



GET TO KNOW

SPRINGS FABRICATION, LLC



CONTENTS

1. ABOUT US

2. CAPABILITIES & CORE COMPETENCIES

3. QUALITY MANAGEMENT SYSTEMS

4. CYBERSECURITY

5. PRODUCTS / PROJECTS



ABOUT US



NATIONAL LEADER IN FABRICATION

TC-300 Flotation Cells, Bagdad AZ / Outotec



ABOUT US

Over 100,000 square feet of industry leading high bay manufacturing facilities.

Approximately **125 employees**.

With the **capabilities to manufacture** products from simple weldments and custom pressure vessels to fully engineered skidded systems and large CNC machine capacity for industrial sized weldments.



Since 1986, Springs Fabrication has been serving the needs of companies nationwide with quality machining and fabrication services.

Our focus and commitment towards delivering complex, high-end engineered metal products across a wide range of industries has been the cornerstone of our continued success.

Through our responsiveness, quality, performance and value-added services, Springs Fabrication is able to enjoy mutually successful relationships with our customers.



FACILITIES



FABRICATION FACILITY

COLORADO SPRINGS, CO



- Modern 105,000 square foot facility on 11 acres
- Large 100 ft. x 450 ft. fabrication bay
- (2) 100 ft. span, 40-ton double trolley bridge crane x 32 ft. under hook height servicing large fabrication bay
- Assembly bay 50 ft. x 100 ft. with (2) 15-ton cranes x 55 ft. under hook height
- Precision floor imbeds in multiple locations allow us to accurately fixture and align large fabrications.
- Indoor reclaim blast booth, 20 ft. x 24 ft. x 70 ft. with inlaid track
- Climate controlled paint booth, 16 ft. x 18 ft. x 75 ft. with inlaid track



CAPABILITIES

CORE COMPETENCIES

CAPABILITIES & CORE COMPETENCIES

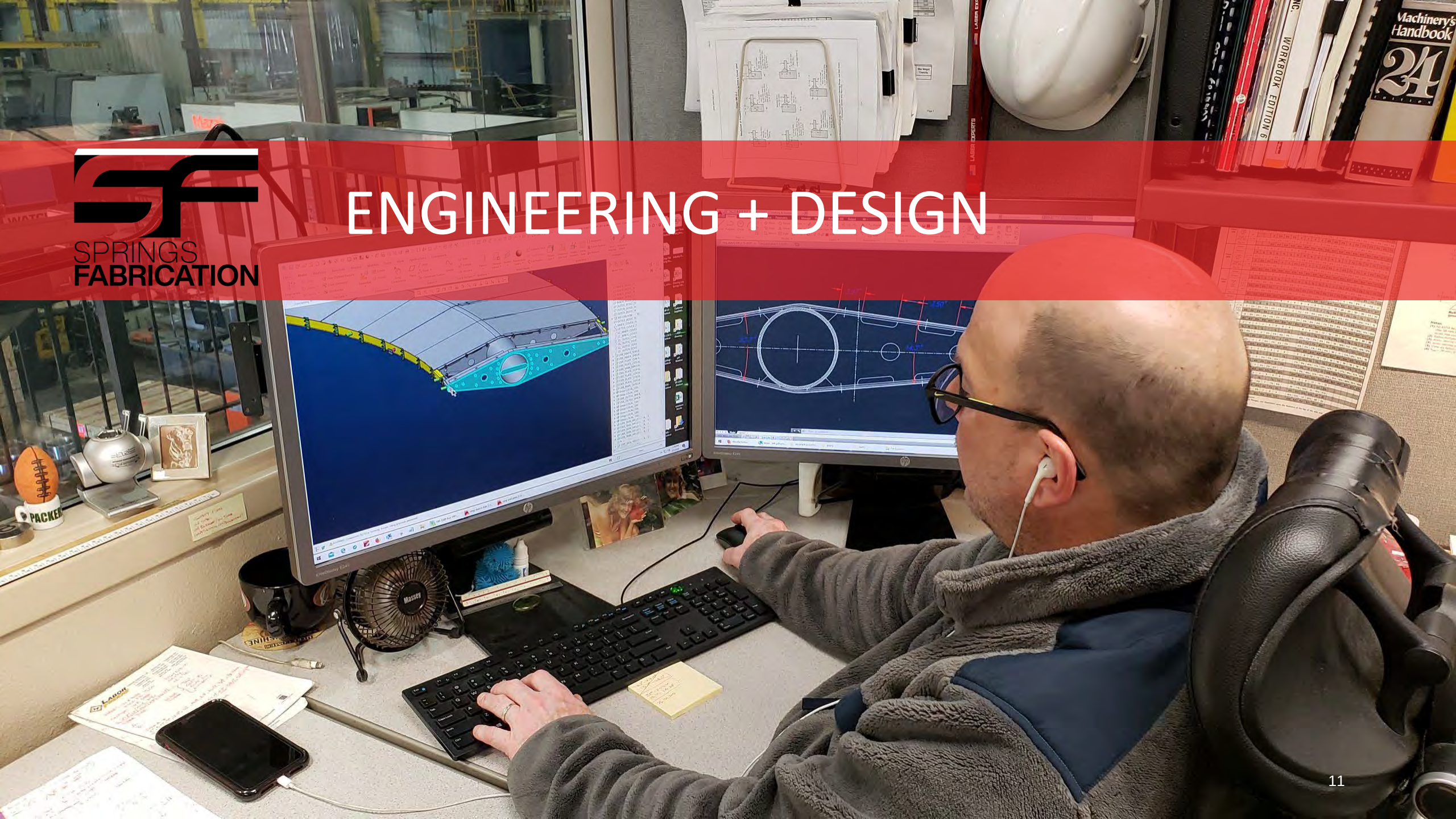
- Engineering and Design Services
- Project Management
- Commercial and Contract Manufacturing
- Material Processing
- Code Welding Program
- Large Machining Capabilities – Lathes / Mills
- Finishing and Assembly
- Inspection and Testing



Ethanol Skid – Coors / Merrick & Co.



ENGINEERING + DESIGN



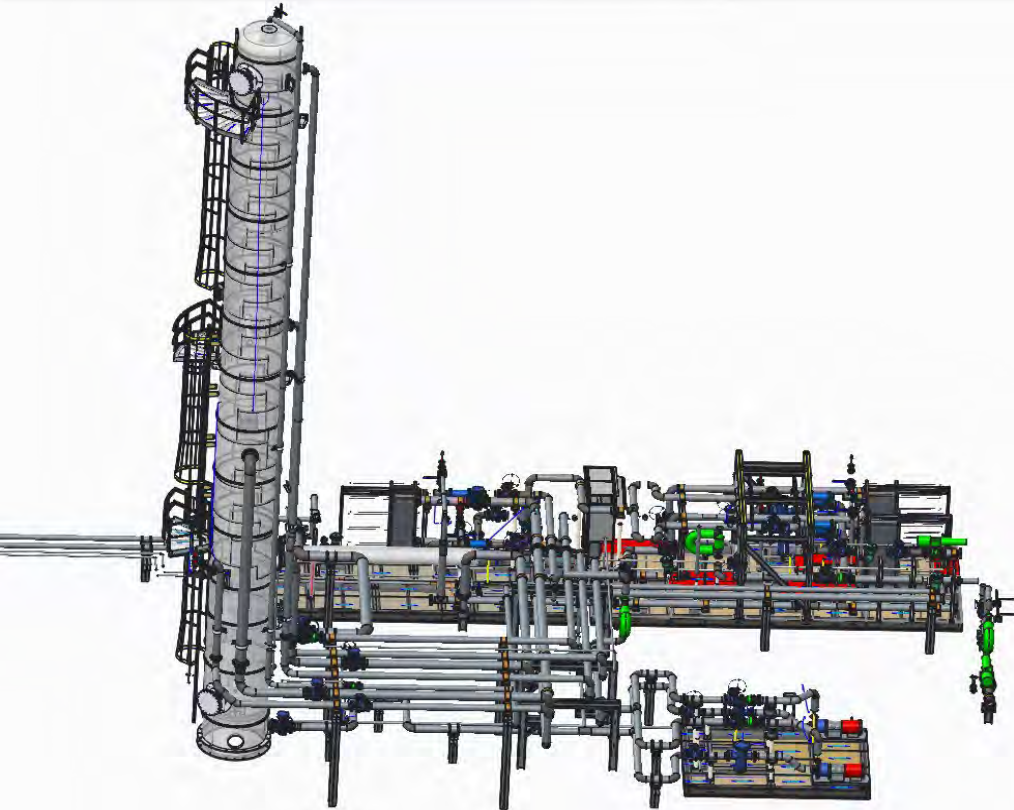
ENGINEERING + DESIGN

Springs Fabrication has a diverse range of experience from the design of simple parts to engineering complex equipment and systems.



DESIGN + ENGINEERING: Coil Stacking Tool – ITER / General Atomics

ENGINEERING + DESIGN



KEYS TO PROVIDING TIMELY, QUALITY PRODUCTS:

- Design to our manufacturing capabilities
- Engineer and perform analysis to support the design
- Manufacture, assemble and test to validate the design

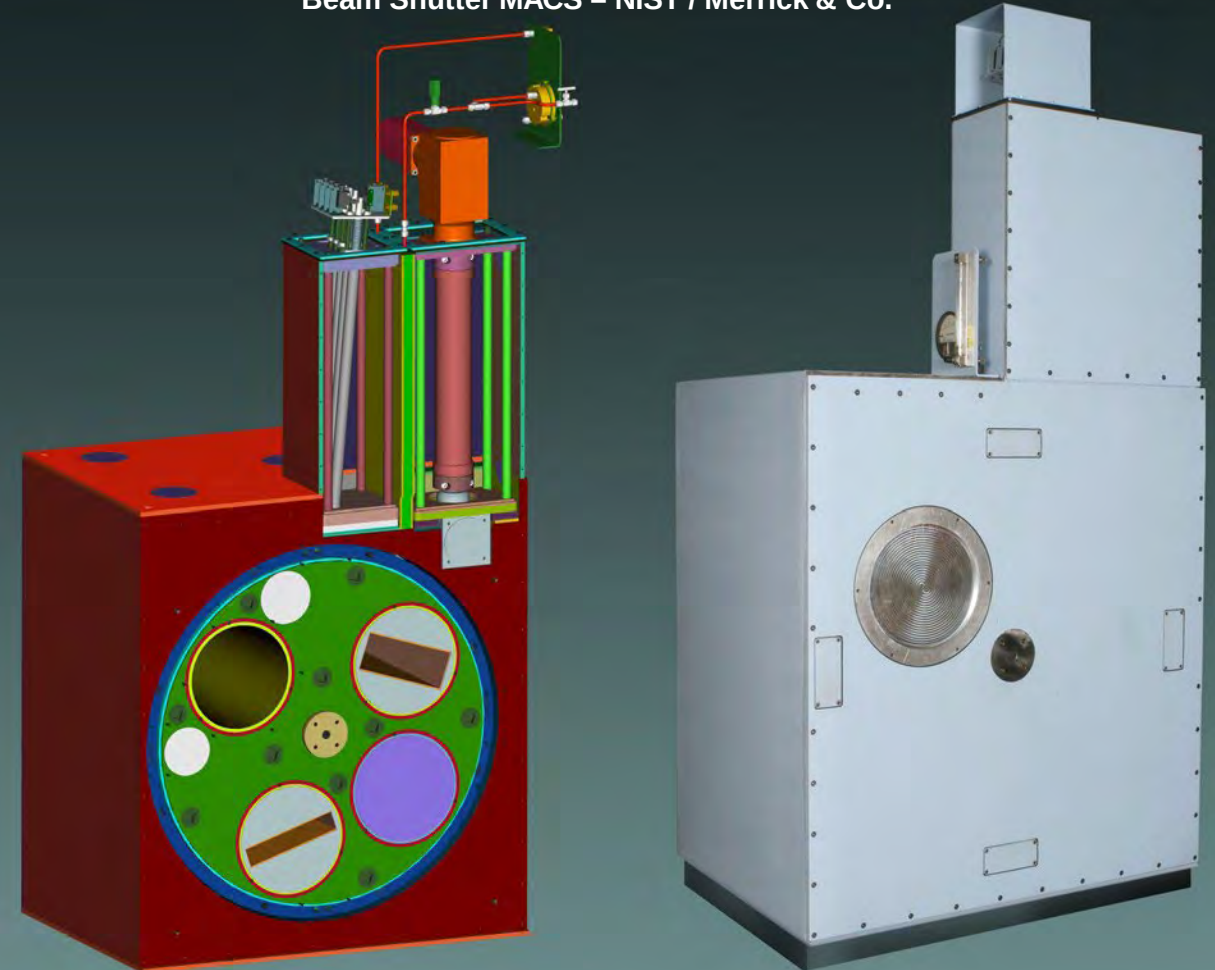
In the early phases of each project, our experienced design team conducts a comprehensive design review, laying the groundwork for a seamless transition from engineering to manufacturing.

DESIGN & ENGINEERING

OUR DESIGN PROCESS SHORTENS LEAD TIME + IMPROVES ACCURACY

- **SolidWorks 3D Modeling software used to construct scaled, 3D models and manufacturing drawings.**
 - Designs optimized to reduce cost and shorten lead time
 - Drawings generated directly from the 3D Modeling software
 - Part geometry, metadata, is exported from the design software directly to our post processing software and machining centers.
- **2D drawing software is used for:**
 - schematics
 - diagrams
 - P&IDs
- **Codeware Compress software used to perform ASME BPVC Section VIII, Div. 1 pressure vessel calculations.**

Beam Shutter MACS – NIST / Merrick & Co.





PROJECT MANAGMENT

Bryan McCullar



PROJECT MANAGEMENT

UPON AWARD AND ACCEPTANCE

the project is assigned to a project management team responsible for all coordination and execution.

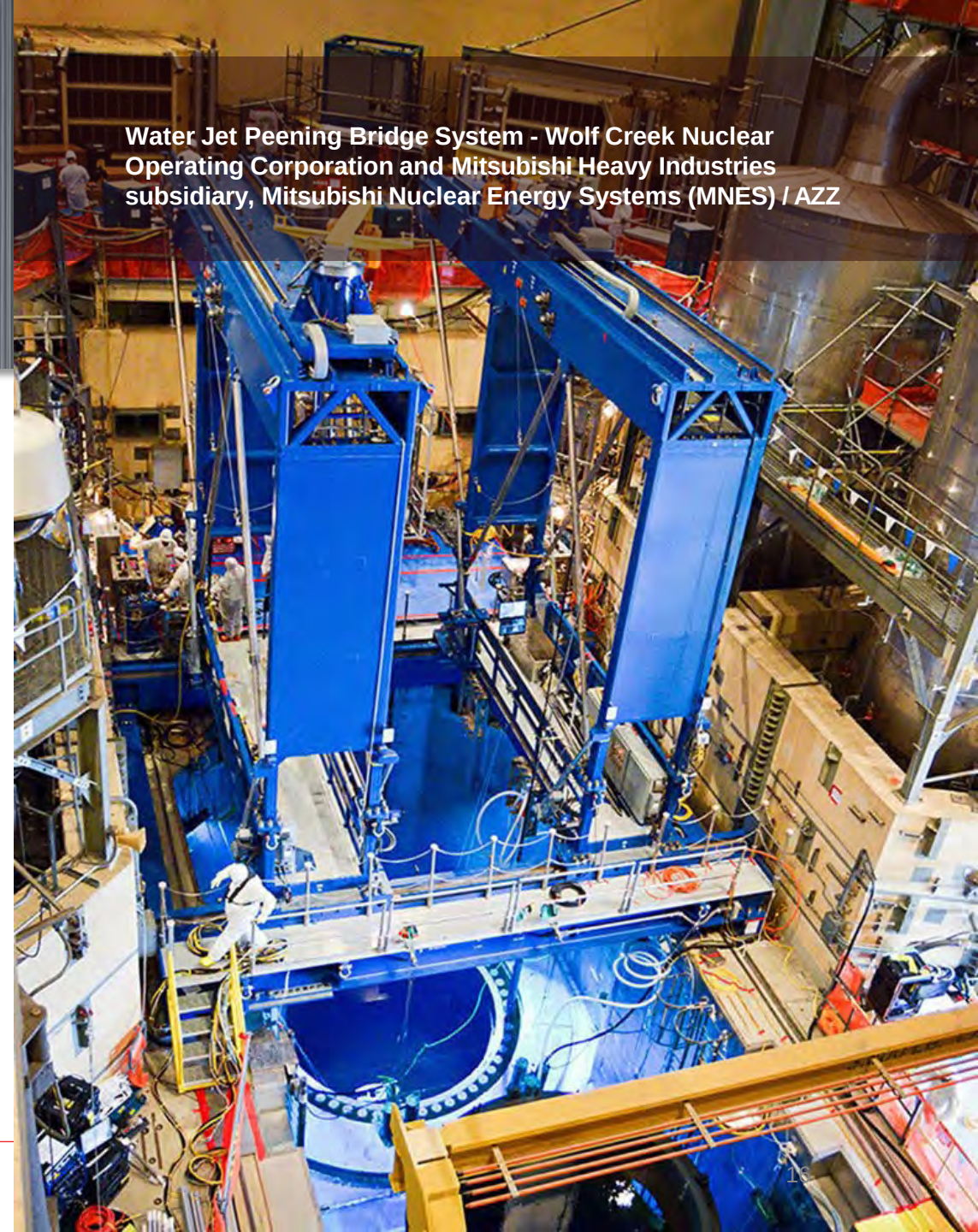
PROJECT MANAGEMENT TEAM INCLUDES

- Project manager
- Project/Manufacturing engineer
- Quality, welding engineering, and procurement are shared resources and support the project as required

THE PROJECT MANAGER IS

- responsible for the project and providing updates, correspondence, project submittals, and scheduling updates
- responsible for defining the Project Execution Plan
- the primary point of contact with the customer

Water Jet Peening Bridge System - Wolf Creek Nuclear Operating Corporation and Mitsubishi Heavy Industries subsidiary, Mitsubishi Nuclear Energy Systems (MNES) / AZZ





COMMERCIAL / CONTRACT MANUFACTURING



COMMERCIAL / CONTRACT MANUFACTURING

Recognized as one of the leading and most capable metal fabricators in the Rocky Mountain region, Springs Fabrication offers over 30 years of design and manufacturing excellence.

As the supplier-of-choice for several leading industrial companies, Springs Fabrication has a track record of forming strong, productive partnerships with our customers. Our experienced team ensures that the products meet all your specifications.

INDUSTRY EXPERIENCE

New & Existing Energy | Mining & Remediation | Aerospace
Infrastructure | General Industry | Railroad
Top 10 Engineering Firms | National Laboratories | Nuclear
Department of Defense (DOD) | Department of Energy (DOE)



Compressor Skid / UE Compression



MATERIAL PROCESSING



MATERIAL PROCESSING

EQUIPMENT HIGHLIGHTS

- Mazak tube laser w/ tapping: Pipe, Tube, Angle, Beam, etc. up to 8.63" diameter
 - Mazak flat laser: 78" x 157" travel shuttle table
 - Kinetic 4000: 8' x 20' table, 260A HD plasma, Oxy Fuel, Machining Head
 - Kinetic 2500: 10' x 24' table, twin-head 260AHD plasma
 - Saws: up to 24" x 24"
 - Rolling: Plate/Sheet - Up to 1-5/8" thick x 12' wide A36, up to 3" thick depending on width
 - Accurpress Press Brake - 485-ton x 16' wide, 9-Axis CNC controller, 6-Axis Back Gauge
-

A CLOSER LOOK

6-AXIS TUBE LASER CAPABILITY | Precision without machining



Round Tube/Pipe



Square &
Rectangular Tube



Angle



Beam



Weld Prep



Slot and Tab
(Self-fixturing)



And more.



CODE WELDING PROGRAM



WELDING PROGRAM

Our welding program is a mature and robust program administered in accordance with the requirements set forth in Section IX of ***the ASME Boiler and Pressure Vessel Code*** and the ***AWS construction codes***.

WELDING PROGRAM

A welder wearing a white hard hat, safety glasses, and a yellow and black safety vest is working on a large, dark, curved industrial vessel. The welder is positioned on a yellow metal platform or scaffolding. Numerous black cables and hoses are connected to the welding equipment. The background shows the interior of a large industrial building with steel beams and other structures.

- Administered by in-house **welding engineers** with weld inspections performed by our AWS CWIs (Certified Welding Inspectors).
- Qualified for use in welding of ASME Section VIII, Division 1 pressure vessels and ASME B31 series piping.



WELDING PROGRAM

WELDING PROCESSES

GMAW, FCAW, GTAW and SAW

COMMON MATERIALS

Carbon steel, 300 series stainless steel, aluminum and nickel alloys.

Springs Fabrication has dedicated stainless steel
fabrication bays for the mitigation of cross-contamination





MACHINING - LATHES



EQUIPMENT HIGHLIGHTS

LATHES

Samsung CNC with live tool & steady rest, 30" x 130"

Haas SL30 with servo 800 bar feeder, 17" x 34"

Mazak Integrex 200s, 5-Axis

HNK VTL with live tool, 78" Table with 98" swing



Adapter, 5MW Dynamometer Facility /
NREL National Wind Technology Center



MACHINING - MILLS



Coil Support Frame, ITER / General Atomics



EQUIPMENT HIGHLIGHTS

MILLS

G&L Horizontal: 360" x 96" x 48", 120" sq. rotary infeed table

Femco Horizontal: 78" x 70" x 66", 4th Axis available

Mazak Horizontal: 52" x 48" x 48", 4th Axis, dual pallet

TOS Horizontal: 137" x 98" x 63", 4th Axis, right angle head

Feeler Bridge: 205" x 94" x 47", right angle head

Chevalier Bridge: 162" x 101" x 39", right angle head

Haas VF6: 64" x 32" x 30", 4th Axis available

Hass VF4SS: 50" x 20" x 25", 4th Axis available

Hass VF11: 120" x 40" x 30", 30 HP, 15K RPM



INSPECTION AND TESTING

INSPECTION + TESTING HIGHLIGHTS

MEASURING AND TEST EQUIPMENT

Our M&TE is calibrated, documented and traceable to NIST Standards.

In addition to a large variety of standard metrology available for use, we have the following equipment:

Wenzel CMM, max. envelope 78"(X) x 118"(Y) x 62"(Z)

FARO 3D laser tracker – 250 ft Cube

FARO Arm, Platinum – 6 ft Cube w/ leaping capability

Bruker XRF PMI (Positive Material Identification) analyzer

Vacuum Pump System and Helium tester

Olympus 38DL UT Thickness instrument

Sonatest Wave UT shear wave instrument

Digital Psychrometer (environmental conditions)



INSPECTION + TESTING HIGHLIGHTS

CERTIFICATIONS



In-House capabilities:

Level II SNT-TC-1A Examiners

VT – Visual

MT – Magnetic Particle

PT – Liquid Penetrant

BLT – Bubble Leak Testing

UT – Ultrasonic Shear Wave

AWS QC1 Certified Welding Inspectors (CWI)



FINISHING

Paint Booth: Viking climate controlled 18ft x 20ft x 75ft

EQUIPMENT HIGHLIGHTS

FINISHING

BLAST BUILDING

24ft x 20ft x 70ft with recovery floor

Available spray to waste system for virgin and specialty media

PAINT BOOTH

Viking climate controlled 18ft x 20ft x 75ft

In-floor rails for transferring product from blast building to and through paint booth





ASSEMBLY



EQUIPMENT HIGHLIGHTS **ASSEMBLY**

MECHANICAL

50ft x 100ft x 55ft under hook height

Assembly bay serviced by (2) 15 MT cranes and (1) 40T crane

ELECTRICAL

Termination, Conduit Runs, Ring-Out, Panel Install

Larger projects and/or licensed electricians subcontracted



QUALITY MANAGEMENT SYSTEMS

QUALITY MANAGEMENT SYSTEMS

Springs Fabrication operates three Quality Assurance Programs:

QT-1 ISO 9001 Certified QMS

Current edition certified through Amtivo (USA), Inc.

QT-2 ASME NQA-1:2008 Compliant QMS

Meets or exceeds the requirements of ASME NQA-1, 2008; Title 10, U.S. Code of Federal Regulations 830.122; DOE Order 414.1C; and Title 10, U.S. Code of Federal Regulations Part 50, Appendix B.

QT-3 ASME Section VIII, Division 1 Certified QMS

ASME Certificate of Authorization "U" / NBIC Certificate of Authorizations "NB" & "R"



CYBERSECURITY

CYBERSECURITY

COMPLIANCE

In support of Cybersecurity compliance requirements for the handling of Controlled Unclassified Information (CUI) and Covered Defense Information (CDI):

- We hold a medium level of assurance (MLOA) hardware digital certificate.
- Our information system is compliant with the requirements of FAR 52.204-21 “Basic Safeguarding of Covered Contractor Information Systems”.
- Our information system is compliant with the requirements of DFARS 252.204-7012 “Safeguarding Covered Defense Information and Cyber Incident Reporting”.
- We have implemented all 110 controls of National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171 on our relevant information system.
- We have conducted a basic self-assessment of the 110 NIST 800-171 controls and submitted resulting scores to the Department of Defense (DoD) Website “Supplier Performance Rating System (SPRS)” (Ref DFARS 252.204-7019 and DFARS 252.204-7020 for additional information.)
- We have implemented Level 1 and 2 controls of Cybersecurity Maturity Model Certification (CMMC), Version 2.0.



PRODUCTS

Water Jet Peening Bridge System - Wolf Creek Nuclear
Operating Corporation and Mitsubishi Heavy Industries
subsidiary, Mitsubishi Nuclear Energy Systems (MNES) / AZZ



INDUSTRIAL PRODUCTS



INDUSTRIAL PRODUCTS

KEY INDUSTRIES

- New and Existing Energy
- Mining and Remediation
- Aerospace (Non-Flight)
- Infrastructure
- General Industry
- Railroad
- Top 10 Engineering Firms
- National Laboratories
- Department of Defense (DOD)
- Department of Energy (DOE)
- Nuclear

INDUSTRIAL PRODUCTS

KEY PRODUCTS

- Custom, High Specification Fabrication
- Skidded / Packaged Systems
- ASME Pressure Vessels / Heat Exchangers
- Atmospheric Tanks
- Pipe Spools / Piping Systems
- Industrial Rotary Equipment
- Vacuum Chambers
- Large Machined Weldments
- Ground Support Equipment (GSE) / Fixturing
- Dam Bulkheads / Gates / Trash racks



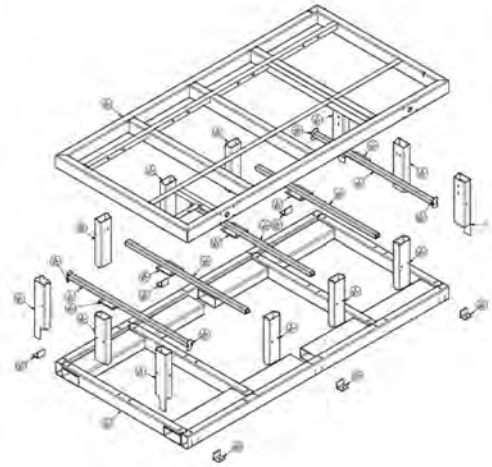
ORIGINAL EQUIPMENT MANUFACTURER (OEM)



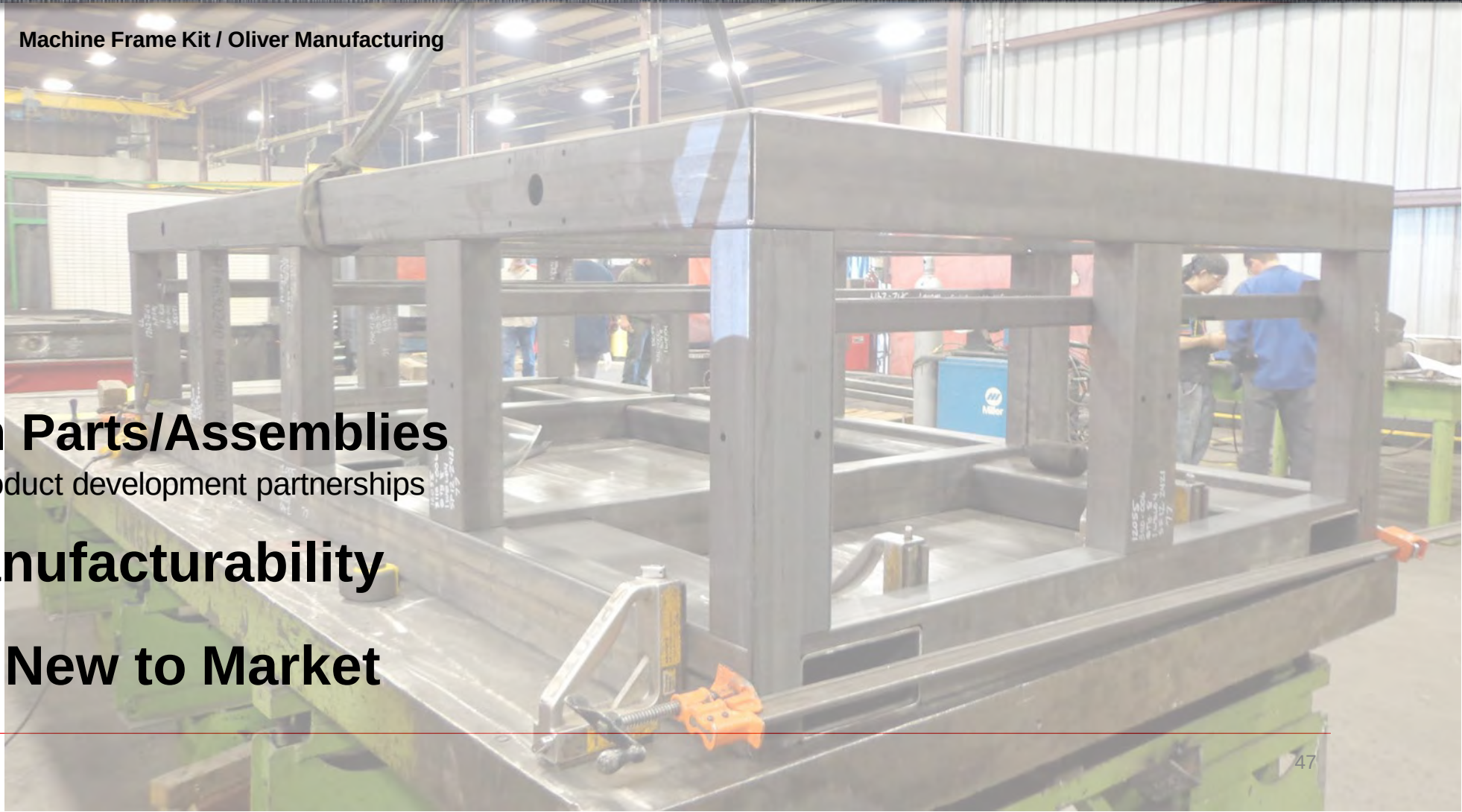
Temporary Sound Mitigation Walls / Urban Solutions Group

OEM

KEY INDUSTRIES



Machine Frame Kit / Oliver Manufacturing



Small-Med Run Parts/Assemblies

Focused on early-stage product development partnerships

Design for Manufacturability

Value-added / New to Market



ARTS + ENTERTAINMENT

Epicenter Sculpture – Switchbacks Football Club / Weidner Apartment Homes
Weidner Field – Downtown Colorado Springs, CO





ARTS + ENTERTAINMENT

KEY INDUSTRIES

Metal Art Sculptures

Providing manufacturability and engineering development

Custom Venue Features

Focused on early-stage product development partnerships



PROJECTS

SEE PROJECT SHEET FOR ADDITIONAL INFORMATION

BIO REMEDIATION PLANT

Functional Acceptance Test (FAT) at Springs Fabrication Facility



Pueblo Chemical Agent-Destruction Pilot Plant (PCAAP)
U.S. Army Pueblo Chemical Depot (PCD), Pueblo, CO
Bioreactor System/ Golder Associates

STABILIZATION TOWER

Loaded for Shipment



Stabilizer Tower 6ft x 82ft / Anadarko Petroleum Corp.

Ground Support Equipment (GSE)



Transport Container – Lockheed Martin

ETHANOL PLANT

Waste Beer Ethanol Plant – Coors,
Golden CO / Merrick and Company

Rail Car Adapters

A-Frames and Saddle Bolsters, Pueblo CO / BNSF





THANK YOU

SPRINGS FABRICATION, LLC

850 Aeroplaza Drive, Colorado Springs, CO 80916

(719) 596.8830 – Main Office

springsfab.com
