

### Benefit from our experience

It was a horrific workplace tragedy that led to the creation of MSA, the world leader in worker protection and safety product innovation. On the morning of 26 March 1912, the Jed Mine in West Virginia exploded. Methane gas ignited and, in a flash, more than 80 miners lost their lives. Following this tragedy, mine engineer John T. Ryan Sr. had an epiphany: "If I could spend my life doing what I can to lessen the likelihood of the occurrence of such terrible disasters, I shall feel in the end that my life had been well spent."

Ryan recruited colleague George H. Deike to help realise his vision for a new company. Recognising the critical importance of dependable, safe mining equipment, they went straight to one of the country's great thinkers: Thomas Edison. The brilliant inventor helped Ryan and Deike create the electric cap lamp which, over the next 25 years, reduced mine explosions by an astounding 75 percent. Edison would later say that, of all his inventions, this was the one that did the most for humanity.



MSA cap lamp

In the decades since, MSA has continued to lead the charge for workplace safety. We've led the way with small first-aid kits and portable methane detectors, and harnessed new technologies to produce state-of-the-art thermal imaging cameras, respiratory breathing apparatus and industry-leading products for gas and flame detection including MSA's very own XCell sensors.

### Introduction

MSA XCell sensors are a breakthrough in sensor design, enabling faster response and shorter span calibrations, saving you time and money.

ASIC (application-specific integrated circuit) technology embedded inside each sensor provides greater control and higher performance than any other sensor on the market. This microchip is much more than a digital sensor; XCell Sensors perform real-time environmental corrections, provide plug-and-play capabilities and deliver greater RF immunity with higher overall performance.



MSA XCell sensors have a typical life of more than four years\*, double the industry average. By miniaturising sensor controlling electronics and placing them inside of the sensor itself, MSA XCell sensors offer superior response time, stability, accuracy and reliability. MSA is proud to offer XCell sensors with:

\*Refers to most standard XCell sensors. Specific exotic gas and special application sensors have shorter expected lives. Please refer to [www.MSAafety.com](http://www.MSAafety.com) for additional information.

- State-of-the-art automated assembly for greater control and reliability.
- Laser-welded sensor housings to eliminate opportunities for leaks.
- End-of-sensor-life warning to minimise downtime and inventory replacement.

The best and latest example of our advanced sensor technology is our XCell pulse sensor technology, now available on select versions of the ALTAIR 2X gas detector, which enables the first stand-alone bump test and eliminates the need for bottled gas!

With less time spent on calibration and bump tests, you save on calibration gas, maintenance costs and, consequently, money. But most importantly, MSA's industry-leading response times help to save lives.

Stay tuned for the second issue of the MSA XCell series on MSA's combustible sensors in the next MSA eNews.