Case Study:
937X LINE: MAIN PRODUCT FOR THE HVAC MARKET

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Introduction

The 937X component is a safety device to prevent Carbon Monoxide from building up in a home and killing people, by virtue of there being no safe evacuation route.

On a cold day in New York for instance, you hit the thermostat and gas injects in to light the flame, but before that all happens, the system needs to ensure there's no pressure build up that might limit air flow and cause exhaust gas to build up. So, to ensure this is the case, a fan turns on to make sure that no pressure builds up, and that there's adequate air flow. The 937X is an air proving device, and as a sensor, it ensures that the coast is clear for the gas to release and flame be lit. By nature, this then is a device that contains a life critical component – if it does not work as it should, the consequences can be, and would likely be dire.
Micro in Action

In the past, this was always accomplished with a small push button switch added to a simple metal can with a diaphragm therein.

Micro entered this market over 20 years ago, and didn't like the existing design. The average price was $8 - 9 per piece and there was one major player occupying almost all orders. We hypothesized that we could make our own switch, different and better. We decided to try and build it out of plastic, and embed a unique switch inside the body rather than bolt one on the outside. From this was born 9300 series of our product, and it worked brilliantly.

The challenges we overcame

In these scenarios, the challenges are not just componentry focused or technical in nature. Convincing the market to adopt new technology or design can also be the challenge. In this case

1. We had an industry that was used to using sheet metal. That was the core material and that's what everyone was used to since the dawn of HVAC systems.

2. The technology hadn't changed since it was built – in a nutshell, you're running hot air through flames, or through a hot coil, and it had always been done that way.

3. Everyone is used to metal and plastic isn't thought of as a precision material. In our instance however, we'd be using a high-precision plastic that was stronger, more durable and more precise than the alternative.

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The outcome

It took over two years for the first company to trial our new product, but once the results were experienced and circulated, the market took to it. Today, it's the only design used in the industry by any company, and Micro commands over 50% of the market. It has now become the industry standard.
Contact us today

Every innovated solution is backed by the uncompromising pursuit of excellence at every phase of our manufacturing process.

Call us Toll-Free: (888) 386-4270
Phone: (954) 973-6166
Fax: (954) 973-6339
Email: info@mic-tec.com

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