

CIREXX DEVELOPS FLEX CIRCUIT FOR SURVIVABILITY IN CORROSIVE ENVIRONMENT

CLIENT / INDUSTRY

Industrial Equipment
Manufacturer

PROJECT SIZE

\$300,000 Project
1 Unit

THE CLIENT

A Northwest U.S. division of a large global conglomerate, who is involved in the design and manufacturing of industrial printing equipment used to print text onto commercial and consumer products – such as PVC pipe, sheets of plywood, etc.

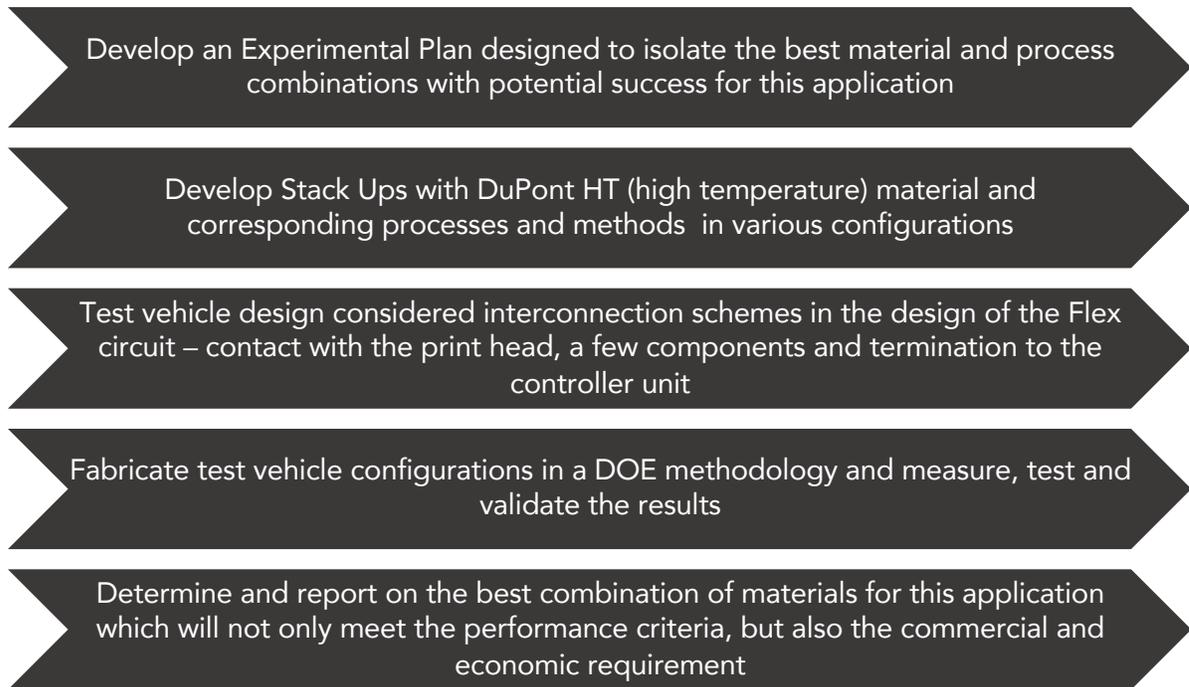
INTRODUCTION

The customer had a new technology that will revolutionize industrial printing quality and speed. The company's founders – prior to being acquired by a global conglomerate – came from the PC Inkjet business and were accustomed to using flex circuits as the primary interconnect for the print head.

NEEDS ASSESSMENT

A consistent failure mode was the Flex circuit's length of survivability when in contact with the caustic ink solution within the print head. The customer needed an interconnect solution that would not be affected by the ink and would also be commercially available across common markets economically matched with already stringent price points in production.

“The customer needed a comprehensive solution that would be commercially available and economically matched with already stringent price points in production.”



SOLUTIONS

Cirexx performed all the tasks in a QUICK TURN mode, rapidly producing results that allowed both company’s engineers to proceed swiftly through the Experimental Plan and kept diligent records throughout to add to the empirical database. Cirexx relied on the work that they had done in conjunction with DuPont during the development of the HT material to form the initial database for how it could be used in this application.

“Cirexx quick turn solution allowed the client to rapidly test the experimental plan and implement changes for improved product performance.”

FINAL OUTCOME

Cirexx and the customer have developed a Flex circuit design that - employing the HT material - can be effectively and economically used in applications where the Flex Circuit contacts ink or other corrosive liquids. The print heads are lasting longer and failing less, which interprets into happier customers down the line and a better reputation for the products of our customer.

“HT” is registered trademark of E.I. DuPont de Nemours Company

HIGHLIGHTS

- Cirexx understood the problem and developed an Experimental Plan to assess options and isolate the best solution
- Cirexx had the resources – technology, facilities and methods – to respond effectively and quickly
- Cirexx solution was cost effective in a price sensitive market