

# "We BARCODE Difficult Stuff"™

## **LABELASE®** Non-Contact, Bar Code Printing Directly On Cold Products

### Features:

- Direct on Products including O.D. or I.D. of Pipe
- Tracking Systems to Meet ISO 9000 Requirements
- Man-readable Identification
- Standard Bar Codes 128, Code 39 and I2 of 5
- Cold Surfaces
- Logos

### The System:

LABELASE® marking system marks bar codes, man-readable characters on hot or cold products. The LABELASE® system applies a paint patch onto a product surface and then uses a low power CO<sub>2</sub> laser to mark the indicia onto the paint patch.

An important advantage of this type of marking is its ability to image both high quality bar codes and man-readable information. Bar codes are within ANSI specifications and their Print Contrast Signal (PCS) is greater than 90% (ratio of reflectivity using visible red). The process flexibility allows the selection of an ink patch that can survive extreme temperatures (ambient to 150°F/ 816°C) as well as the rigors of harsh environments.

For many types of products, traditional adhesive backed labels or the attachment of barcode tags is not practical in many cases. All too often, the surface roughness, temperature, fluids and solvents used in industry will adversely affect the bonding of adhesive labels and tags.



**Typical API pipe identification on pipe I.D. or O.D.**

### Conclusion:

The LABELASE® system uses two proven technologies to create extremely durable marked paint patches directly onto many types of products. Using paint spray nozzle to lay down a patch of paint and then marking it with a low power CO<sub>2</sub> laser, provides the ability to put a bar code, alphanumeric text and logos onto rough and contaminated product surfaces without tags or adhesive backed labels.

## METHOD OF OPERATION

LABELASE® marks directly on products in a two step process:

- (1) Applying the paint patch
- (2) Marking the paint using a CO<sub>2</sub> laser

### Applying the paint patch

While dispensing paint, a conventional air nebulized (fan) spray nozzle is traversed over the surface to be marked. The size of the patch is configurable from a small .5 inch diameter circle up to 8" x 8" patch. By varying the pressure of the air spray and the distance between the tip of the nozzle and the surface of the target, a given size patch of paint of controllable thickness can be sprayed onto the surface.

Before the patch of paint can be marked, its surface needs to be set. As part of the design of the laser marking system, the components of the paint are selected to be compatible with the temperature of the object. Under most situations, the paint will cure very rapidly, and as such, will not add significant delay to the process. In the rare cases where the paint will not cure quickly enough on its own, a simple warm air blast will

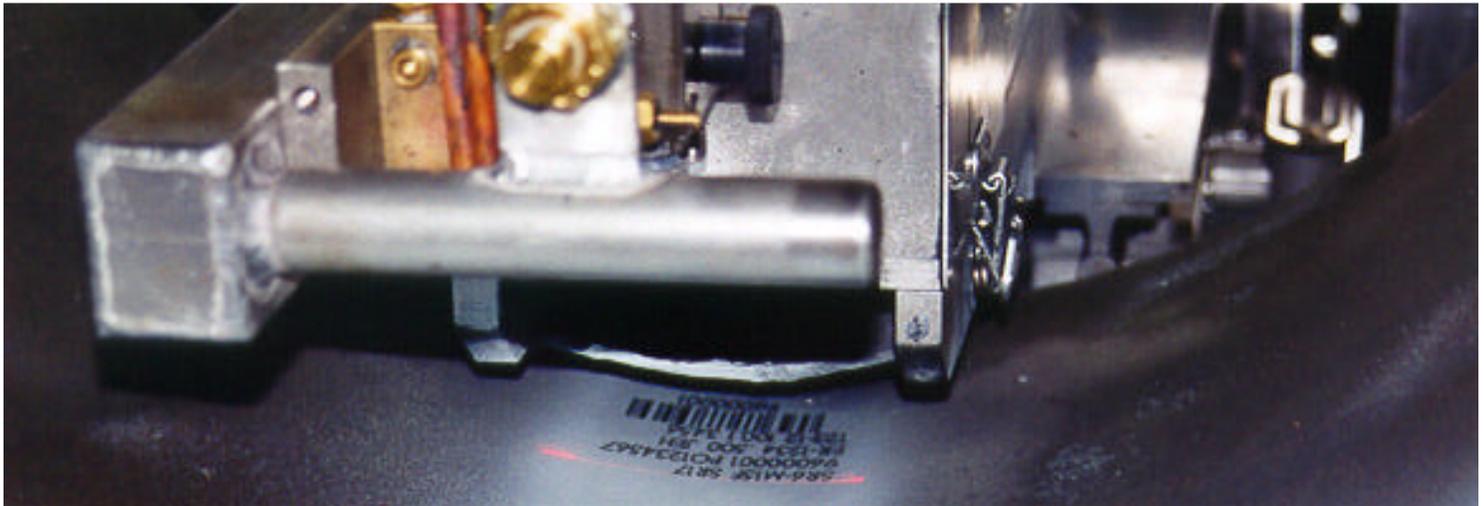
set the paint sufficiently enough to allow for laser marking. Paints can often be marked while still tacky.

### Marking the Paint Patch

The third and final step in the marking process is the laser marking of the paint patch. The system software receives the label data from a pre-configured application, operator interface terminal or a host computer interface. This information is used to drive the focused CO laser to mark a high contrast, high-resolution indicia into the paint patch.



Standard bar code portable reading gun.



Bar code and man-readable identification being applied to pipe I.D.