



The Fluke Corporation

Graphic overlay

The challenge

The Fluke Corporation, a manufacturer of electronic test tools, needed an overlay solution for their newest communication tool, the Fluke 154 HART Calibration Assistant. The main objective for the project was to find a cost effective printing solution that met or exceeded Fluke's color, pricing and time specifications. The overlay contained a mix of several colors and Fluke only required a low volume of parts, which presented a unique printing challenge. GM Nameplate's rapid prototyping team stepped in to help Fluke identify the ideal printing process for the job.

Project goals

- Identify a printing solution with the following characteristics:
 - Meets stringent color standards
 - Fast turnaround time
 - Cost effective

The solution

Initially, Fluke was interested in having the overlays screen printed. Unfortunately, due to the overlay's use of multiple colors and low volume, screen printing became a very expensive option. Screen printing is most appropriate for parts with few colors and parts printed in high volumes. Although screen printing provides great color control, screen presses can only print one color at a time and the average set-up time for one color is 30 minutes. Therefore, in this case, Fluke would incur significant costs associated with the additional time and resources used to set up the

300%
COST SAVINGS

CASE STUDY

screen press for each color.

For these reasons, GMN urged Fluke to consider an alternative printing technique for the overlay. In comparison to screen, digital printing proved to be the most cost efficient technique for the project. With digital, multiple colors could be printed simultaneously and volume was not a concern. However, Fluke had reservations about committing to digital because of their high color matching expectations, but GMN's rapid prototyping team was able to ease the apprehension felt by Fluke.

2X FASTER
TURNAROUND
TIME

Despite digital printing's inferior color matching reputation, advancements in digital printing technology allowed GMN to create digital prototypes that were virtually indistinguishable from the screen prototypes. Another advantage was the team's ability to print and deliver the samples to Fluke with unparalleled speed and efficiency. Through the assessment of these prototypes, Fluke gained confidence in a digitally printed solution.

With minimal set up costs, digitally printing the overlays resulted in a 300 percent cost savings over screen printing. In addition, digital printing provided a faster turnaround time, cutting the production time of screen printing in half.

