Australian Government Department of Industry, Innovation and Science

# SUCCESS STORY

# METAL PARTS

A new high-speed, low-cost, metal 3D printing technology is set to revolutionise industrial production in remote areas by producing metal parts on demand. Melbourne based SPEE3D developed the technology, and with the support of the Industry Growth Centre Initiative, its production is set to be fast-tracked for the oil and gas industry.

Industry

Growth

Centres

The cutting-edge technology uses a novel new metal deposition technique, taking advantage of kinetic energy from a rocket engine to promote bonding of metal particles. This allows the technology to operate around 1000 times the speed of conventional metal 3D printing — at a fraction of the cost.

In remote locations, downtimes are caused when replacement parts are unavailable locally and have to be ordered from overseas. This can have a significant impact on the continuation of work on-site and can cost operators up to a million dollars a day.

SPEE3D's technology has the ability to print emergency metal parts on-site and the potential to change the way business models operate by printing parts on demand instead of storing them in warehouses. The creators knew it would be in high demand, but needed support to demonstrate that the printer could be effective at a larger scale.

The Oil, Gas and Energy Resources Growth Centre, known as NERA (National Energy Resources Australia) is teaming up with Charles Darwin University and oil and gas operator ConocoPhillips to support the ongoing development of this new technology through to its game-changing potential.

Once produced the printer will be commercialised throughout Australia and exported globally.

SPEE3D is just one of the many businesses across six sectors unlocking its success with Australia's Industry Growth Centres Initiative. If your business has unrealised potential, now could be your time.

# LEARN MORE AT Industry.gov.au/IndustryGrowthCentres

## **GROWTH CENTRE SECTOR**





ADVANCED MANUFACTURING CYBER SECURITY





FOOD AND AGRIBUSINESS

MEDICAL TECHNOLOGIES AND PHARMACEUTICALS





MINING EQUIPMENT, TECHNOLOGY AND SERVICES

OIL, GAS AND ENERGY RESOURCES

### **GROWTH CENTRE INVOLVED**



### **BUSINESS FOCUS**



"NERA project funding has enabled SPEE3D to take its technology to the energy resources sector by approaching large oil & gas operators to demonstrate that its SPEE3D technology works in a robust and production feasible format in remote, heavily industrialised conditions."

— Steven Camilleri, Chief Technology Officer, SPEE3D.