Pipe Repair Clamp

Enabling expedient repair of damaged pipework to maintain operational effectiveness.

Value Summary

The ability to manufacture bespoke repair solutions whilst in dock or underway, ensures maritime capability not reduced by pipework failing or becoming damaged.

Production Method	Production Time
Manufactured (Casting or Machining)	6-8 weeks
SPEE3D CSAM NAB	27.5 hours

Background
Modern Naval vessels contain extensive pipework of varying diameters and lengths that service important onboard systems. Isolating sections of pipework for extended periods can decrease the operational effectiveness of a vessel or necessitate its withdrawal from the operations to undergo repairs.

The Challenge
Can effective bespoke pipe repair solutions be produced at point of need to enable continuation of the mission, until a permanent repair solution can be installed.

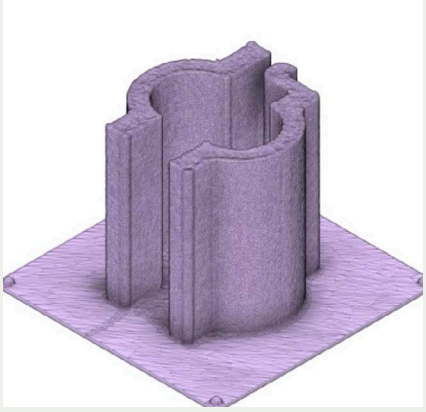
The Solution
SPEE3D's CSAM (Cold Spray Additive Manufacturing) technology can 3D print bespoke metal repair kits to fit a wide variety of pipe designs from design to deployment in less than 28 hours or just over 1 day.

The Value
Keeping equipment running is essential in critical enviorments for any industry. Whether it's a tank on a battlefield, a piece of mining equipment in a remote area, or a valve on an oil rig in the ocean, without the correct spare parts equipment can sit idle and unable to be used. Often the cost of the replacement parts is not the issue, it's the time it takes to receive them. With CSAM technology customers can reduce the wait time for critical spare parts from weeks to less than a day.

Design to deployment in less than 28 hours

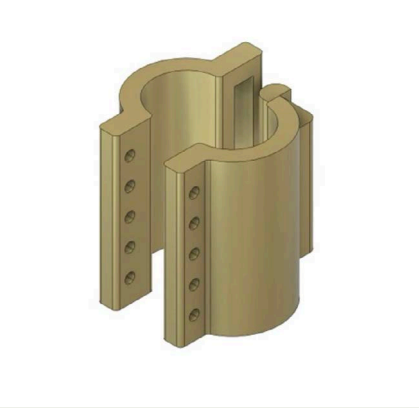
Print: 6 hours

Nickel Aluminum Bronze,
36kgs of material



Cook: 19.5 hours

Heat treated in a standard
air furnace



Cut: 2 hours

Critical surfaces machined
on CNC

About The Equipment

Pipework on ships are like the veins that keep the vessel alive, carrying everything from liquids to steam to gasses. If any of these systems become compromised they can have lasting detrimental effects on the operational capability of the vessel.

SPEE3D — SPEE3D.COM

World headquarters,
Melbourne, Victoria, Australia

Research & development,
Darwin, NT, Australia
Phone: +61 (03) 8759 1464

North America,
Wilmington, Delaware, USA
Phone: +1 877-908-9369

UK/Europe,
Berlin, Germany
Phone (UK): 0808 196-2931
Phone (EU): +44 (808) 196-2931

Learn more today

Ready to bring your metal additive manufacturing application to life?
Visit us at www.spee3d.com/contact/