



TEAM[®]

TEAM Aerospace Solutions (TAS)

Overview

1. TEAM Inc.
2. TAS (TEAM Aerospace Solutions)
3. New Facility
4. Equipment Capacity/Modernization Details
5. Full Capability List and Accreditations



TEAM Inc.



TEAM, Inc. — Optimizing Performance

Who We Are

TEAM is the **only global provider of truly integrated digitally-enabled asset integrity solutions** that result in **greater safety, reliability and operational efficiency** across an entire supply chain.

TEAM By the Numbers

7,000+ team members

200 locations in 20 countries

14 integrated service lines across 3 segments

20+ unique industry sectors serviced

45+ year legacy of providing integrated inspection and assessment, turnaround and onstream services

100 year legacy of technological innovations

\$1.2B of annual revenue in 2019



TAS

TEAM Aerospace Solutions



TEAM Aerospace Solutions

Who We Are

TEAM Aerospace Solutions (TAS) has been the go-to aerospace solutions provider for over three decades. We are recognized throughout our expanding customer base for **expedited service**, consistently **meeting turn time**, and providing **innovative and customized solutions**.

TEAM Aerospace Solutions

6 principal locations

250+ customers

8 integrated service lines

30+ years of world class service

6 different market sectors served



NDT Capabilities

Ultrasonic Inspection



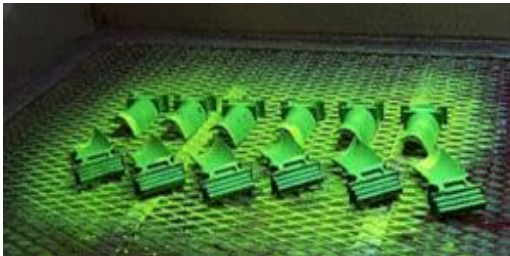
- Ultrasonic Immersion Stations
- Through Transmission
- Roller Probe C Scan
- Contact

Radiography



- X-Ray
- Isotope
- Computed Radiography

Fluorescent Penetrant



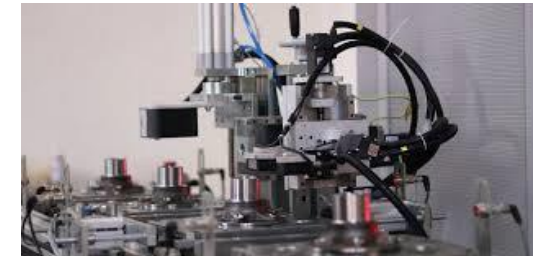
- Post Emulsified
- Water Wash
- Solvent Removable

Magnetic Particle



- Wet Fluorescent
- Dry Powder
- De-Mag Machine

Eddy Current



- Fully Automated
- Semi-Automated
- Hand Scan

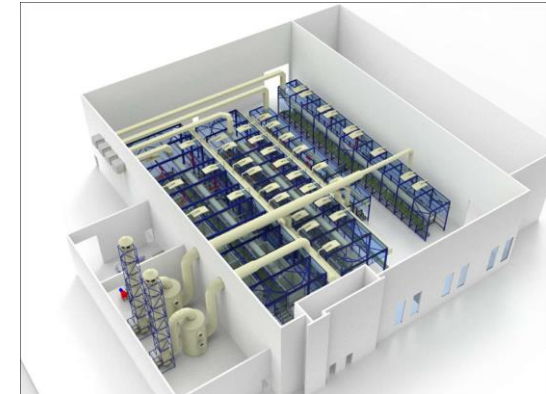
Chemical Processing Capabilities

Current Engine Line Capability

- CF6-80A
- CF6-80C
- CF6-80E
- CFM56-7
- GE90-94B
- GE90-115B
- Genx-1B
- LM2500
- HONDA
- LEAP-1A
- LEAP-1B
- F414
- F404
- F110
- J85

New Facility 6 Lines / 90 Tanks

- Blue Etch Anodize
- Macro Etch
- Anodic Etch
- 3 & 4 Step Alkaline Clean
- Titanium Clean
- Strip Lines



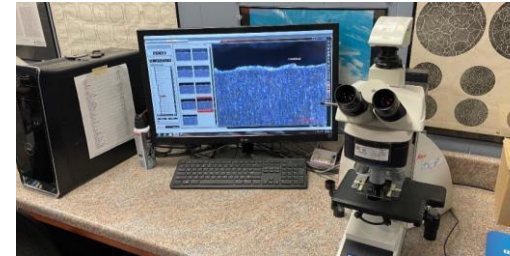
Other Services

Clean Room



- Cleanliness Verification
- P4TF21 (all Classes)
- Particle Size
- Particle Count
- Weight

Metallurgical Services



- Replications
- Tensile Testing
- Alpha Case
- Inter-Granular Attack
- Micro Hardness
- Laser Re-Case Evaluation
- Hardness

Abrasive Blasting



- Alumina Oxide
- Plastic Media
- Nut Shell Media

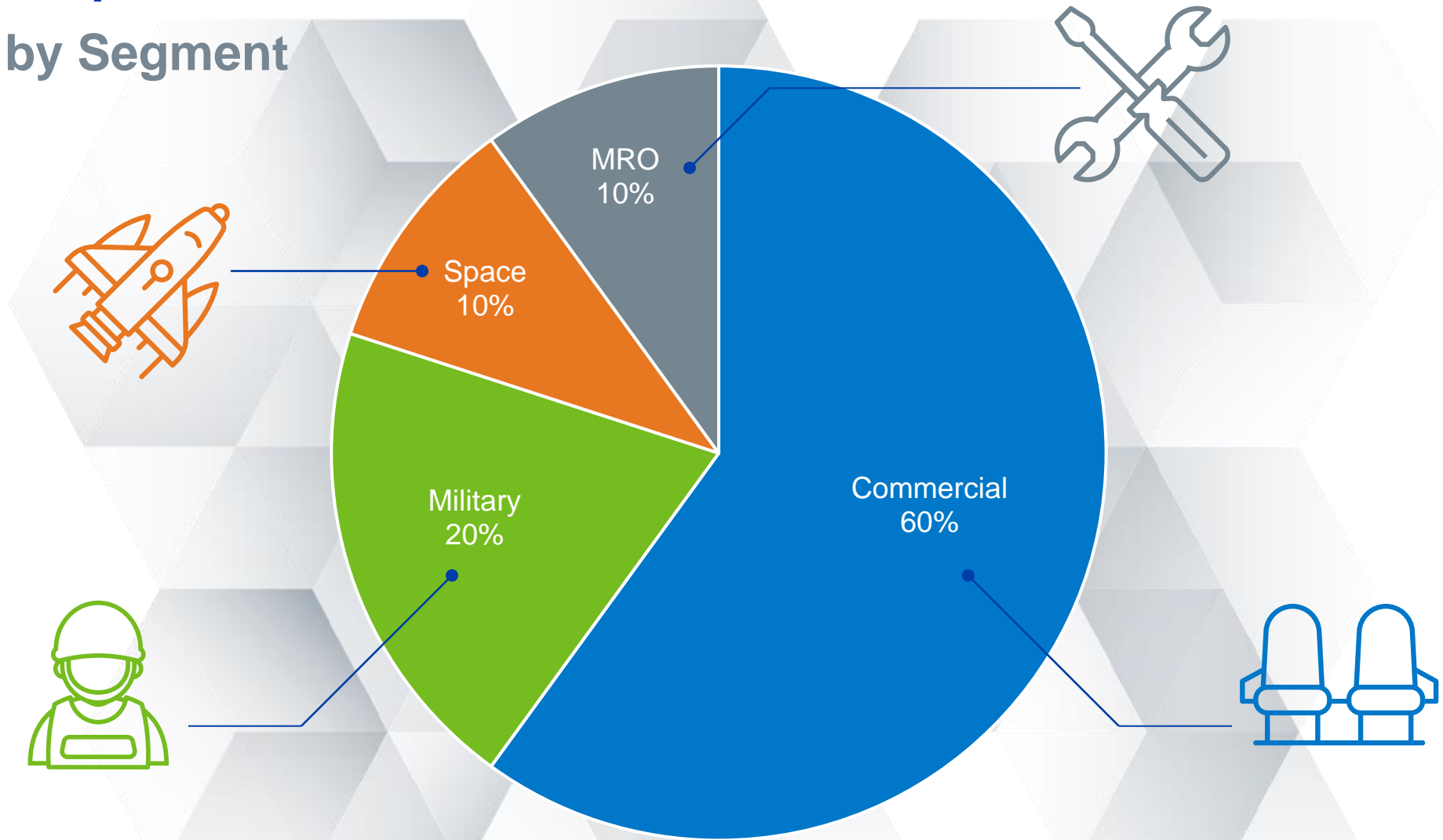
Coating Room Application



- Paint
- Dry Film Lube
- Molydag

TEAM Aerospace Solutions

Projects by Segment



Locations Around the Globe



Facility Headquarters



Cincinnati Facility Headquarters

90,000 square foot brand new facility

\$16M capital investment in facility & equipment

3x increased aerospace part capacity

Q2-2022 move in and approvals

Ensuring Alignment

- Equipment and Construction
- Audit and Accreditation (Existing and New)
- Culture and Infrastructure



Facility/Construction

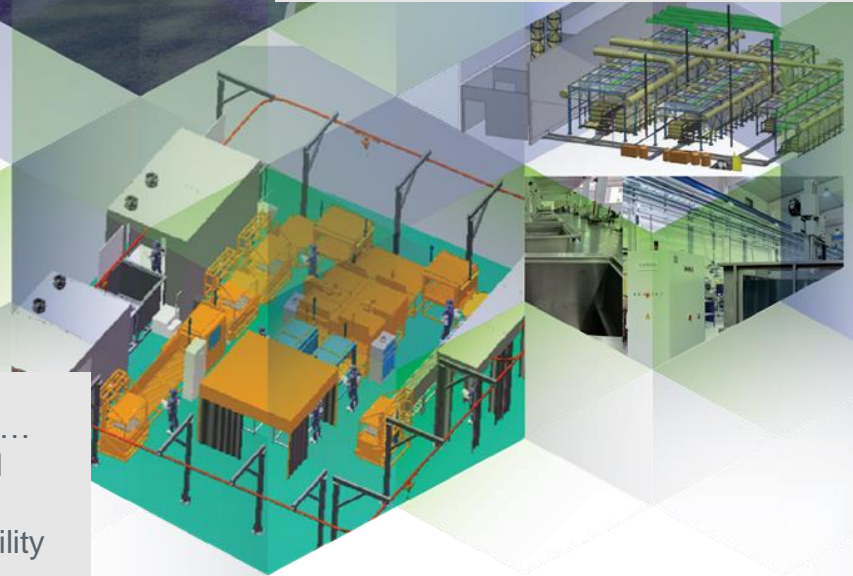
General Contractor award – Q2/2021



Construction/Audit Complete – Q1/2022

Equipment

- All Equipment in Build...
1st delivery in Q3/2021
- Strong overlap plan in place with existing facility



Equipment Capacity/Modernization Details



Cincinnati Chemical Processing Expansion

3X increase in capacity, up to 8' Envelope

Equipment due to ship August 2021

Approval March 2022

Methods

- **Coatings Strip**
 - PtAl and Bond Coats
 - Leaching
- **Blue Etch/Anodize**
 - All Ti Alloys and Back Stripping
- **Macro/Anodic Etch**
 - Ti, Super Alloys, Pre-Pen / Single Crystal
- **Cleanliness Verification ("Super Clean")**
 - Single Crystal
- **Alkaline Cleaning**
 - 3 - 4 Step and Heavy Duty - Descaling

Layout and Rendering

Equipment in Build

Cincinnati FPI/MPI Expansion

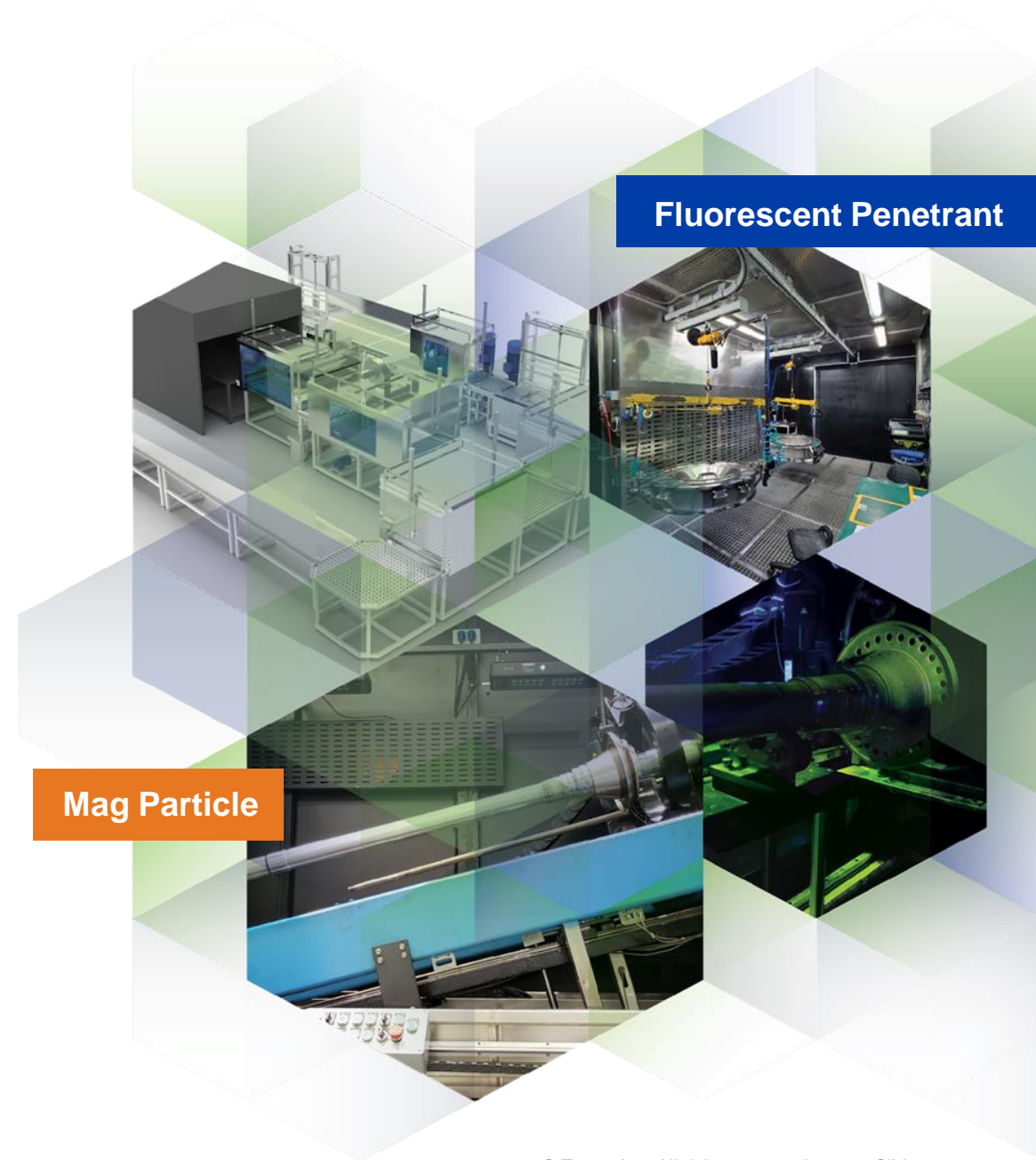
3x increase in capacity

Equipment due to ship August 2021

Approval March 2022

Methods

- **FPI**
 - Modernized System
 - Dual Line Capability
 - Component Automation
- **Mag Particle**
 - Automated System
 - Robotic Visual Inspection
 - Increased Size Capability (Midshafts)



Cincinnati Ultrasonic Expansion

3x increase in capacity

Equipment due to ship July 2021

Approval 2nd IRT August 2021, 4 additional Q1/2022

Methods

- **Immersion**

- 6 Tanks in Production (1 IRT)
- 5 additional IRT Systems on order
- Composite and Additive capability
- Class A, B, and D Approved

- **Contact**

- Phased Array Capability
- Conventional Longitudinal and Shear

Expanding to 6 IRT Systems

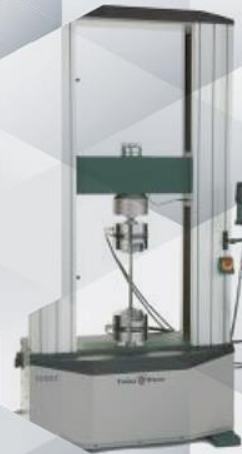
Prime	OKOS	SDI	IRT SCANMASTER
GE Aviation	✓	✓	✓
Rolls Royce		✓	✓
Boeing			✓
Airbus			✓
Pratt & Whitney			✓
Safran			✓
MTU Aero			✓

Working to Expand Approvals

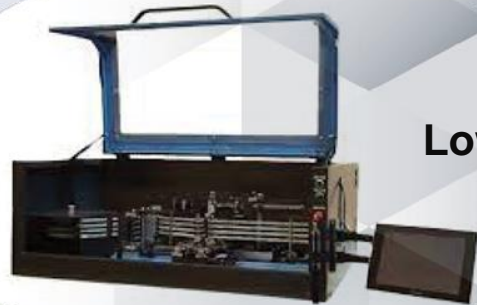
Cincinnati Equipment Upgrades for Eddy Current and Met Lab

New Met Lab Equipment

CNC Machine



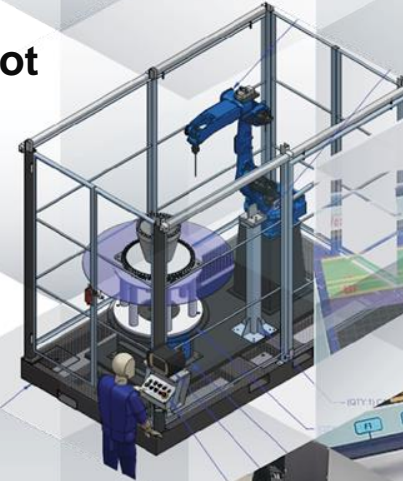
Tensile Testing Machine/Induction Coil Heater



Low Stress Grinder

TEAM®

Motoman Robot



Uniwest EVi



New Eddy Current Equipment



EC-2000

Full Capability List and Accreditations



Accreditors

AEROJET ROCKETDYNE	MTU AERO ENGINES
BAE SYSTEMS	NADCAP
BLUE ORIGIN	PRATT & WHITNEY QA101
BOEING DI-4426	PRATT & WHITNEY CANADA
GE AVIATION GT-193	ROLLS-ROYCE UK AEROSPACE
FAA	ROLLS-ROYCE INDIANAPOLIS
HAMILTON SUNDSTRAND	SPACEX
LOCKHEED MARTIN AERONAUTICS QCS-001	SAFRAN
LOCKHEED MARTIN SPACE SYSTEMS	SNECMA
LOCKHEED MARTIN RMS	



See full list of accreditations [here](#).



NDT Certificate # 3595193754
Chem Process Certificate # 3595203286
Materials Testing Certificate # 3595199448






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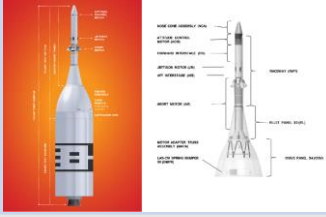





Commercial Applications

Customer	Project		
GE	GE9X – 777 MAX	 <p>GE9X</p> <p>First engine tested in March 2016</p> <p>4th generation composite fan housing</p> <p>ONLY 16 fan blades</p> <p>The largest fan diameter in commercial aviation</p> <p>8db</p> <p>5% better specific fuel consumption (SFC) than our 787-900 engine in service in 2008</p> <p>30% NOx improvement over ICAO II regulations</p> <p>10% lower fuel burn than the GE90-115B</p> <p>27:1</p> <p>Temperature-pressure ratio</p> <p>The highest ever in commercial aviation</p>	
GE	LEAP – 737 MAX		

Military Applications

Customer	Project	
Lockheed Martin	F-22 Raptorv	
Lockheed Martin	F-35 Lightning II	
GE	F/A-18 Super Hornet	
GE	F110 Engine	
GE	T901 Engine	

Space Applications

Customer	Project	  	
Metalex	NASA Orion		
Aerojet Rocketdyne	NASA Artemis	  	
Futuramic / Northrop Grumman	OmegaA	 	
Department of Defense / Metalex	Trident II	 	

TEAM Aerospace Solutions

Your go to for Conventional NDT and Advanced NDT processes of new and MRO parts.

- Expedited Service
- Consistently Met Turn Times
- Innovative and Customized Solutions



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Thank You