





Daniel J. Shybunko  
Founder

Anne D. Shybunko-Moore  
Owner and CEO

GSE Dynamics was founded by Daniel J. Shybunko in April of 1971. Dan was working as a structural Engineer at Grumman Aerospace at the time and received support from their leadership to open a small manufacturing company on Long Island that could function as a subcontractor for smaller structures. In 1978 Dan departed Grumman after 25 years of service and put all of his efforts into expanding GSE's capability. GSE has demonstrated steady

growth for over 50 years with a broad range of experience on numerous complex structures that support our military applications. Today, GSE is recognized as a national leader in the aerospace industry and has grown to be one of the largest federally certified Woman Owned Small Businesses in the Defense Logistics Agency for Aviation.



# A TRADITION OF **QUALITY,** **INTEGRITY,** AND **LEADERSHIP**

**GSE Dynamics, Inc. is a full service engineering and manufacturing company engaged in the manufacture, assembly and testing of military mechanical and structural components and assemblies.**

Our demonstrated record of best value for pricing, delivery, quality, and technical expertise has made GSE a critical member of the supply chain. GSE is a partner in the industry who believes in the collaborative mission to meet our national defense requirements.

## **GSE's recognition of excellence include:**

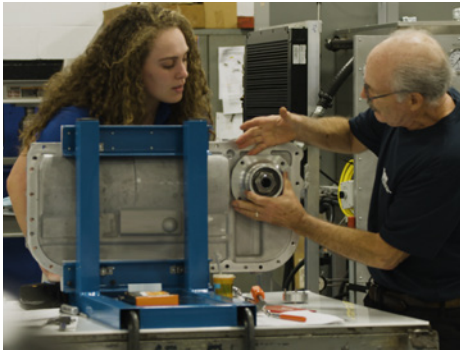
- Defense Logistics Agency (DLA) Best Value medalist multiple years (gold, silver and bronze)
- Defense Logistics Agency (DLA) award for Outstanding Readiness Support
- Northrop Grumman Platinum award for sustaining customer quality and delivery expectations
- Boeing award for Performance Excellence
- General Dynamics Top Tier Supplier for outstanding quality and performance
- Composites World magazine Top Shop





# THE GSE DIFFERENCE

*Over 50 Years of Experience in Manufacturing and Engineering Technology*



## **Investment in the Future:**

GSE has continued to evolve with the ever-changing manufacturing industry by investing in advanced manufacturing equipment and capability, as well as investment in workforce development and training.



## **Diverse Scope of Manufacturing Capability:**

GSE's strength in manufacturing engineering has resulted in a broad range of proven performance on structures including precision machining, welding, composites bonding and fabrication, testing, and complex assemblies.



## **Commitment to our Customers:**

GSE's corporate structure as a small business allows for quick responses to changes in priorities or urgent requirements.



GSE Dynamics will always seek to provide 'Best Value Solutions' that consistently exceed our customers requirements and expectations.



**AS 9100 D**  
**CERTIFIED**  
**ISO 9001**





# OUR CAPABILITIES

We commit to surpassing expectations, respecting teamwork, and supporting advanced manufacturing skills and expertise.



## PERFORMANCE

GSE maintains a proven track record of delivery and quality performance.

## BEST PRACTICES

GSE develops and utilizes "state of the art" processes and practices.



## FLEXIBILITY

GSE has the ability to respond to urgent requirements.



### Certifications / Qualifications

- AS9100 Rev D / ISO 9001:2008
- AQMS AS9104
- Boeing DPD with MBD (No limitations)

### CAD/CAM

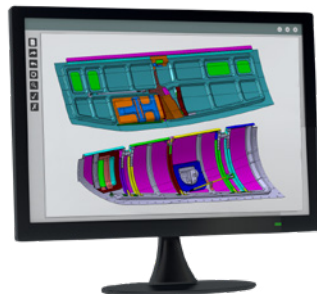
- Catia V5-R25 (5) Seats
- NX 12 w/machining Module
- Solid works 2021 w/ Mastercam bundle
- Autodesk Inventor 2020 CAD Software
- Autodesk AutoCAD 2020 CAD Software
- Mastercam 2021 3-5 Axis Machining Software
- GTCO Accutab Surface Lit Digitizer
- Geomagic Design X

### Precision Machining

- 5 axis CNC milling
- Milling
- Turning
- Grinding

### Welding

- Fusion
  - AWS D17.1
- Resistance
  - AWS D17.2
- Brazing
  - Manual torch braze



### Complex Assembly

- Large, close tolerance structures
- Metallic & composite structures
- Complete "cradle to grave" management of complex assemblies including tooling, process development, production and inspection

### Composites

- Northrop Grumman GSS11000 / GSS11101 / GSS11102 / ACS PRS 5017
- Surface Preparation: Northrop Grumman GSS7022 Method 6
- Adhesive Bonding: GSS22650 Group 4
  - NADCAP Certified

### Painting & Finishing

### Reverse Engineering

### CMM Inspection

# GSE PRODUCTS & EQUIPMENT

GSE develops and utilizes “state of the art” processes and practices and offers an unprecedented level of capability with an emphasis on innovation and continuous improvement.

## GSE Dynamics

25 Corporate Dr, Hauppauge, NY 11788

30,000 sq. ft.

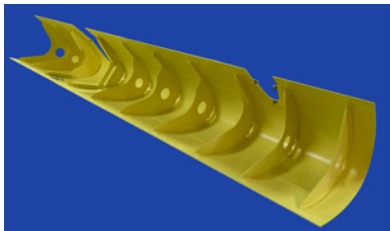
Corporate Headquarters, Purchasing, Engineering, Mechanical Assembly, Welding, Painting and Finishing.

## GSE Composites

110 Oser Ave, Hauppauge, NY 11788

57,000 sq. ft.

Machining, Composites and Metal Bond, Clean Room, Autoclave Curing, Trimming, Assembly, Naval Structures Applications, Auxiliary Painting and Finishing.



Leading Edge



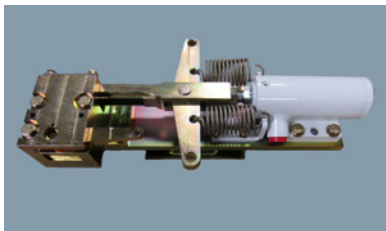
Handle Assembly



Hydraulic Tank



Suppressor

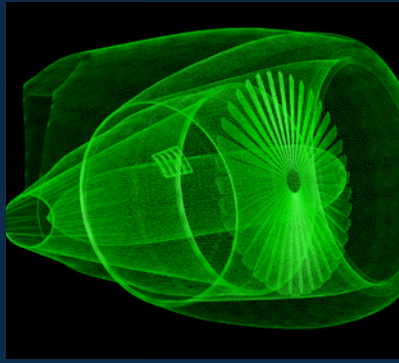


Lock Mechanism



Mast Fairing





## MILLING

- (2) Two OKK HM-500s/40 4 Axis High Speed Horizontal Machining Centers
- With (2) Automatic Pallet Changers and Fanuc model 31i A5 Control, 25" x 25" x 28"
- (2) Two OKK VM-53R0 4 Axis High Speed Vertical Machining Centers with model 31i A5 Control, 41" x 22" x 41"
- HAAS VF-4SS CNC Mill, 50" x 20" x 25"
- HAAS VF-7SS CNC Mill, 64" x 34" x 30"
- HAAS UMC-7500 SS 5 Axis Vertical Machining Center, 30" x 20" x 20"
- Thermwood M77-510 Heavy Duty 5 axis CNC router, 60" x 120" stationary table
- Cincinnati Planar Mill, 30' x 6' Travel
- Pond Planar Mill, 20' x 4' Travel

## LATHES

- Samsung SL-20 CNC Turning Center with Fanuc Oi-TD Control, 7" x 22"
- (2) Hardinge Engine Lathes 11" Dia. Swing

- Hardinge HC Lathe 13" Dia. Swing
- Hardinge HC Lathe w/ True Trace Unit 13" Dia. Swing
- Hardinge Turret Lathe 8" Dia. Swing
- 3 Engine Lathes

## GRINDERS

- Brown & Sharp Surface Grinder

## METAL FORMING

- Connecticut Press Brake, 12 ton x 8 ft.
- Central Machinery Pan & Box Brake, 48"
- River Edge Roller, 48" Width
- Roper Whitney Hydraulic Shear, 4ft X 18 ga.
- GMC Power Bending Roller
- RAM Bead Roller

## WELDING

- Taylor-Winfield Spot Welders
- Sciaky Spot Welder
- Sciaky Seam Welder
- Miller Dynasty 300 TIG Welder
- Airline Welding Vacuum Chamber, 5" Dia. x 24" deep

- Miller 2050 Plasma Cutter .500 for alum & 1.25 for steel.
- JETLINE TKSA-72 TIG Side Beam Welder with Model 9500 Controller and Automatic coil feeder.

## SAWS

- Everising Horizontal Automatic Cut off Saw
- Kalamazoo Vertical Band Saw 24" Frame to Blade
- Dayton Horizontal Band Saw

## QUALITY ASSURANCE

- Brown & Sharpe Model: Global FX 9158 (Range: 36" x 60")
- Brown & Sharpe Model: Global S Green 7107 (Range: 24" x 36")
- ZEISS Model: Contura G2 RDS (Range: 24" x 36")
- Roamer Arm RA-7530-SI
- True Stone Surface Plate, 6' x 12' & 4' x 8'
- Wilson Rockwell Tester
- Centurion Conductivity Tester
- Janda 3020 Tensile Tester
- Tinius Olsen universal testing machine, 10,000 lbs.
- Instron universal testing machine, 30,000 lbs.

- Optical Metrology measuring equipment
- Geomagic Control X
- K Compare Validation Software

## COMPOSITES

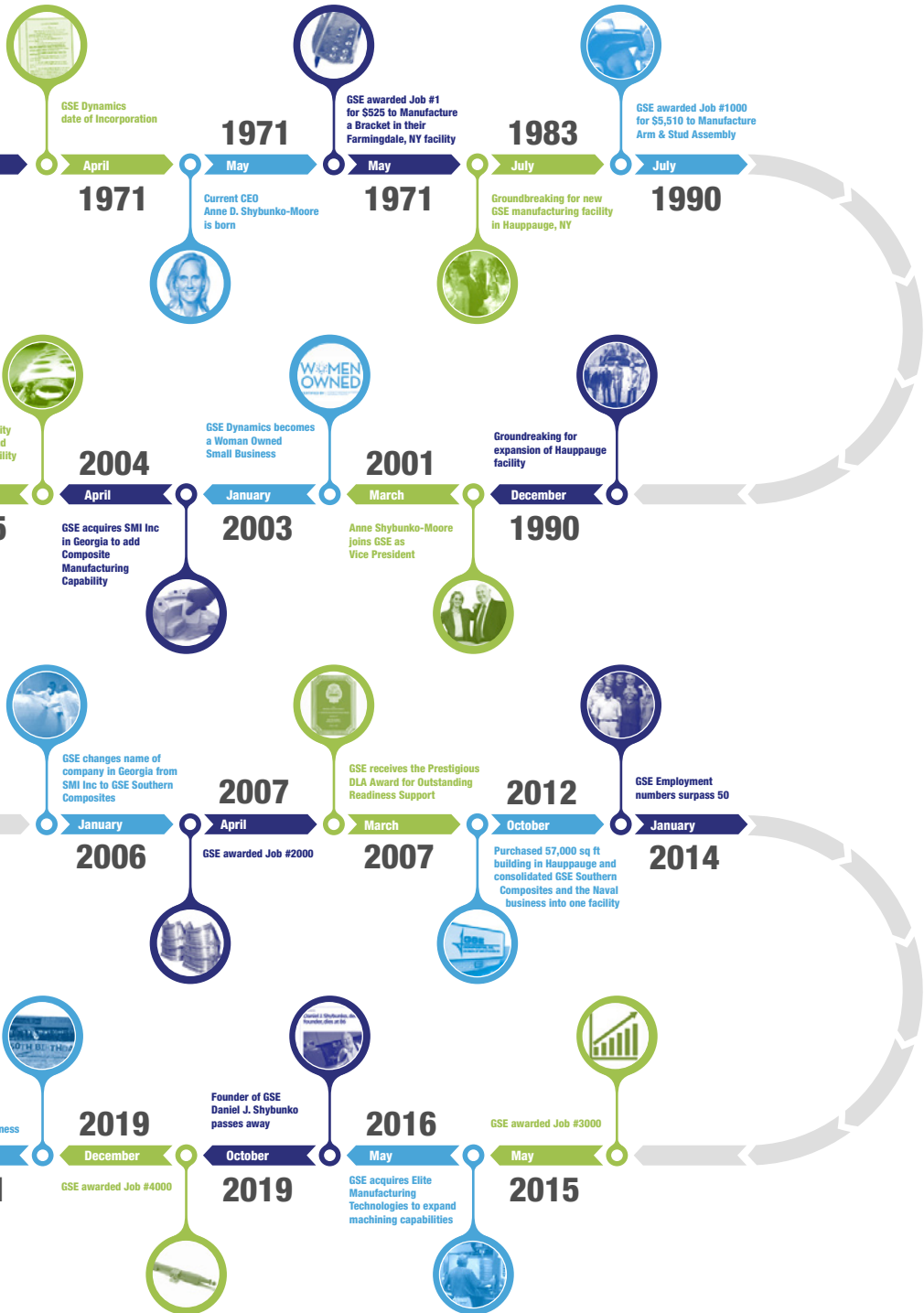
- Two Autoclaves, (8' 4" x 24' and 5' x 8')
- Controlled Lay-Up Environment 2000 SQ. FT Curing Oven W/Vacuum (12' X 10' X 28' Work Area) Resin-Infusion Process Equipment Walk-In Freezer /Refrigerated Material Storage

## MISCELLANEOUS

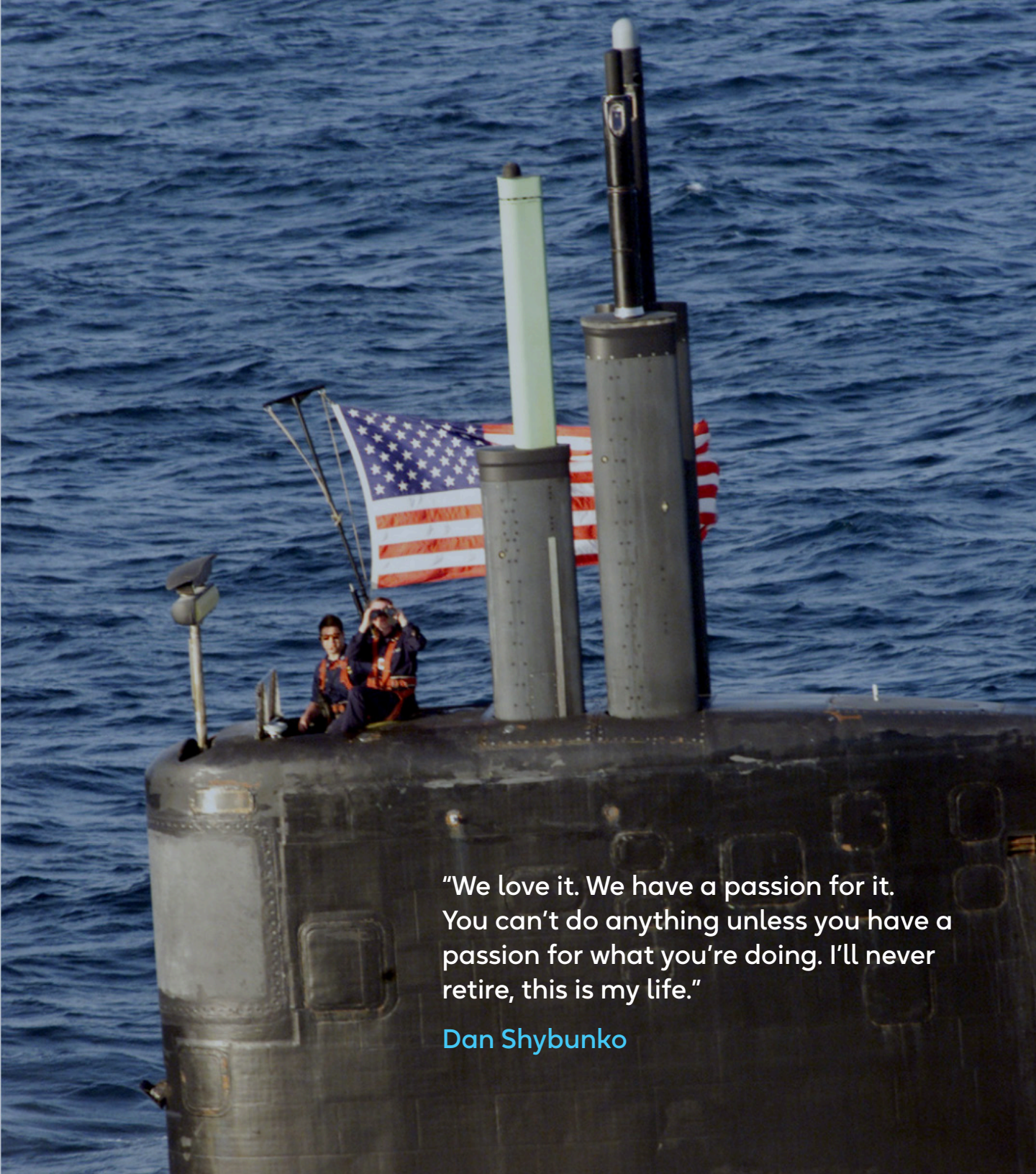
- Trinco Abrasive Blaster, 5' x 4' x 4'
- Meuselwitz Radial Arm Drill Press, 4' x 6'
- Compression riveting tools
- Carolina 30 Ton Hyd. Press
- Central Hydraulics 20 Ton Hyd. Press
- Scotchman Hyd. Ironworker
- Kramer Vibratory Tumbler w Adj. Vibration Frequency Sunnen Precision Honing Machine
- 2 Paint Booths, 12' X 12' & 12' x 30'



Timeline







"We love it. We have a passion for it. You can't do anything unless you have a passion for what you're doing. I'll never retire, this is my life."

Dan Shybunko





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