



ACCELERATING COMMERCIALISATION

## Kinetic Elements - Clean printing technology

### Customer Story

#### *Breakthrough technology for cleaner printing.*

Family-owned start-up, Kinetic Elements Pty Ltd (Kinetic Elements), is a great example of how innovative Australian manufacturers are successfully countering competition from low-cost economies.

The Melbourne-based company was established in 2014 to take new manufacturing technology developed by its parent company, Laserlife Littlejohn, and the CSIRO, to market.

Laserlife Littlejohn and the CSIRO began collaborating in 2010 to develop a new "cold spray" technology to produce eco-friendly anilox printing rollers.

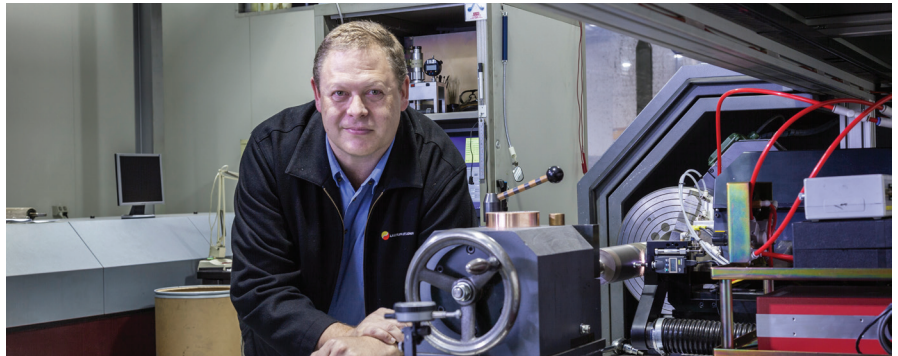
"This collaboration was a timely and exciting opportunity, as we were facing stiff competition in the established chrome oxide plated print roller market from cheaper Chinese products," says Kinetic Elements managing director Alex Engel.

The collaboration has produced great results, resulting in a new eco-friendly technology being developed to manufacture the rollers used in the printing of corrugated packaging cardboard and materials such as plastic film, paper and metallic foil.

*"The research collaboration has paid off and Kinetic Elements has exclusive global rights to this valuable new technology."*

ALEX ENGEL, MANAGING DIRECTOR,  
KINETIC ELEMENTS.

The new technology eliminates the use of the chromium oxide in anilox rollers. Traditionally used in the rollers - chromium oxide is a hazardous material which has serious and costly waste disposal issues. Extensive trials have shown the company's new Titanium rollers also perform better and are cheaper than chromium oxide technology.



*Kinetic Elements' Alex Engel is pioneering new eco-friendly printing technology. Photo: Rob Skovell.*

Kinetic Elements is commercialising its new technology, with an eye to disrupting the market for chromium oxide rollers, and is identifying potential new customers at home and in South East Asia.

"Our local customers are showing strong interest in this technology and are keen to conduct trials in their printing operations as soon as we are in production," says Engel. "Use of hazardous chromium oxide is under threat in the US and Europe due to environmental regulatory concerns - we have the solution."

Kinetic Elements received a \$1million Australian Government Accelerating Commercialisation Grant in March 2016. The grant and expert advice have supported the construction of a state-of-the-art manufacturing plant, product testing by CSIRO, professional assistance with licensing and intellectual property protection.

Commercialisation Adviser Ron Mack is impressed by the technology's potential.

"Manufacturing and commercialising this technology has the potential to transform the business into a global leader in the niche anilox roller market," Mack says.

Kinetic Elements commenced commercial production of its titanium rollers in 2017 and is currently conducting trials with potential licensees in Europe and the US.

View [kineticelements.com.au](http://kineticelements.com.au)

#### *Entrepreneurs' Programme*

The Entrepreneurs' Programme is the Australian Government's flagship initiative for business competitiveness and productivity.

The [Accelerating Commercialisation](#) element helps small and medium businesses, entrepreneurs and researchers to commercialise novel products, processes and services.

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