

# THE ENGINEER'S BRIEF

Volume 2, Issue 1



## POLYCARBONATE VERSUS METAL

COST, IMAGE & DURABILITY

### The Problem

The Lincoln Electric Company, a worldwide manufacturer of industrial and consumer welders, was faced with several common problems manufacturers experience in today's competitive world market place. They needed to update the look of their welders and maintain consistent branding across all their product lines *while* reducing manufacturing costs to remain competitive and increase their share of the market. Lincoln Electric was using metal for most of their nameplates. They believed it to be the only durable substrate that could withstand the welding environment, even though in some cases the metal was exposed to salt water which would corrode the metal. They also needed to *remove* cost from the manufacturing of their welding equipment while maintaining the quality.

### The Solution

The *first challenge* was to find a material that could withstand the welding environment and deliver cost savings to Lincoln. VMS's answer was polycarbonate. VMS sales engineers worked with Lincoln to choose the correct gauges and finishes that would be functional and portray the corporate brand across the entire line of welding equipment for both the consumer and industrial markets. By using polycarbonate, VMS helped reduce cost and added design benefits:

- Using adhesive to fasten the overlays reduced the usage of fasteners and the manufacturing operations to fasten the overlay to the welder.
- Thinner gauges of polycarbonate reduced the overall cost of the overlay.
- A wider variety of finishes and color choices were now made available to aid in the product look and maintain the corporate branding image.
- Polycarbonate allowed the use of transparent inks to create tinted or clear windows for LEC or LCD displays.
- Weld sparking was tested and did not effect the polycarbonate.
- The corrosion formed by salt water was eliminated.
- VMS was able to provide a polycarbonate overlay with a 45 degree bend and apply adhesive to selective areas which would allow easy access to repair the welder.

The *second challenge* was to convert existing "hand-drawn" prints and update all existing graphics to meet the new corporate look. VMS's industrial graphic design team worked closely with Lincoln Electric's engineering staff to create all new electronic art for each overlay and decal. This not only insured the use of the new corporate image across the board, but it allowed the engineering staff to input the art directly into their prints, made changes very easy for both companies, and most important, reduced cost and saved everyone time.

### The Result

VMS has successfully helped Lincoln Electric to achieve their goals:

- Achieved a **30% cost reduction** on the production of graphics for their welders!
- Enhanced the look of their equipment to represent the new updated corporate image Lincoln Electric wants to represent their company in the 21st century.
- Maintain a consistent look across the wide range of product that Lincoln Electric offers both the consumer and industrial welding market place.
- Improved the performance of their overlays by eliminating corrosion caused by salt water.
- Additional savings were achieved by reducing the hardware and inventory.

The challenges Lincoln Electric faced are common for all manufacturers entering the 21st century. VMS works with its customers to solve their challenges. Why not give VMS a call to discuss your product identification goals.

VMS Corporation is a leading manufacturer of pressure sensitive markings including Overlays, Decals, Nameplates, and Labels. If you wish to learn more, ask about our

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