

MICHAEL ARAYA // GRAPHIC DESIGN AND MULTIMEDIA

DIGITAL AND PRINT DESIGN SHOWCASE

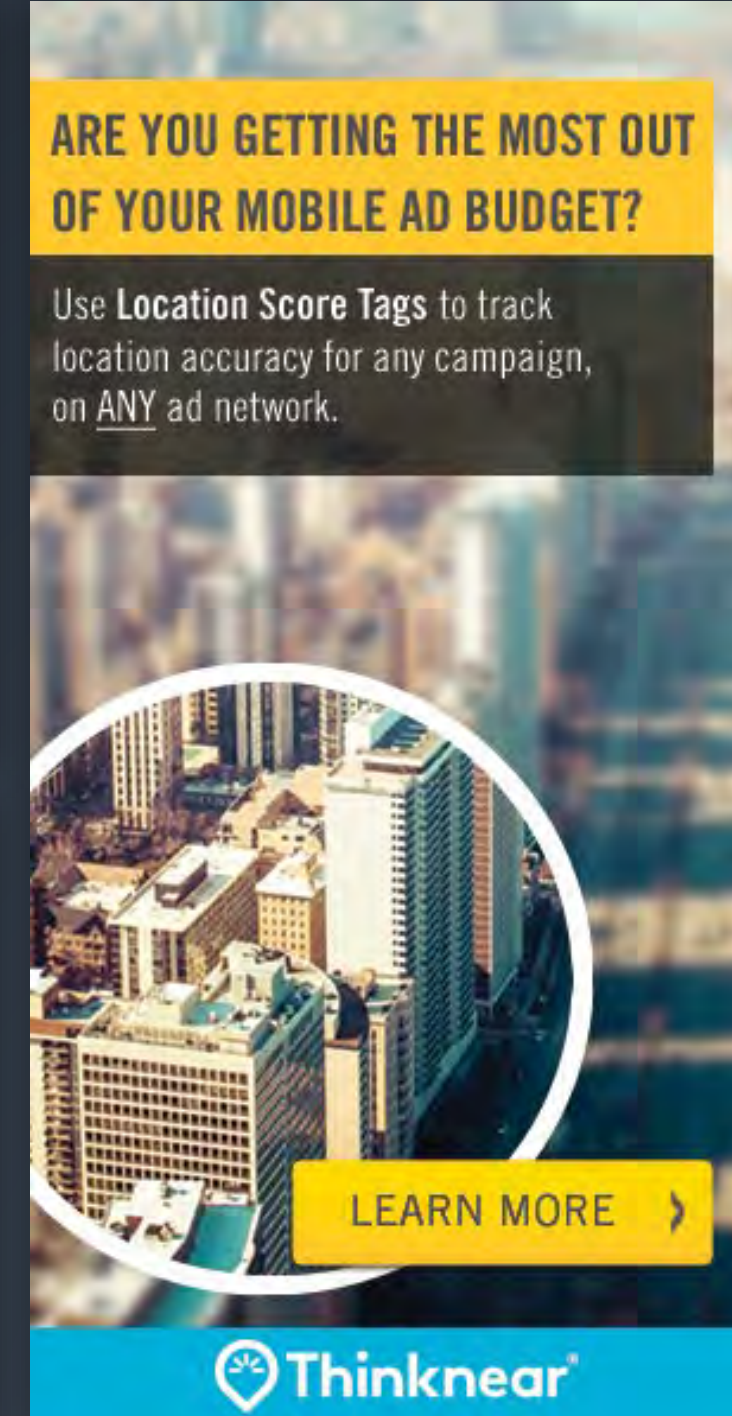
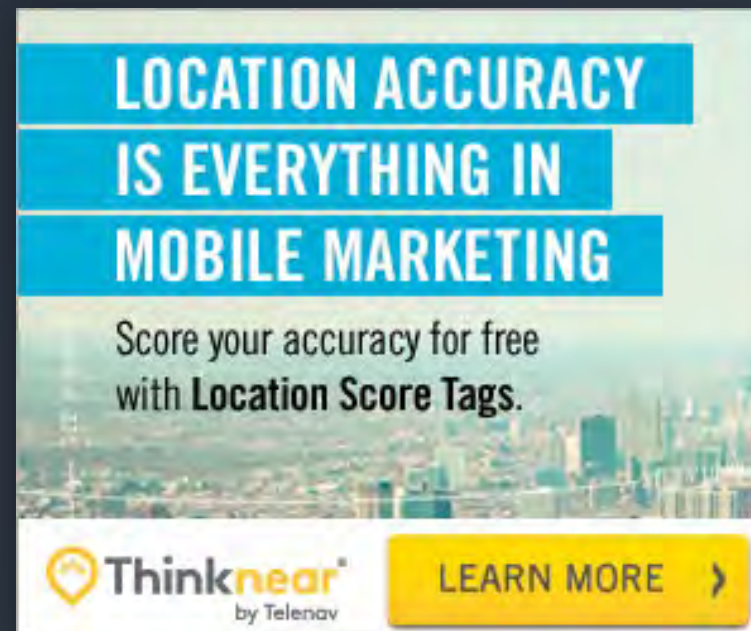
WEB GRAPHICS

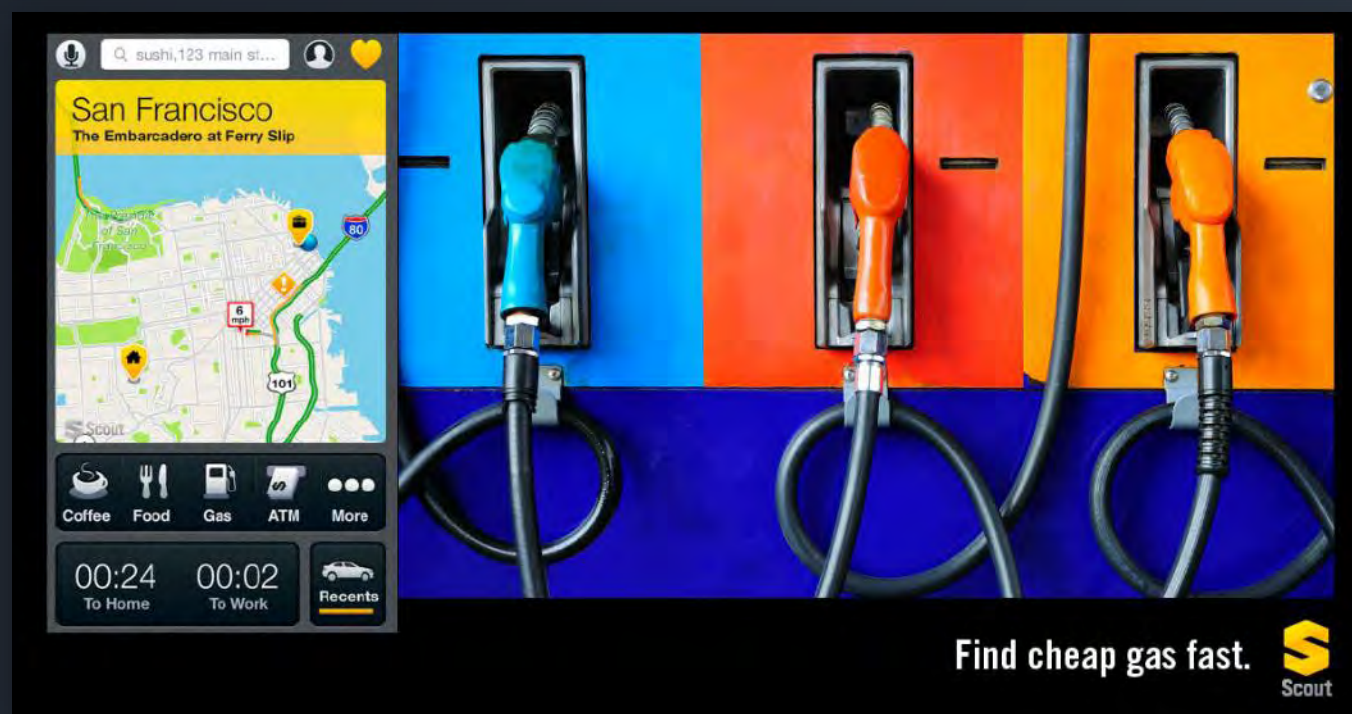
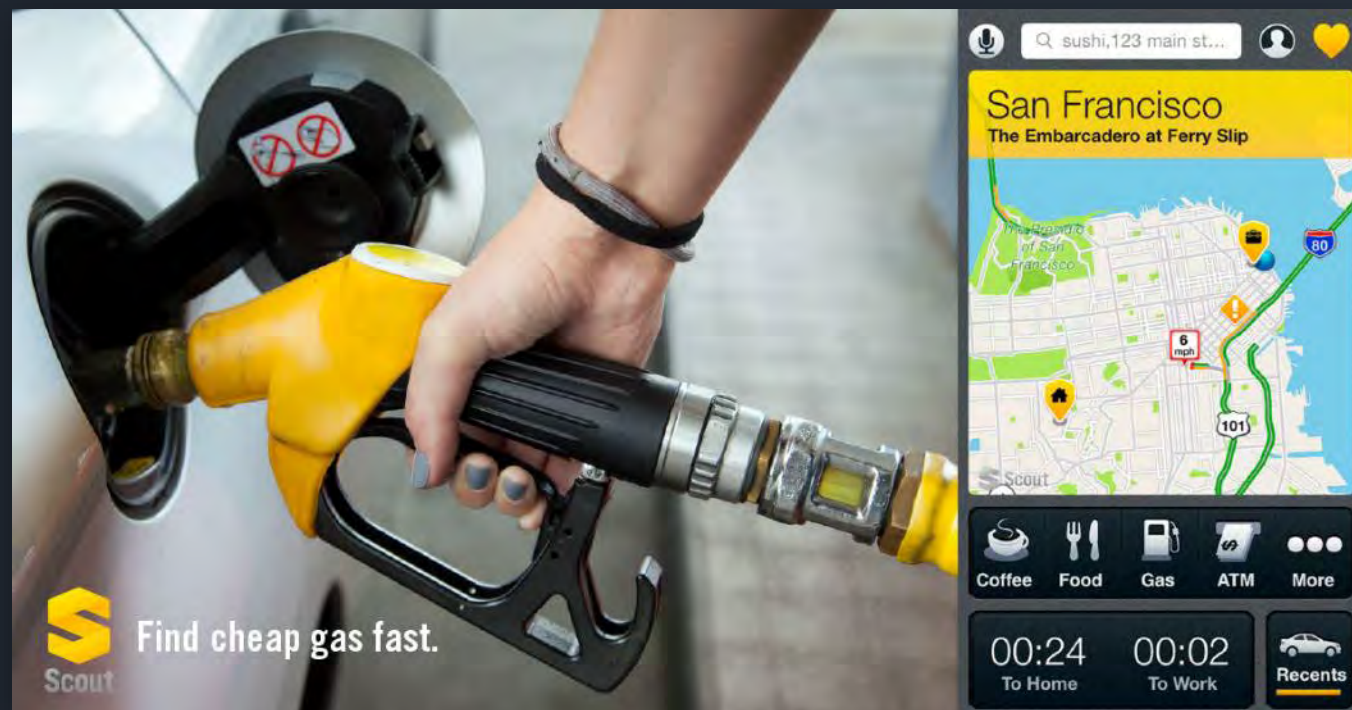
Social Graphics and Advertising

TELENAV

A collection of TEVENAV web graphics for social media streams, announcement emails and advertising banners. Used primarily for new feature rollouts and directing traffic into app store platforms.

Photoshop, Illustrator, InDesign, Flash, Premiere, After Effects, PowerPoint, Photography, Lightroom, Stock Images





TELENAV

EXPERIENCE THE FUTURE OF NAVIGATION



THE FUTURE IS HERE NOW.

JOIN TELENAV FOR A TECHNICAL EXHIBITION TO EXPERIENCE IT FIRST HAND.

Come discover the latest and upcoming innovations in automotive navigation. See how Telenav Automotive solutions work seamlessly inside and outside of the vehicle to deliver a highly personalized and connected experience.



Scout for
Ford SYNC® AppLink™



Personalized Connected
Navigation



The Next Generation
of Navigation

WHERE:

Building #5, Lobby
Conference Room #1



WHEN:

February 22nd
9:30am-1pm



**FOR MORE
INFORMATION:**

automotive@telenav.com



MAKE THIS YEAR'S PLANS YOUR MOST MEMORABLE

Discover and share your 2013 plans with Scout on your computer or phone

[FIND LOCAL EVENTS ON SCOUT.ME](#)

SCOUTING YOUR CITY JUST GOT EASIER AND FASTER

Discover and drive with Scout for Android

[DOWNLOAD](#) [LEARN MORE](#)

The Android Robot logo is the property of Google, Inc. and is used in accordance with the terms of the Creative Commons 2.0 license.

DIGITAL MEDIA

Industrial IOT Team Branding

CISCO Industrial IoT

Icons designed for the Industrial IOT team's embroidered event attire, branded graphics and giveaway prizes. Designed as PowerPoint images, social media graphics and print ready vectors.

Photoshop, Illustrator, InDesign, PowerPoint



IoT Connectivity



Industrial IoT Networking



IoT Connectivity





Cisco Industrial
IoT Networking

IoT Networking

Industrial IoT Networking

IoT Connectivity

Cisco Internet of Things



Cisco Industrial
IoT Networking

IoT Networking

Industrial IoT Networking

IoT Connectivity

Cisco Internet of Things



Industrial IoT Networking



Industrial IoT Networking



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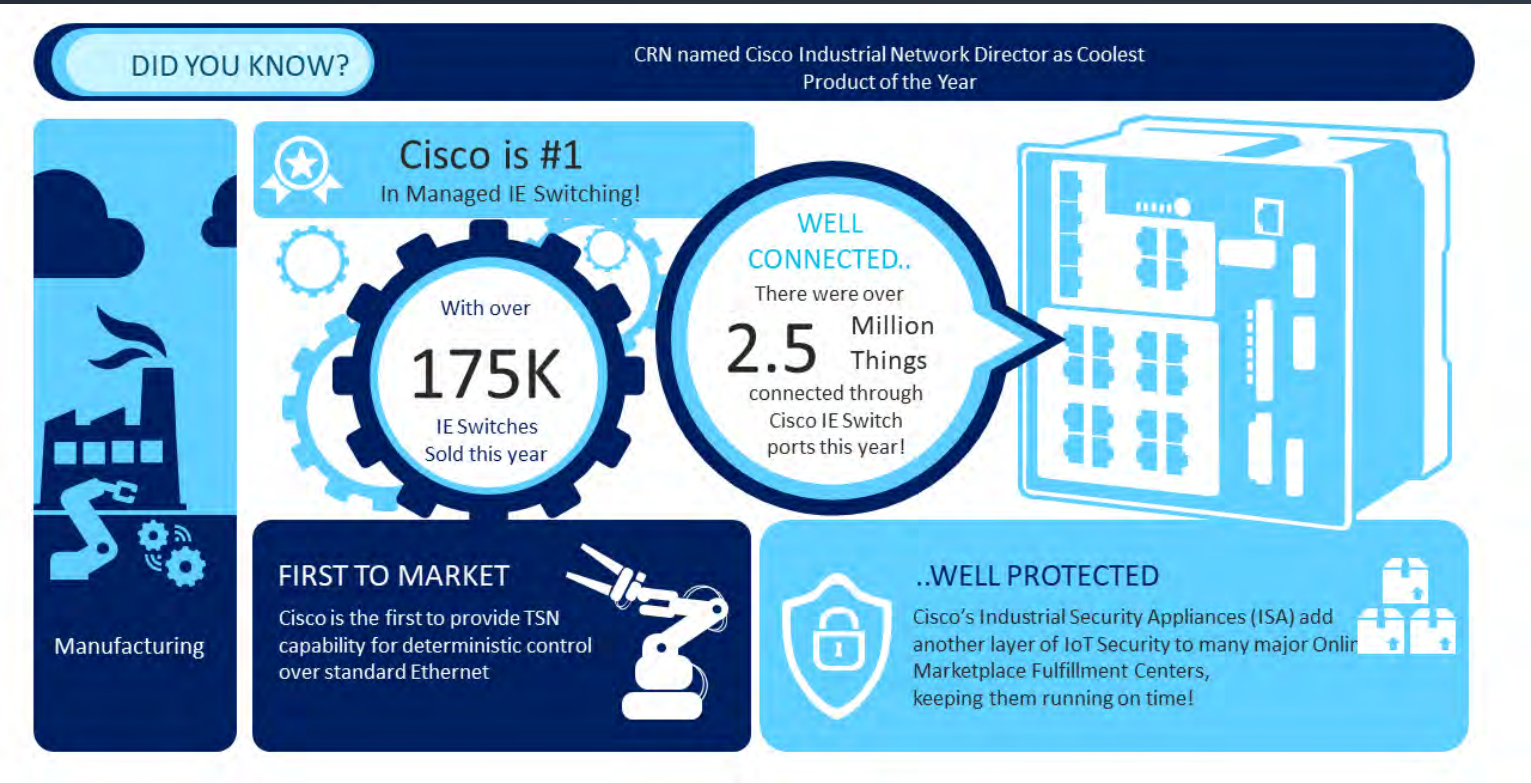
Industrial IoT Networking

DIGITAL MEDIA

Industrial IOT Infographic Posters

CISCO Industrial IoT

Infographic posters showcasing the Cisco Industrial IOT product line and popular user applications, with fun facts and milestones. Designed as sharable PowerPoint slides, social media graphics and printable posters.



Photoshop, Illustrator, InDesign, PowerPoint

DID YOU KNOW?

The CGR is the toughest Cisco Industrial IOT Routers in the market- with a unique ruggedized enclosure rated at IP67, it can handle just about anything!



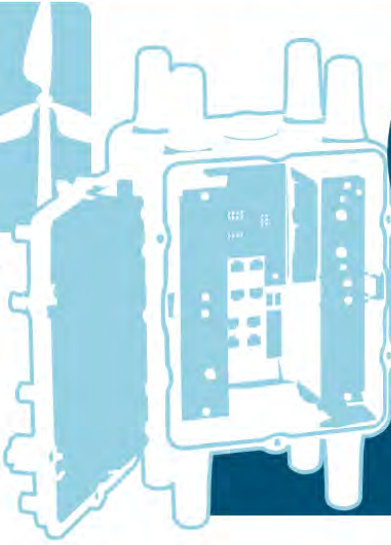
Cisco Industrial Switches are currently implemented in Wind Farms, enabling Clean & Renewable Energy Solutions



This Year, Cisco Won the Biggest Utility Deal in France

250,000

Cisco IoT Routing Units will manage smart grids across France in a deal spanning the next 10 years!



The Toughest Switch is Getting Tougher!

The CGR line is expanding modularly with 128GB server cards and new 4G/LTE cards

DID YOU KNOW?

Not only do Cisco Routers in Roadway Safety Solutions make faster, smarter, safer commutes, they also pave the way for Smart Cars and Automated Vehicle Technology!



EYE IN THE SKY

Cisco Embedded IoT Technology is in use above the battlefield, in highly sophisticated defense drones



Cisco's IR809

Routers aid the Tennessee Department of Transportation with faster roadside processing and traffic management

SAVING LIVES

The Cisco IR829 Industrial router means safer roads, smoother commutes and faster emergency service response – through connected roadside sensors, processing power, Dual LTE and Wireless capabilities!



DID YOU KNOW?

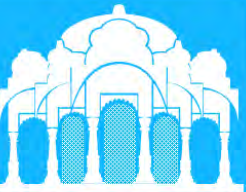
The Cisco IW3702 was selected for Google's free Internet service at Indian railway stations. In Mumbai alone, 100,000 people made use of Google's services within a week of its debut!



This year, Cisco connected

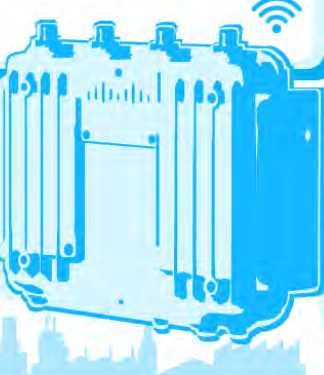
9000

Switching Units in Rajasthan, part of the Government of India's redevelopment plan to create Smart Cities!



WIRELESS IN SAN FRANCISCO

Overhead iconic Market Street in Downtown San Francisco, high-performance Cisco IW3702 access points have been deployed to provide maximum network capacity for Super Bowl 50 visitors and locals alike!



Cisco IoT Networking Around Town

Smart Cities utilize Cisco Industrial IoT products to monitor and manage city lighting, public parking, city-wide Wi-Fi connectivity, sanitation, smart buildings, water & utilities, and public safety



DID YOU KNOW?

LoRaWAN Solutions utilized in the 2017 French Tennis Open! From tracking foot traffic and attendance numbers in courts, to managing queues and providing customer satisfaction feedback.



Cisco's LoRaWAN Solution in Connected Mouse Traps let you know where and when they've caught a critter!

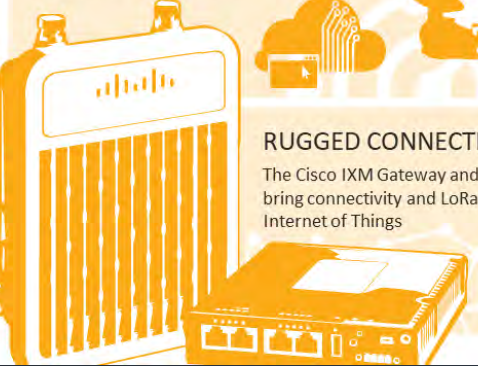
SAFE AND SOUND

From tracking herds of cattle and sheep at the farm, to adding sophisticated alarm systems to the horns of endangered rhinos in Africa, Cisco's LoRaWAN Solution can keep animals safer, smarter!



RUGGED CONNECTIVITY

The Cisco IXM Gateway and IR809 work hand in hand to bring connectivity and LoRaWAN Solutions to the Internet of Things



PRINT MATERIALS

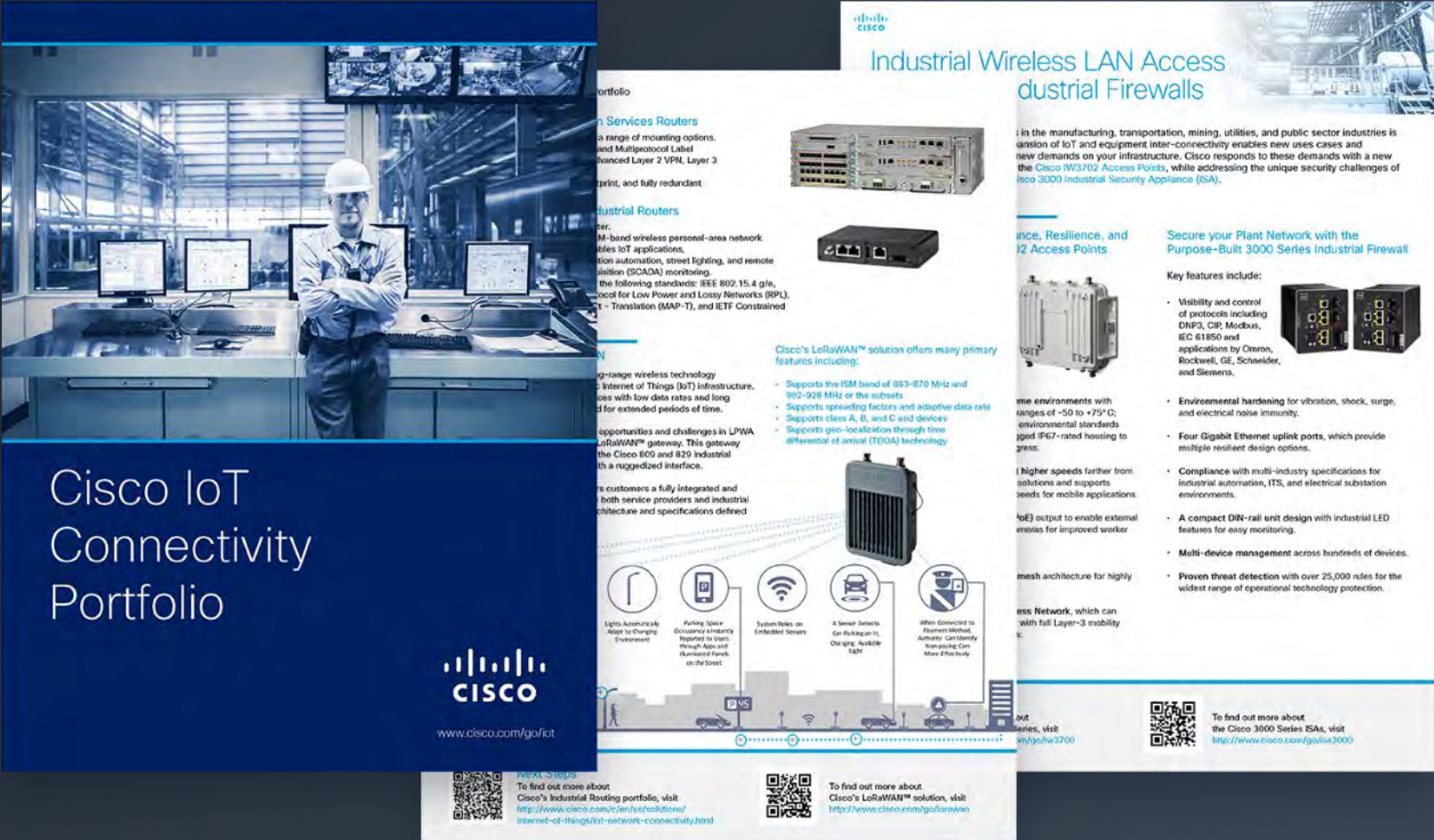
CISCO IOT Connectivity Portfolio

CISCO Industrial IoT

An updated product catalogue of the product lines supported by the Industrial IOT group. Available for web and print format, used for promotional handouts and technical reference.

Perfect for use across sales and marketing teams, supplemental materials for conventions and industry events or for distribution online.

Photoshop, Illustrator, InDesign, Photography, Lightroom, Stock Images



PRINT MATERIALS

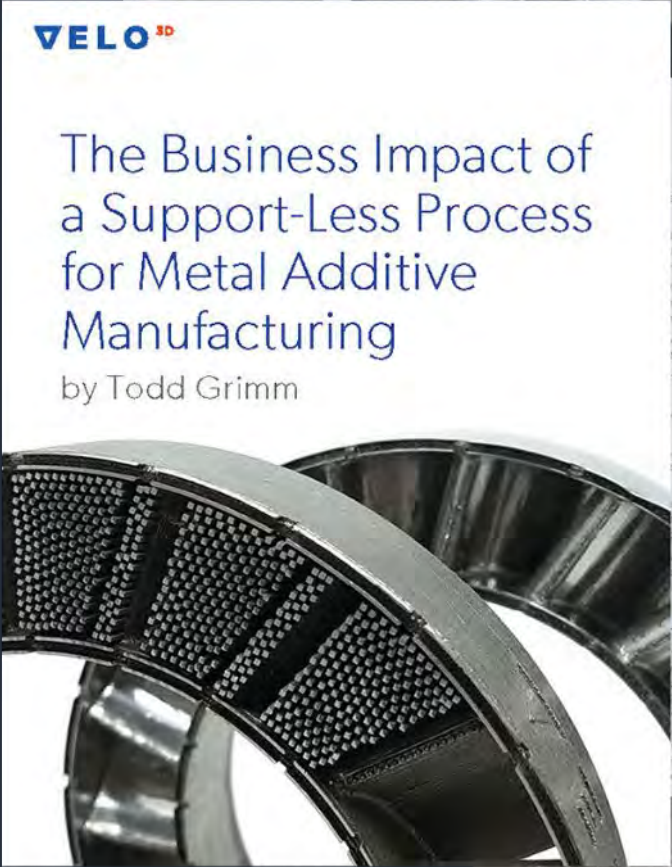
Additive Manufacturing Solutions Printed Brochures

VELO3D

Informational PDF files for printed brochures and bifold whitepapers showcasing VELO3D technical capabilities, written by field experts.

Perfect supplemental information and marketing material for conventions and industry events or for distribution online.

Photoshop, Illustrator, InDesign, Photography, Lightroom, Stock Images



PRINT MATERIALS

Additive Manufacturing Solutions Partner Case Studies

VELO3D

Informational handouts and booklets showcasing an industry partner use cases and VELO3D solutions for problematic metal additive printed parts. Great for starting conversations which could lead to developing growth in target markets.

Perfect supplemental information and marketing material for conventions and industry events or for distribution online.

Photoshop, Illustrator, InDesign, Photography, Lightroom, Stock Images

Sierra Turbines Drives Innovation for Microturbines

Manufacturing gas microturbines to be 40X more efficient, 10X more power density, and 50% lighter in weight



Roger Smith is breaking the rules of manufacturing. The chief executive officer of San Jose, California-based **Sierra Turbines Inc.**, he's discarded the industry's long-held belief that additive manufacturing (AM) is limited to prototyping and low-volume work. In fact, Smith plans to additively manufacture 95% or more of his microturbine components even when he reaches large-scale production.

Smith doesn't care that he's discarding several other industry beliefs, among them the notion that overhauling microturbines every 40 to 50 hours is acceptable. Smith is unhappy with much of the small-engine status quo. A microturbine has historically been a simplified version of its full-size counterpart; cost restrictions have always prohibited manufacturing complex features that would give microturbines improved performance. With a little radical thinking and a hefty dose of advanced technology, he's prepared to change it.

Two 3D-printed turbine combustors that serve as the core of Sierra Turbines' small engine. They are small enough to fit in the palm of a hand and were built by laser powder bed fusion with 3D metal printing. By Sierra Turbines.

3D Printing Turbomachinery for Super Critical CO2 Systems

Hanwha Power Systems achieves 80% faster build time and 90% less material with VELO3D's Sapphire



While it may take hundreds of parts to construct power generation equipment, there are mission critical ones that can determine the performance of the entire system. Many of these highly optimized parts can be tricky to manufacture and present some of the greatest engineering challenges that high-tech companies face. Tradeoffs often must be made between performance, availability, volume, quality and cost.

Chad Robertson, senior engineer at Hanwha Power Systems, and his team are developing turbomachinery for a high-efficiency power-generation system utilizing Supercritical CO2 (s-CO2) as the working fluid in a recompression Brayton cycle (RCBC). Heat input to the cycle will be delivered from a concentrated solar-power array. The solar power project, which is in-part supported by the Department of Energy's office of Energy Efficiency and Renewable Energy, has an end-goal of using this equipment for a concentrating solar-power plant.

Statays Direct ensured accurate dimensional measuring of the shrouded impeller with a Coordinate Measuring Machine (CMM).

Hanwha component design AM support requirements guided by the Sapphire. First, they modeled supports degrees from horizontal. Only needed to add supports degrees from horizontal. Then continued improving their and can now print all the way with applications without a design for Hanwha was drastic—a 90% reduction in support material.

Accelerates Product Development

Sapphire, Statays Direct wouldn't say. Carter says: "Previous projects with us had shown us that the removal of support structures required for direct metal printing was costly and impossible," he says.

A system, however, the need for it—not entirely eliminated—due to come the "45-degree rule," which then that require additional vertical of a part during printing.

The turbine wheel still attached to the build plate as it came out of the Sapphire metal AM printer.

3D printers would need a large amount of support structures in red to produce after design while light, the VELO3D Sapphire printer can manufacture the same design with minimal supports (in blue).

in to additively manufacture a better, Statays Direct was in the total volume of material for which the system needed

Hanwha component design AM support requirements guided by the Sapphire. First, they modeled supports degrees from horizontal. Only needed to add supports degrees from horizontal. Then continued improving their and can now print all the way with applications without a design for Hanwha was drastic—a 90% reduction in support material.

Validation of Part Quality

al properties of the extremely important moves forward. The greater than 14,000 lb force is a high speed it is critical that the turbine are well project, Statays Direct heat-treated to measure tensile tests.

a general specification of nickel alloy results all exceeded requirements. The test samples was TM requirements.

ected for review, printing, and FPI. No detected by the scans. need and spin tested design conditions and 3D using FPI.

CT scan of the Hanwha shrouded impeller

"The success of the centrifugal impeller wheel prototypes Statays Direct made for us with the Sapphire machine from VELO3D has definitely increased our interest in additive manufacturing," says Robertson. "It has opened up design freedoms for our team, and sparked a renewed effort to better quantify the material properties and capabilities of additively manufacturing parts. The combination of the state-of-the-art 3D printing and expert project management truly did make the impossible possible."

EVENT DISPLAYS

Additive Manufacturing Industry Events

VELO3D

Branded displays featuring multiple walls, a large video monitor for presentations, several standing display cases and overhead banners.

Photoshop, Illustrator, InDesign,
Lightroom, Photography





SupportFree Heat Exchangers
High aspect ratios (3000:1) for advanced heat exchangers

Industries
Aerospace | Oil & Gas | Power Gen



Metal Alloys
Nickel | Titanium | Aluminum

VELO^{3D} SupportFree Metal AM Solution

SpaceX, Aerjet Rocketdyne, Honeywell, PWR, Probalabs, Knust Goodwin, TNSC, Stratus Direct Manufacturing, Danson

SupportFree Zero-Degree
Enables low angle overhangs



FreeFloating
Increases build utilization and enables nesting of parts
mikearaya.com

VELO^{3D}

SupportFree Manifolds
Large Inner Diameter (100mm) for manifolds, crossovers, and volutes





EVENT DISPLAYS


SF Giants Fanfest



TELENAV

Scout Team branding for the SF Giants Fanfest event. Featuring custom printed attire, email blasts, giveaway items, branded activities for visitors and more.

Photoshop, Illustrator, Flash, Photography









**COME VISIT
SCOUT AT THE
KNBR FANFEST**

AT&T PARK
February 9, 2013
10am-3pm



 Drive


**FREE
ADMISSION**

 **VISIT THE SCOUT TENT FOR A
CHANCE TO WIN GREAT PRIZES**

**Come meet Scout – your daily personal
navigator – at the KNBR Fanfest!**

Scout is your perfect sidekick to help you power through your daily commute. With personalized and important information at a glance and a one-of-a-kind discovery engine, Scout makes your trip easier, less stressful, and more productive. Come visit our on field tent to say hi and enter for a chance to win free prizes!







PRODUCT PHOTOGRAPHY

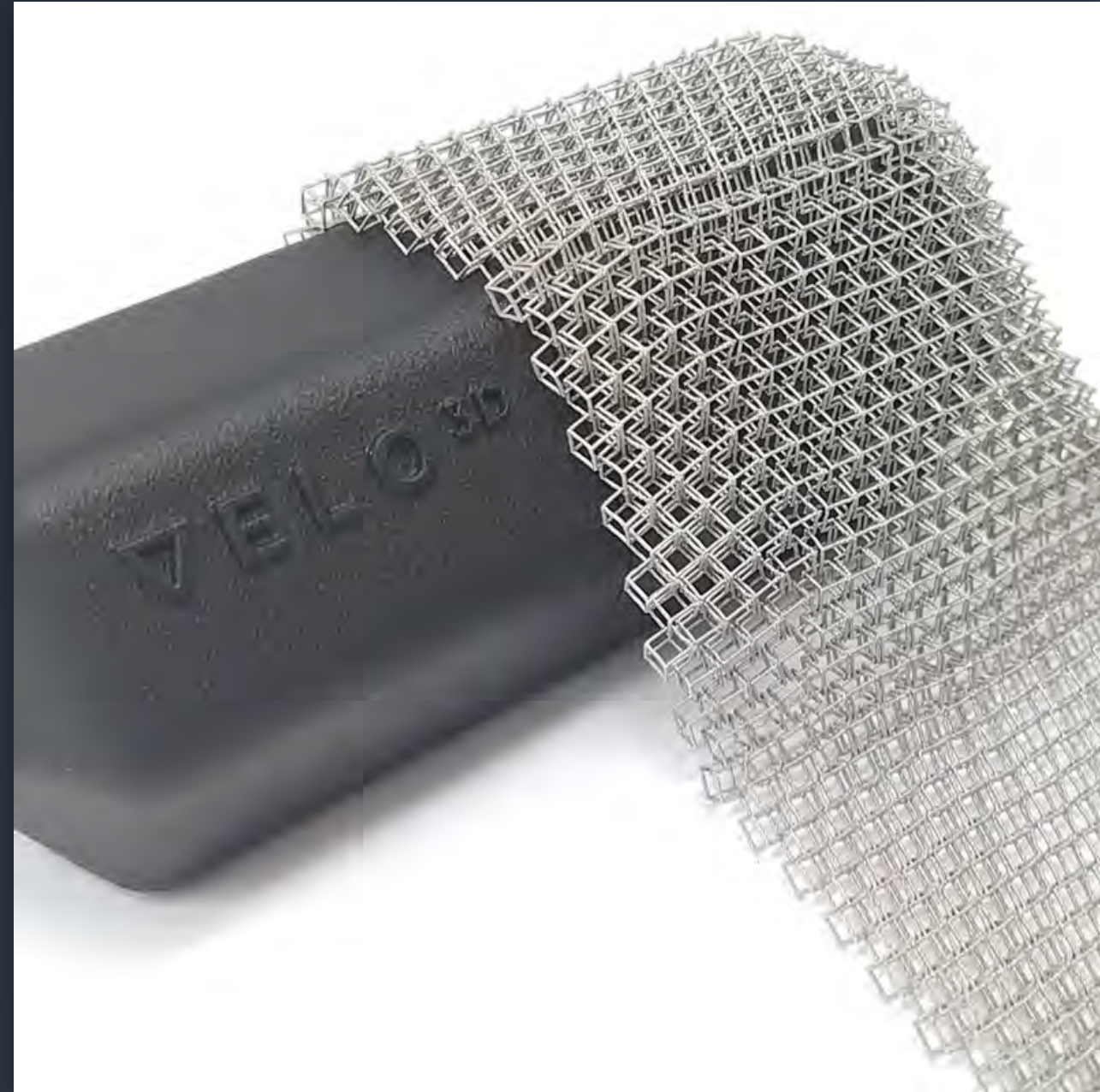
Additive Manufacturing Metal 3D Printed Parts Showcase

VELO3D

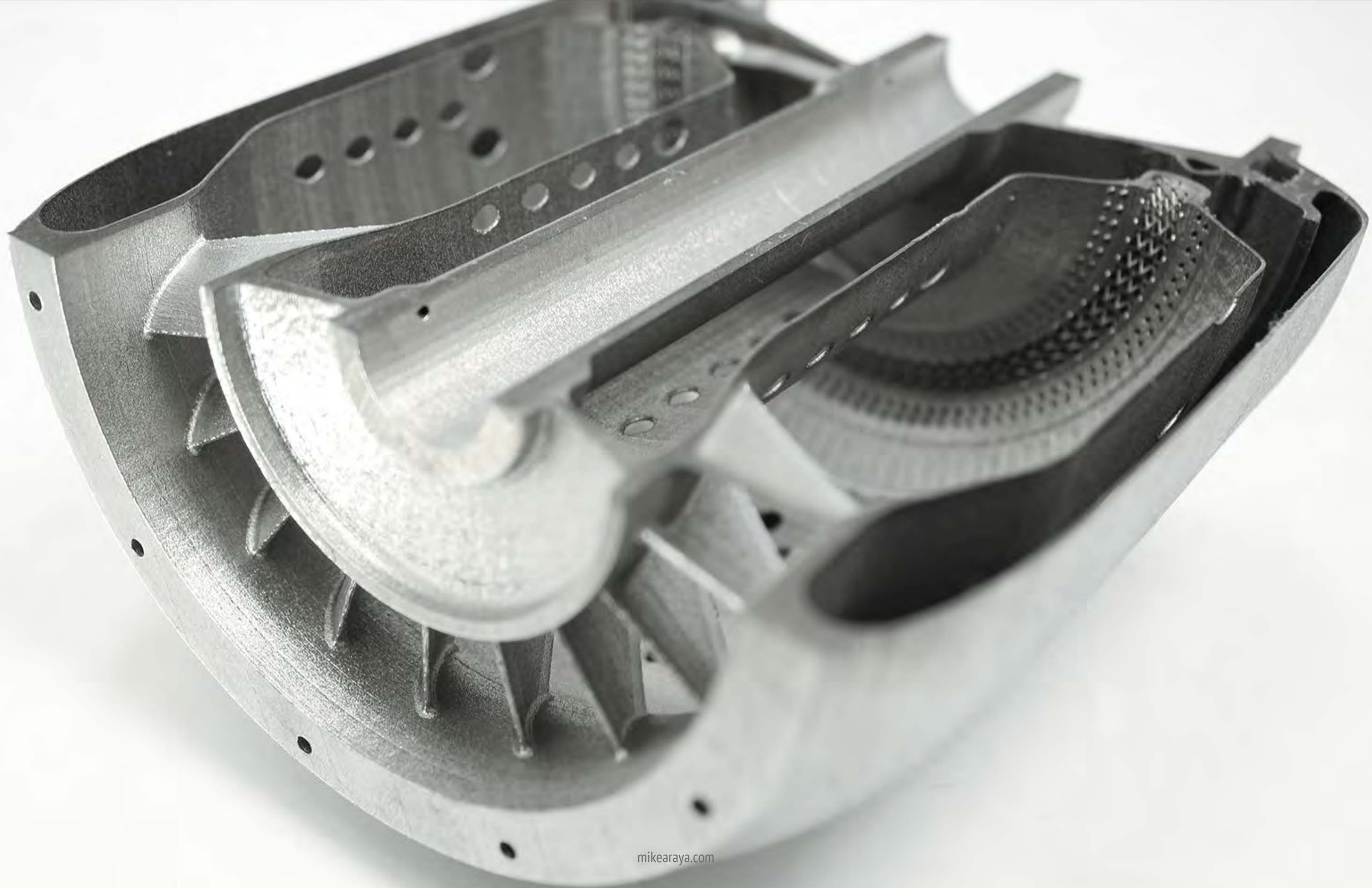
A sample of a larger collection of product photographs for VELO3D's image resource library, used in presentations, marketing materials and large prints.

Highlighting key features and technological advancements in metal 3d printing, such as fine details, large solid bodies and intricate geometries.

Photoshop, Lightroom, Photography











MICHAEL ARAYA // GRAPHIC DESIGN AND MULTIMEDIA

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