



WWW.SAMMTECH.COM

**PRINT WHAT YOU NEED.
WHEREVER YOU NEED IT.**

SNOWBIRD ADDITIVE MOBILE
MANUFACTURING TECHNOLOGY

Patented gantry technology

Metal and composite production

Finishing mill for complete parts

Large format up to 250 cubic feet

Software and scanner compatibility



US PATENT NO. 10,434,712 B1





Our Mission is to protect both people and equipment from the most intolerable conditions around the globe.

Our cutting-edge technology will go the distance, no matter the environment.

INTRODUCTION

SUPPORTING PEOPLE AND EQUIPMENT

ABOUT US

With more than 31 years of experience in the designing and manufacturing of specialized cooling and water systems, the Snowbird Technologies brand is synonymous with innovative solutions for extreme environments.

Today, Snowbird Technologies offers a range of custom-built environmental control units, air-water generators, and now the impressive SAMM Tech additive manufacturing platform — providing support for users in military and industrial markets around the world.

WHY SNOWBIRD TECHNOLOGIES

Snowbird Technologies has been a trusted OEM contractor for the United States military and allied forces since 1992. As a small business, our team is dedicated to producing quality, reliable products that support the goals of each mission. SAMM Tech is the newest product innovation by Snowbird Technologies and offers mobilized, large-format 3D printing, which no other manufacturer can boast.

SAMM Tech brings mission-supporting elements to remote, mobile, and extreme locations.



As shown:

Model SAMM-MM010S

Metal production + milling head | 64 cu.ft. print bed | 10-ft. standard height shipping container

See full specifications on page 9

ABOUT SAMM TECH

"This combination will enable quick, high-tolerance interim and end-use parts to be produced onsite anywhere in the world."

Scott Morse, Owner/CEO

End-to-end 3D manufacturing

Large format parts

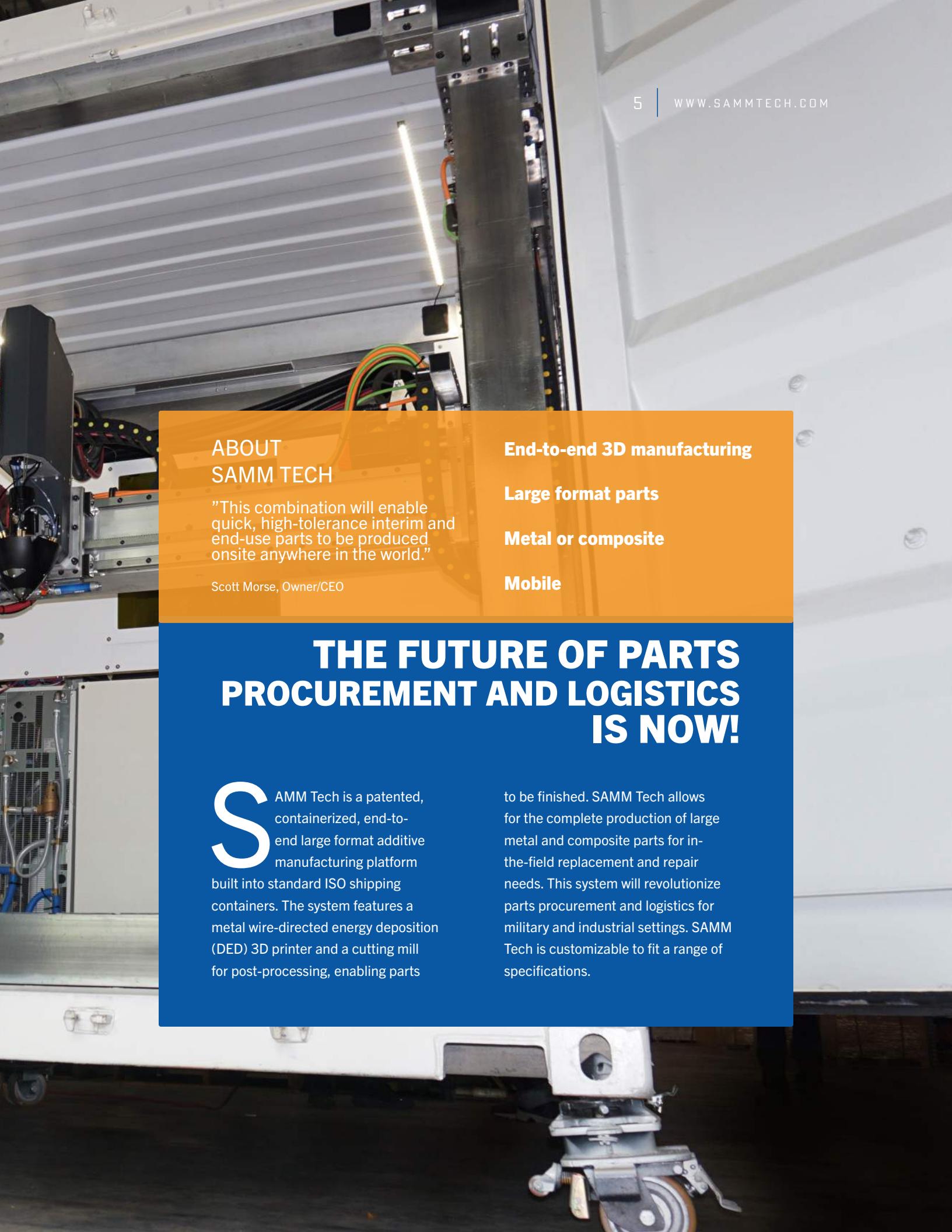
Metal or composite

Mobile

THE FUTURE OF PARTS PROCUREMENT AND LOGISTICS IS NOW!

SAMM Tech is a patented, containerized, end-to-end large format additive manufacturing platform built into standard ISO shipping containers. The system features a metal wire-directed energy deposition (DED) 3D printer and a cutting mill for post-processing, enabling parts

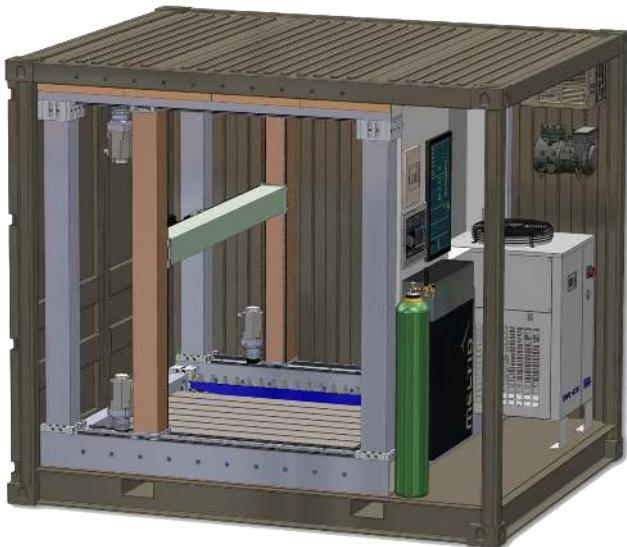
to be finished. SAMM Tech allows for the complete production of large metal and composite parts for in-the-field replacement and repair needs. This system will revolutionize parts procurement and logistics for military and industrial settings. SAMM Tech is customizable to fit a range of specifications.



THE DNA OF A SAMM TECH MACHINE

SAMM Tech was engineered and built by industry experts who understand the importance of onsite, on demand parts production. This machine is designed to keep your operations running without downtime.

Setting ourselves a part from any other additive manufacturing system, the DNA of a SAMM Tech machine consists of the following:



PATENTED TECHNOLOGY

Our patented gantry technology is designed to perform metal and composite additive and subtractive manufacturing inside of a mobile container.

INDUSTRY-TRUSTED VENDOR PARTNERS

We've partnered with the best component designers and manufacturers in additive manufacturing to ensure that only the most innovative, quality pieces are used on our machine.

STANDARD SHIPPING CONTAINER

A simple yet impactful decision was to build our platform inside of standard ISO shipping containers. This ensures that SAMM Tech can conveniently ship to anywhere in the world, all while protecting the core of the system.

LARGE FORMAT

Unlike any other offering on the market, SAMM Tech can produce both small and large intricate components, up to 250 cubic feet!

SOFTWARE COMPATIBILITY

The SAMM Tech platform is compatible with most industry 3D printing software and scanner systems, allowing flexibility in selecting the right products for your requirements.

RUGGEDIZED & DURABLE

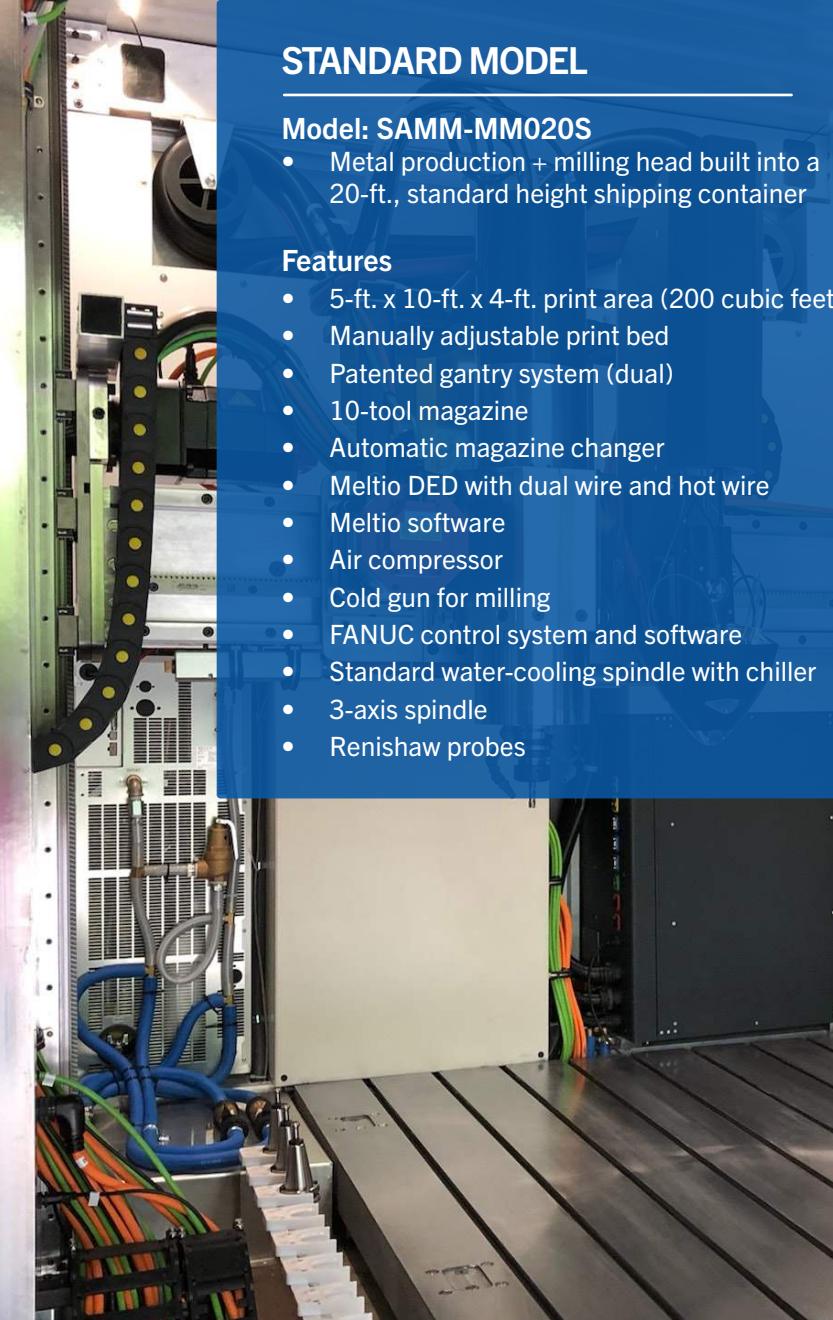
SAMM Tech is ruggedized to withstand the harshest climates and terrains. Our expertise in climate-control ensures that the interior of the unit is at the optimal setting for 3D printing without defects.

SPECIFICATIONS



SAMM Tech units can be custom-designed and built to fit a range of requirements and applications.

Outlined below are the standard model features and capabilities. SAMM Tech units are engineered to MIL-STD-810.



STANDARD MODEL

Model: SAMM-MM020S

- Metal production + milling head built into a 20-ft., standard height shipping container

Features

- 5-ft. x 10-ft. x 4-ft. print area (200 cubic feet)
- Manually adjustable print bed
- Patented gantry system (dual)
- 10-tool magazine
- Automatic magazine changer
- Meltio DED with dual wire and hot wire
- Meltio software
- Air compressor
- Cold gun for milling
- FANUC control system and software
- Standard water-cooling spindle with chiller
- 3-axis spindle
- Renishaw probes

CAPABILITIES

Max cutting speed 9.1m/min on aluminum

Rapid movement speeds at 30m/min

Max weight at or under normal shipping weight

Operates on one 3PH/208V/60Hz 200 Amp MIL-SPEC power coupling

Interior operator station

Metal DED printing - 1.1kg/hour metal deposition rate of steel

Spindle vibration displacement tolerance under 0.0001" at max speed resolution and repeatability - 0.0007"

CUSTOM BUILD



Select from the following to build your custom SAMM Tech platform.

A CUSTOM-BUILD

Production Material

- Metal
- Composite
- Dual (metal and composite)

Subtractive Manufacturing Capabilities

- Milling
- Routing

Container Length

- 10-ft.
- 20-ft.
- 40-ft.
- 53-ft.

Container Height

- Standard
- High Cube



OPTIONS

Single, dual, or multiple gantries

5-axis spindle

Titanium printing chamber design

Operator compartment air conditioning

Climate control in the print chamber

Renishaw probes (single gantry option, standard with dual gantry)

Creaform scanner

FANUC robotic arm for print head

Trunnion table

Heated print bed



AS SHOWN

Model: SAMM-MM010S

Metal production + milling head built into a 10-ft., standard height shipping container

10-ft. ISO Container with Hybrid Manufacturing Capabilities

Features

- 4-ft. x 4-ft. x 4-ft. print area (64 cubic feet)
- Patented gantry system (single)
- 8-tool magazine
- Automatic magazine changer
- Meltio DED with dual wire feeders and hot wire upgrade
- Meltio software
- 30 SCFM output air compressor
- Cold air coolant gun for milling tool cooling
- FANUC control system and software
- Standard water-cooled spindle with stand-alone water chiller
- 3-axis spindle

INDUSTRIES AND APPLICATIONS



The SAMM Tech design was inspired by the need for military bases and warfighters to have accessible, accurate replacement parts for critical systems in some of the most isolated places on the globe. SAMM Tech systems are designed to bring flexible, scalable manufacturing operations to remote and extreme locations.



Oil and Gas



Research and Academia



WWW.SAMMTECH.COM



SCHEDULE A DEMO

INTERESTED IN EXPERIENCING THE POWER OF
MOBILE MANUFACTURING? CONTACT US TODAY TO
SCHEDULE A DEMO OR FACTORY TOUR.

Jeremy Heerdink | VP, Business Development
JHeerdink@snowbirdtech.com



7749 Bayberry Rd.
Jacksonville, FL 32256

Phone M: (615) 630-0812 | O: (904) 739-1300

Email JHeerdink@snowbirdtech.com