knife blade instead of the laser beam to cut out the labels. This feature, along with the phase change technology the Catalyst uses for the laser marking, eliminates the need for a smoke and fume extraction system, saving money on the initial equipment costs and the ongoing costs of periodic filter changes, cleaning and other maintenance.

Unlike traditional laser label systems, the Catalyst V8e features phase change technology to eliminate smoke and fumes during imaging. This makes it ideal for indoor desktop use without the need for costly extraction systems and trained operators.

Instead of a more traditional but more complex and



expensive computer controlled galvanometer with beam steering mirrors, the Catalyst was designed more like a standard industrial label printer such as DTM Print's LX3000e colour label printer. This approach results in a far less complicated and more rugged machine with no special maintenance or ongoing calibration required.

EVERYTHING YOU NEED

Catalyst V8e is easy to deploy, operate and maintain. Catalyst installs on a PC as a standard Windows printer. Any popular Windows based label creation software can be used to send image files. No special operator training or certification is required. A printer driver for Windows 10+ is available online for download. Also available for download is an easy to use label design and printing software from Seagull Scientific called BarTender UltraLite for Windows. Upgrade versions of UltraLite are available for obtaining additional features and connectivity, including database interfaces, SAP, Oracle, and other ERP integrations. Data interfaces include USB 2.0 and wired Ethernet.

Despite its many advantages, laser marking of durable label film has always been a complicated and expensive process. It required highly trained operators, a large capital investment, a lot of maintenance and a secure work area for safe operation. The Catalyst V8e Laser Marking System changes all that. It is designed to be used right on a desktop or workbench, making the laser marking process simple and convenient.

Catalyst is available directly from DTM Print or through authorised DTM Print partners in Europe, Middle East and Africa.