SPEE3D

PRESS KIT 2026

www.spee3d.com

Company overview

SPEE3D is an Australian advanced manufacturing company. Its Cold Spray Manufacturing (CSM) technology makes metal parts where they are needed, in hours rather than days or weeks.

SPEE3D was founded in 2015 by Byron Kennedy and Steven Camilleri. The founders met building the Desert Rose solar car at the Northern Territory University (now Charles Darwin University). They turned its motor into a company later acquired by a NYSE-listed manufacturer, then founded SPEE3D after struggling to source quality metal parts.

SPEE3D is headquartered in Melbourne, with research in Darwin, a manufacturing and applications centre at the University of New Hampshire, and offices in Wilmington, Delaware and London.

CSM uses kinetic energy instead of heat. Metal powder is accelerated to up to three times the speed of sound and bonds on impact, with no melting, moulds or lasers. The result is dense metal parts equivalent to cast parts, with no controlled atmosphere or expensive inert gases needed.

The technology is built to deploy. SPEE3D's Expeditionary Manufacturing Unit (EMU) takes a part from CAD file to a finished, heat-treated, machined part on site, and SPEE3D systems have operated in combat, maritime, desert and arctic conditions. Now in its fifth generation, SPEE3D's world leading technology has been used in 70 deployments worldwide and is trusted by six defence forces, including in Australia, the United States and the United Kingdom.

FOUNDED

2015

DEPLOYMENTS WORLDWIDE:

70

NO. OF DEFENCE FORCES TRUSTED BY:

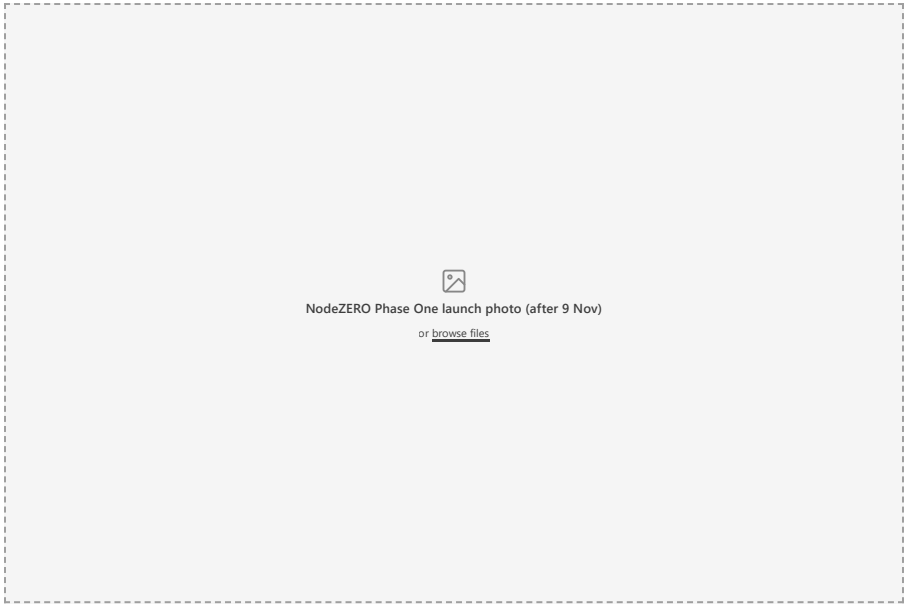
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CRITICAL PARTS MADE LOCALLY

CriticalSPEE3D

In November 2026 SPEE3D launched Phase One of NodeZERO in Darwin, the first of 50 advanced manufacturing factories planned across the Asia Pacific region, known as CriticalSPEE3D. CriticalSPEE3D will be run by SPEE3D as a service, making critical metal parts close to the bases, ports and industry that depend on them.

NodeZERO in Darwin is the first factory and is planned as the hub, where people for every factory will come for training and induction. Phase One is open to a small group of founding members. Organisations can register interest with Pierre Devaux at pierre.devaux@spee3d.com.



How Cold Spray Manufacturing works

Metal powder is accelerated through SPEE3D's Phaser Nozzle at up to three times the speed of sound and bonds on impact in a solid state. A robot moves the build so each layer lands where it should. Parts are then heat-treated and machined to finish. SPEE3D holds over 20 patents.



Good candidate parts are large, heavy-duty metal parts such as flanges, pump components and parts that suffer from corrosion.

Products

SPEE3D's range runs from printers for 5 kg parts to 2,000 kg parts, plus containerised systems that print in the field. Build sizes are diameter x height.

PRODUCT	WHAT IT IS	BUILD SIZE	MAX PART WEIGHT
LightSPEE3D	SPEE3D's smallest printer, for smaller parts	350 mm x 300 mm	5 kg
WarpSPEE3D	SPEE3D's highest-volume printer	1 m x 0.7 m	40 kg
TitanSPEE3D	Large-format printer for parts usually cast	2.4 m x 1 m	2,000 kg
XSPEE3D	A printer in a 20-foot shipping container, printing within hours of arriving on site	0.9 m x 0.7 m (approx.)	40 kg
SPEE3Dcell	Heat-treatment furnace, CNC mill and testing tools in a 20-foot container	n/a	n/a
Expeditionary Manufacturing Unit (EMU)	XSPEE3D plus SPEE3Dcell: from CAD file to a finished, heat-treated, machined, certified part on site	0.9 m x 0.7 m (approx.)	40 kg

TwinSPEE3D software takes STL and STEP files, generates multi-axis tool paths automatically and simulates each build before printing.

Materials. Qualified: aluminium 6061, copper, cupronickel alloys, stainless steel, 410L stainless steel and nickel aluminium bronze. In development: titanium and further stainless and aluminium alloys.





Leadership

Bryan O'Connor headshot
or browse files

Bryan O'Connor

GLOBAL CEO

Bryan O'Connor is SPEE3D's Global CEO. He brings more than 30 years of senior executive experience across aerospace, defence and industrial automation.

Bryan joined SPEE3D in October 2026 to lead its operations worldwide.



Byron Kennedy

US PRESIDENT AND CO-FOUNDER

Byron Kennedy co-founded SPEE3D in 2015 and led it as CEO until October 2026. From 2027 he will be based in the United States, building SPEE3D's presence, partnerships and business there.

Byron is a serial entrepreneur. He and Steven Camilleri co-founded In Motion Technologies, a spin-off from their work at Charles Darwin University, which was acquired by Fasco Motors, part of NYSE-listed Regal Beloit. Byron served as R&D Director at Regal Beloit from 2006 to 2014. His product work spans solar cars, electric motors, electric bicycles and pool pumps. Byron holds a Master's degree in Engineering (Electrical and Electronics Engineering).

Leadership



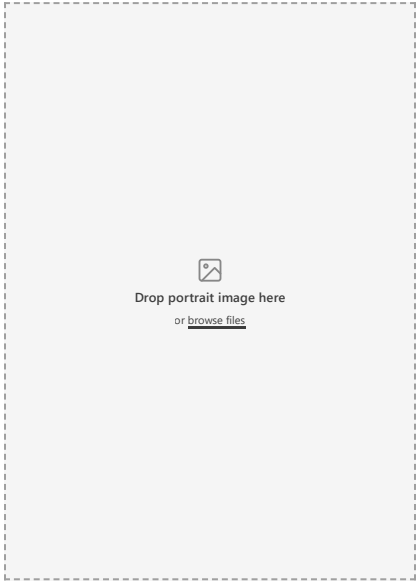
Steven Camilleri

CO-FOUNDER AND CHIEF TECHNOLOGY OFFICER

Steven Camilleri co-founded SPEE3D in 2015 and leads its technology as Chief Technology Officer. He holds multiple patents, a Master's degree in Engineering and a PhD in Metallurgy, specialising in corrosion resistant alloys.

Before SPEE3D, Steven and Byron co-founded In Motion Technologies, a spin-off from their work at Charles Darwin University, set up to commercialise axial flux electric motors and later acquired by Fasco Motors, part of NYSE-listed Regal Beloit. His product work spans solar cars, electric motors, electric bicycles and high-efficiency pool pumps.

Steven has published two white papers on Australian manufacturing: *Make Stuff Here: A blueprint to reinvigorate Australia's Economy* (2025), and *Make stuff here...or else: A framework for deciding what Australia must produce, repair or regenerate domestically*, published by the Australian Strategic Policy Institute (ASPI) in 2026.



Press releases, 2019 to 2026

Newest first. Each headline links to the release or its coverage.

DATE	HEADLINE	SUMMARY
9 Nov 2026	SPEE3D kicks off 50-factory Asia Pacific advanced manufacturing network from Darwin	NodeZERO Phase One launched in Darwin, the first CriticalSPEE3D factory
8 Sep 2026	SPEE3D appoints Bryan O'Connor as Global CEO	Former Moog Asia-Pacific Defence head takes over global operations; Byron Kennedy moves to the US
29 Aug 2026	US joint effort tests at-sea metal 3D printing at RIMPAC 2026	SPEE3D's cold spray system made 32 metal parts during RIMPAC 2026, 8 at sea and 24 ashore, with DEVCOM ARL as government lead
Jun 2026	ASPI publishes Steven Camilleri's Make stuff here...or else	The white paper proposes a framework for which goods Australia should make at home
5 Mar 2026	Six weeks to ten hours: Guard soldiers make and install a vehicle part in the field	Tennessee Army National Guard, University of Tennessee engineers and DEVCOM ARL replaced a failed battle lock handle in under 10 hours using the EMU
9 Feb 2026	SPEE3D supports repairs at the US Navy's Trident Warrior 2025	Led by CAMRE at the Naval Postgraduate School, newly trained service members from every US military branch used an XSPEE3D to repair a damaged Navy aviation part by adding material
10 Sep 2025	SPEE3D takes the EMU on a live manufacturing tour of Europe	The Expeditionary Manufacturing Unit toured Europe, making parts live
14 Aug 2025	University of Sydney installs WarpSPEE3D for materials research	WarpSPEE3D printers installed at the Sydney Manufacturing Hub

Press releases, 2019 to 2026

DATE	HEADLINE	SUMMARY
27 Feb 2025	Steven Camilleri publishes Make Stuff Here: A blueprint to reinvigorate Australia's Economy	White paper arguing Australia should build high-value industries such as advanced manufacturing, beyond exporting raw materials
30 Jan 2025	Northeastern University's Kostas Research Institute buys WarpSPEE3D	WarpSPEE3D for students and military research in Burlington, Massachusetts
16 Dec 2024	XSPEE3D prints metal parts in sub-zero conditions	XSPEE3D tested in the cold as part of the US DoD Point of Need challenge
18 Nov 2024	SPEE3D showcases expeditionary manufacturing at Formnext 2024	Live printing at Formnext, Frankfurt
30 Oct 2024	Austal USA buys WarpSPEE3D for maritime manufacturing	WarpSPEE3D at Austal USA, which runs the US Navy's Additive Manufacturing Center of Excellence
12 Sep 2024	SPEE3D joins the Army Research Laboratory advanced additive manufacturing demonstration in Tennessee	A Tennessee Army National Guard soldier with minimal training printed a Bradley Fighting Vehicle transmission mount cap on a WarpSPEE3D in about two hours, at the University of Tennessee
8 Sep 2024	SPEE3D shows the Expeditionary Manufacturing Unit (EMU) in Australia for the first time, at Land Forces 2024	The EMU's first showing in Australia, at the Land Forces International Exposition
13 Aug 2024	11 parts for five services at RIMPAC 2024	An EMU at Marine Corps Air Station Kaneohe Bay printed 11 cast-equivalent parts for the Army, Navy, Air Force, Marines and Coast Guard during Trident Warrior
17 Jul 2024	RusselSmith buys WarpSPEE3D for West Africa	Strategic partnership to bring SPEE3D's technology to West Africa

Press releases, 2019 to 2026

DATE	HEADLINE	SUMMARY
24 Jun 2024	SPEE3D introduces nickel aluminium bronze (NAB Expeditionary)	New material launched, printed live at RAPID + TCT
18 Jun 2024	SPEE3D opens US manufacturing and applications centre	New centre at the University of New Hampshire's John Olson Advanced Manufacturing Center
6 Jun 2024	SPEE3D previews TitanSPEE3D	Large-format printer for parts up to 2,000 kg, previewed at LSAAT in Worcester, Massachusetts
29 May 2024	SPEE3D joins the US Navy's first Salvex exercise at Pearl Harbor	Part of the NAVSEA salvage exercise
14 May 2024	SPEE3D launches the Expeditionary Manufacturing Unit (EMU)	Launched at the European Defence Agency's AM Village in Belgium, alongside the British Army
30 Apr 2024	SPEE3D partners with New Jersey Innovation Institute	WarpSPEE3D at NJII
5 Dec 2023	Adam Lewis appointed Chairman	New Chairman of the SPEE3D Board
30 Aug 2023	XSPEE3D installed at the US Naval Postgraduate School	XSPEE3D for the Naval Postgraduate School (CAMRE)
4 Aug 2023	SPEE3D takes part in US Marine Corps Integrated Training Exercise 4-23	
19 Jul 2023	Missouri S&T buys WarpSPEE3D	WarpSPEE3D for research and workforce training
15 Jun 2023	SPEE3D partners with HAW Hamburg	University of Applied Sciences Hamburg partnership
30 May 2023	SPEE3D chosen by the US Navy to develop SUBSAFE manufacturing materials	

Press releases, 2019 to 2026

DATE	HEADLINE	SUMMARY
17 May 2023	SPEE3D wins the US DoD ManTech Point of Need Challenge	Office of the Secretary of Defense Manufacturing Technology challenge
30 Mar 2023	SPEE3D to help the British Army build its additive manufacturing capability	British Army buys an XSPEE3D, with support from SPEE3D
9 Nov 2022	SPACE3D rocket engine passes first hot fire test	
1 Nov 2022	British Army chooses SPEE3D for Project Convergence	Parts made for a multinational force in the US Army exercise
4 Oct 2022	XSPEE3D launched	Printer and all auxiliary equipment in one 20-foot container
9 Sep 2022	WarpSPEE3D prints parts on a US Navy ship	NAVSEA REPTX exercise, ANTX-Coastal Trident 2022, Port Hueneme, California
11 Jun 2022	SPEE3D releases the Phaser Nozzle	New high-velocity nozzle
23 May 2022	SPEE3D joins the US Navy's MaintenX exercise	Maritime parts printed from port and at sea
1 Mar 2022	EWI chooses SPEE3D for its cold spray research centre	
15 Feb 2022	SPEE3D wins the first DSI Expeditionary and Tactical 3D Printing Excellence Award	
27 Jan 2022	Phillips Federal adds a WarpSPEE3D at Rock Island Arsenal	
1 Nov 2021	Australian Army prints and certifies armoured vehicle parts in the field	Exercise Koolendong, with the Marine Rotational Force, Darwin

Press releases, 2019 to 2026

DATE	HEADLINE	SUMMARY
27 Jul 2021	Elementum 3D adopts SPEE3D technology	
8 Jul 2021	SPEE3D launches the SPACE3D rocket engine project	
24 Jun 2021	Penn State Applied Research Laboratory acquires SPEE3D technology	
18 May 2021	SPEE3D wins Land Forces 2021 SME Innovation Award	ADMA Foundation award
16 Apr 2021	SPEE3D releases SPEE3DCraft	Free metal manufacturing simulator
23 Mar 2021	WarpSPEE3D arrives in El Salvador	3D in Metal, Latin America
20 Jan 2021	Infocus Laser Systems to represent SPEE3D in Brazil	Reseller agreement
10 Nov 2020	Royal Australian Navy installs WarpSPEE3D at HMAS Coonawarra	
4 Sep 2020	Australian Army proves metal 3D printing can strengthen sovereign capability	Two-week field trial at Mount Bundey: real repair parts printed and machined in 37 degree heat
25 Jun 2020	World-first field deployment of WarpSPEE3D by the Australian Army	Unloaded and ready to print within 30 minutes at Mount Bundey
5 May 2020	Phillips Federal adds a LightSPEE3D at Rock Island Arsenal	
15 Apr 2020	ACTIVAT3D copper kills SARS-CoV-2 virus	Lab tests showed copper-coated touch surfaces contact-killed 96% of SARS-CoV-2 in two hours
21 Nov 2019	Royal Australian Navy pilot announced	A$1.5 million, two-year pilot with a WarpSPEE3D
21 Nov 2019	SPEE3D sets world record for fastest 3D print of a metal part	A 1.012 kg copper sledgehammer printed in 10 minutes 2 seconds, live at Formnext in Frankfurt

Awards and recognition

2025	AmCham Freedom's Forge Award
2023	Winner, US DoD ManTech "Point of Need" Challenge (Office of the Secretary of Defense) 3DPI Awards Leader in Defence, Aerospace and Space Award, Victorian Manufacturing Hall of Fame Awards Finalist, Scale-up of the Year, Startup Tech Daily Awards Finalist, Defence Innovator of the Year, Australian Defence Industry Awards Silver, AU Manufacturing Top 50 Most Innovative Australian Companies
2022	DSI Expeditionary and Tactical 3D Printing Excellence Award Governor of Victoria Export Awards, Manufacturing and Advanced Materials Finalist, SME of the Year, Defence Connect Australian Defence Industry Awards
2021	Land Forces SME Innovation of the Year Winner, Advanced Technologies Award, NT Export and Industry Awards (NTEIA) Finalist, Advanced Manufacturing, InnovationAus Awards Finalist, SME of the Year, Defence Connect Australian Defence Industry Awards
2020	NT Exporter of the Year Australian Trusted Trader Technology and Innovation Award AIDN-NT Innovation Award
2018	TCT Awards, Hardware Non Polymer Highly Commended, TCT Rising Star Finalist, NSW Export Awards
2016	Tech23 Award for Innovation
2015	Bosch Venture Forum Awards

FAQs

What is Cold Spray Manufacturing (CSM)?

CSM is SPEE3D's process for making metal parts. It accelerates metal powder to up to three times the speed of sound, and the particles bond on impact in a solid state, with no melting. Because nothing melts, there are no moulds, no lasers and no need for a controlled atmosphere or expensive inert gases.

How fast is it?

SPEE3D makes full-scale metal parts in hours rather than days or weeks. The print itself is followed by heat treatment and machining, which take it to a finished part, all within hours. That compares with a wait that can run to weeks or months when a part has to come from overseas.

How good are the parts?

SPEE3D parts are dense metal parts equivalent to cast parts, with properties comparable to, and in some cases better than, casting. The Expeditionary Manufacturing Unit (EMU) takes a part from CAD file to a finished, heat-treated, machined, certified part on site.

FAQs

Where has it been proven?

SPEE3D systems have operated in combat, maritime, desert and arctic conditions, completing full print, heat-treat and machine cycles on site. Examples:

- **Northern Territory, 2020.** Soldiers from the Australian Army's 1st Combat Service Support Battalion trucked a WarpSPEE3D to the Mount Bundey Training Area. It was ready to print within 30 minutes, and in a second trial they printed and machined real repair parts in 37 degree heat and 80 per cent humidity.
- **RIMPAC 2024.** An EMU at Marine Corps Air Station Kaneohe Bay printed 11 cast-equivalent metal parts for the Army, Navy, Air Force, Marines and Coast Guard.
- **Tennessee.** Tennessee Army National Guard soldiers, supported by University of Tennessee engineers and the DEVCOM Army Research Laboratory (ARL), used the EMU to replace a failed battle lock handle on a combat support vehicle in under 10 hours. A drone flew the part to the crew: a single-day mission in place of a supply chain that would typically take more than six weeks.

Who uses SPEE3D?

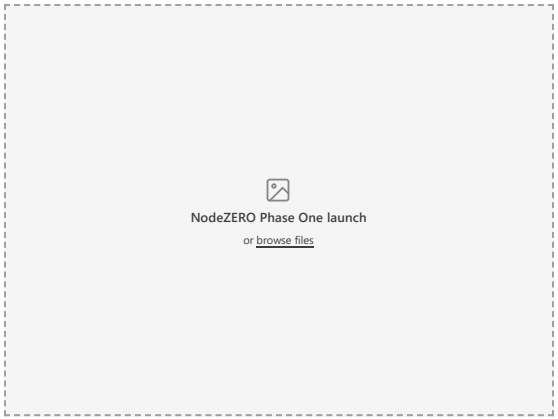
SPEE3D is trusted by six defence forces and has 70 deployments worldwide. An XSPEE3D is installed at the US Naval Postgraduate School, and Austal USA, which runs the US Navy's Additive Manufacturing Center of Excellence, uses a WarpSPEE3D for parts traditionally made by casting. SPEE3D also works with research partners including Charles Darwin University and Penn State's Applied Research Laboratory.

What are CriticalSPEE3D and NodeZERO?

CriticalSPEE3D is SPEE3D's plan for 50 advanced manufacturing factories across the Asia Pacific region, close to the bases, mines, ports and industry that need critical metal parts. It will be run by SPEE3D as a service. NodeZERO in Darwin is the first factory and is planned as the hub, where people for every factory will come for training and induction. Phase One launched on 9 November 2026 and is open to a small group of founding members. Organisations can register interest with Pierre Devaux at pierre.devaux@spee3d.com.

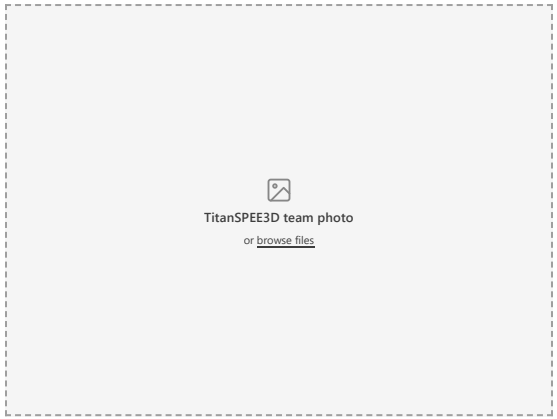
Photos and video

High-resolution photos and video are available for download at the SPEE3D press kit page.



CRITICALSPEE3D

A metal part being made at the NodeZERO Phase One launch in Darwin, November 2026



TITANSPEE3D

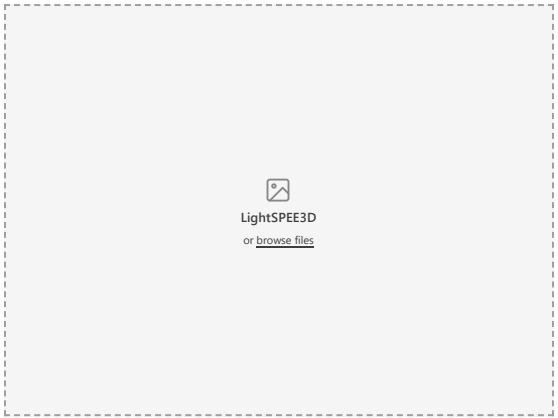
SPEE3D team members inside TitanSPEE3D, SPEE3D's large-format printer for metal parts up to 2.4 m across and 2,000 kg



EXPEDITIONARY MANUFACTURING UNIT (EMU)

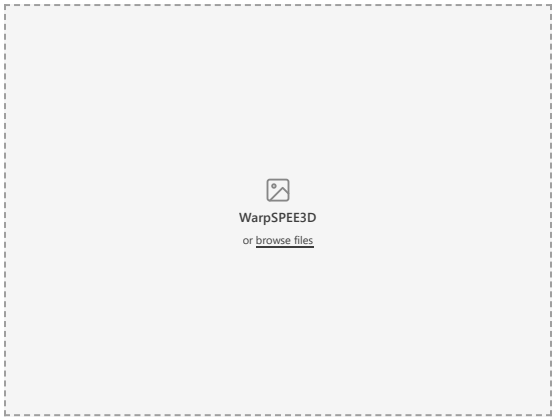
SPEE3D's Expeditionary Manufacturing Unit (EMU): SPEE3Dcell for heat treatment, machining and testing (left) and the XSPEE3D printer (right), each in a 20-foot shipping container, taking a part from CAD file to finished part on site

Photos and video



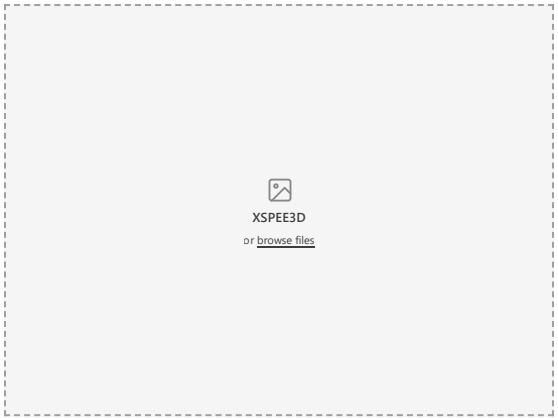
LIGHTSPEE3D

LightSPEE3D, SPEE3D's smallest printer



WARPSPEE3D

WarpSPEE3D, SPEE3D's highest-volume printer



XSPEE3D

XSPEE3D, a metal printer in a 20-foot shipping container

Photos and video



PHASER NOZZLE

SPEE3D's Phaser Nozzle spraying titanium



BATTLE LOCK HANDLE, TENNESSEE, 2026

The replacement battle lock handle fitted to a combat support vehicle's armoured door, made in the field by Tennessee Army National Guard soldiers with University of Tennessee engineers and DEVCOM ARL

Photos and video





EXERCISE KOOLENDONG, 2021

Australian Army WarpSPEE3D tactical trial, Exercise Koolendong, Bradshaw Field Training Area, Northern Territory, 2021





MOUNT BUNDEY FIELD TRIALS, 2020

Australian Army soldiers printing parts at the Mount Bundey Training Area, Northern Territory, 2020



US NAVY REPTX, 2022

WarpSPEE3D at the US Navy's REPTX exercise, 2022

Photos and video



US MARINE CORPS ITX, 2023

SPEE3D at the annual US Marine Corps Integrated Training Exercise, California, 2023







LEADERSHIP

Bryan O'Connor, Global CEO; Byron Kennedy, US President and Co-Founder; Steven Camilleri, Co-founder and Chief Technology Officer



FACILITIES

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AVAILABLE FOR INTERVIEW

Bryan O'Connor, Global CEO

Steven Camilleri, Co-founder and Chief Technology Officer

Pierre Devaux, Senior Director, Worldwide Business Development: US media and CriticalSPEE3D

Calum Stewart, Global Head of Defence: Defence programs

Jennifer Howe, Senior Business Development Director, Central Region: US industry

Byron Kennedy, US President and Co-Founder: US media, from 2027

SPEE3D

ABOUT SPEE3D

SPEE3D is a defence manufacturing technology company and the pioneer of Cold Spray Manufacturing (CSM), a deployable approach to metal part production that builds components at high speed without melting. SPEE3D's expeditionary systems are designed to put metal manufacturing at the point of need, on land or at sea, to strengthen supply chain resilience and sustainment for defence and aerospace customers worldwide.

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