

# CHAPCON HIGH PERFORMANCE CONTRACT MANUFACTURING SOLUTIONS

## Manufacturing Capabilities

Brian Weinstein, President, Chapco Inc.

### What Differentiates Us

For 60 years, Chapco has been manufacturing partnerships, not just parts. Our commitment to core values and our culture of excellence permeates throughout our organization. From the first conversation, we give you the personal touch and attention often not afforded by larger, more rigid companies. Partner with us and you will see it in the way we do business and in the quality and value of the goods and services we deliver.

- Established in 1964, family owned since 1967
- We invest in the best technology and run it 24/7
- Solution focused
- 70,000 ft<sup>2</sup>, 2 site manufacturing facilities
- 80+ staff, 2 shifts and lights-out capabilities
- Turn-key manufacturing operation
- · Professional engineers on staff

### **Core Competencies**

#### **High Performance Metal Fabrication:**

- Precision metal fabrication
- Product management
- Laser cutting/ punching
- Bending
- Hardware insertion/pemming
- CNC and conventional milling, turning, and tapping
- Spot welding, welding, grinding
- · Finishing
- Lights-out fabrication

- Seasoned management team with experience across a wide variety of industries
- Multi-vendor relationships to control cost and limit supply chain disruptions
- Product analysis for optimized manufacturing
- Ability to scale rapidly to your needs with multiple automated work centers.

#### **Product Development and Contract Manufacturing:**

- Engineering and Product Development
- Contract Manufacturing & Assembly
- Solidworks Modeling and Prototyping
- FMEA (Failure Mode Effect Analysis)
- Reverse Engineering Capabilities
- Value Add Engineering
- Design Consulting
- Testing and Quality Control
- Certification Facilitation



### **Snapshot**

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Founded:	1964
CEO:	Brian Weinstein
Sq Ft:	72,000
CAGE:	85006
DUNS:	122208978
NAICS:	332322 - Sheet Metal Work Manufacturing
SIC:	3444 - Sheet Metal Work
<u></u>	necticut Exporter of the Year England Small Business ufacturer of the Year
Connectio	Manufacturing Innovation Fund Advancing Manufacturing Fa
EASTERN AL	
N	AVAL & Cbi

### **Industries Served**





**Original Equipment** Manufacturers

Automotive &

Transportation

**HVAC** 

Architectural

**Commercial & Industrial Electrics and Electronics** 



Medical & Pharmaceutical





Industrial & Architectural Lighting



Aerospace, Military, and Defense



Food & Beverage Processing



Sports



Construction



# **Lights Out Fabrication**

Our lights-out production enables us to scale to your delivery schedule on demand. Chapco has always invested in the best equipment, and runs it 24/7. It's just one of the ways we maintain our stellar lead times and deliver out of this world service.

#### Inside the TruMatic BendCell 7000



#### **Increases Productivity**

Robotic production is faster and more accurate than manual labor. We can scale on demand while ensuring consistent quality.





#### Manage Costs

Through use of our robotic work centers we can improve material costs and minimize errors and rework.



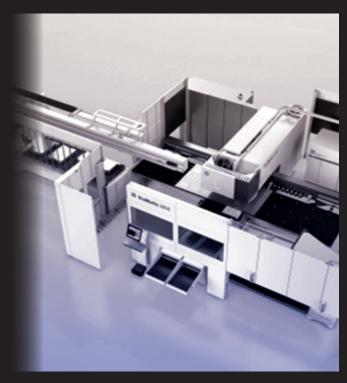


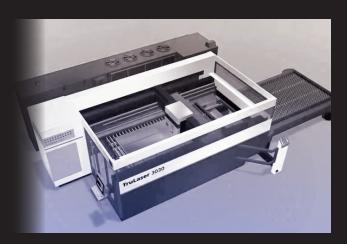
#### **Energy Efficient**

Our modern robotics are energy efficient and carbon-free; they are environmentally friendly, and highly accurate to decrease material waste.



### **Our Automated Work Centers**





#### TruMatic 6000 Fiber Laser/Punch:

Cutting at 1,338 inches per minute, the TruDisk 3001, 300-Watt fiber-laser can cut multiple materials and thicknesses with no downtime for tooling changes.

- Forming, tapping, and extrusions up to 60" x 120" blanks.
- Material thicknesses up to 0.188".
- Sheet master for automated material loading, part removal, web removal, part stacking and sorting of multiple parts simultaneously.
- Part chute for small part removal and sorting.
- The integrated fiber-laser is more power-efficient than a CO<sup>2</sup> laser, providing a far cleaner cut than traditional lasers.

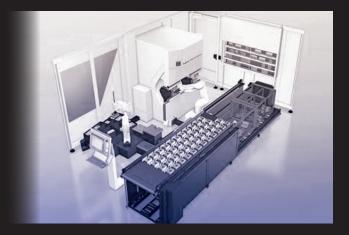
The TruMatic's integrated 20 ton punch forms features up to 900 strokes/minute, with deburring and scratch-free processing, to form complex features including:

• Knock-outs, extrusions, integrated hinges, formed flanges, 4" louvers, half sheers, beading, tapping, CSK, C-Bore, engraving, and roll forming.

#### TruLaser 3030 Fiber:

The TruLaser 3030 Fiber is our high performance 2D laser cutter. This machine is fast and effective and can handle intricate contours with minimal setup in a variety of metal thicknesses

- Able to process blank sheets up to 60" x 120".
  - Cold rolled steel up to .625" thick
  - Stainless steel & Aluminum up to .5" thick
  - Copper up to 0.188"
  - Brass up to 0.250"
  - Galvanized and galvaneal steel up to 7 gauge.
- Automatic sheet change in "lights out" mode



#### TRUMPF TruBend Cell 7000:

This high speed bending machine consists of a press brake, bending robot and material handling unit, and is capable of functioning with zero human guidance.

Operating at a blazing cycle time of 4 seconds per bend and boasting the ability to independently change its tooling, the TruBend Cell 7000 is guaranteed to eliminate down time and finish your job on time.

- Material Thickness .010" .187"
- 19.65" x 14.95" blank size
- 3.3 lbs max blank weight

### **Chapco Quick Reference Guide**

CODES	FACILITIES	ESTIMATING, LEAD TIMES, & LOGISTICS
NAICS 332322	70,000 ft <sup>2</sup> 3-site facilities	Quote quantities of 1-10,000 at the same time. Quoting a smaller quantity will result in a higher price per part.
SIC 3444	80 staff, two	PDFs are preferred for a fast and accurate quote (reverse engineering contact info@chapcoinc.com)
CACE	shifts plus	Depending on finish requirements, please assume 3-4 weeks with shorter lead times on request.
CAGE 8S006	24/7 lights-out operations	Pick up & delivery
DUNS	ľ	Tooling & fixturing
122208978		High volume & rapid scaling with 24/7 automation

AUTOMATED WORK CENTERS	MACHINING	CNC PRESS BRAKES	POWER PRESSES	WELDING	GRIDING & CUTTING
Trumpf 3030 TruLaser Fiber	Conventional lathes & mills		.500″	MIG – all metals	Plasma cutting
Trumpf 6000 Fiber Laser/Punch	CNC turning & Milling	7 Press brakes	.500″	TIG – all metals	Band & cold saws
Trumpf 7000 TruBend Cell	Multi-head tapping	≥ 175 ton ≥ 12′ long	.500″	Spot – all metals inc. aluminum	Surface grinding

MATERIAL	SPECIFICATION	MINIMUM THICKNESS	MAXIMUM THICKNESS	MAXIMUM SHEET SIZE	MINIMUM PART SIZE
Aluminum	All types	0.005″	.500″		
Steel	Hot and cold rolled	0.002″	.500″		
Stainless Steel	All types in all finishes	0.002″	.500″		
Pre-plated	Galvanized and galvannealed steel	26 gauge	7 gauge	60″ x 120″	0.002″
Brass	All types/All alloys	0.002″	0.250″		
Copper	101-110, 120	0.002″	0.188″	1	

SURFACE FINISH	HARDWARE INSERTION	COATING & PLATING	PART IDENTIFICATION	ASSEMBLY
Standard mill	PEM standard	Powder coat/E coat	Silk screening	Hardware
Orbital sanded	fasteners	Hot dipped galvanized	Laser etching	Mechanical
Stainless steel polished	Custom hardware	Black Oxide	Metal stamping	Electrical
Cosmetic grinding	available	Anodize (clear/all colors)	Ink Stamping	Electro-mechanical
Vibratory tumble	PEMs with	Chromate conversion (clear/yellow)	Dot Peen	Hydraulic
Deburring	auto-feed solution	Passivation (clear)	Vibratory Etch	Pneumatic
Time save	POP, Spin, Rivets	Zinc and Nickel coating		Electro-magnetic
	& Riv-Nuts	Tin and silver plating		

### Welding

This process uses a concentrated stream of energy to join material at the molecular level. We perform MIG, TIG, and resistance welding. We will advise which is best for your project or whether alternatives, such as forming, may be a better option.

#### TIG:

(Tungsten Inert Gas) is perfect for delicate materials or small parts. This process is used to weld both ferrous and non-ferrous metals. While TIG welding tends to be a slower process, it produces finer, stronger more precise welds.

PART GEOMETRY		
Complex features	Knock-outs, extrusions, integrated hinges, formed flanges, 4" louvers, half sheers, beading, tapping, CSK, C-Bore, engraving, and roll forming.	
Maxed formed features	Custom radius tooling available up to 3"	
Internal form radii	0.015", 0.030", 0.060", 0.090", 0.120", 0.188", 0.250", 0.375", 0.500", 1.00"	
Hems	Depends on material thickness – standard up to a maximum length of 10'	
Punched features standard	Max. height = 2x material thickness. Custom tooling where applicable	
Rolled features	Max. material thickness 16 gauge Maximum blank width 45″ Minimum radius ≥ 3.5″	
Broken edges	Deburring/vibratory tumble	

	TOLERANCE
Offsets	(+/-) 0.5°
Hole Diameter	(+/-) 0.012"
Edge/Edge and Hole/Hole (Hardware to edge/hole and hardware to hardware)	(+/-) 0.003"
Bend/Edge	(+/-) 0.003"*
Bend/Hole, Hardware/Bend	(+/-) 0.010"*
Features separated by 2 bends	(+/-) 0.010"*
* Depending on length of piece >6'; subject to	

\* Depending on length of piece >6'; subject confirmation on receipt of drawings

PDFM & QUALITY DOCS	OTHER TURNKEY SERVICES	
For production: CAD preferred - accept-	Engineering concepts	
ed file formats are: PDF, DWG, DXS, STP, and SOLIDWORKS	DFMA & Prototyping	
Quality Documents: C of C; First article inspection (FAI); Material certifications	Certification facilitation & coordina- tion UL, ETL, NSF, NAMA	
Laser QC scan	Failure Modes & Effects Analysis (FMEA)	
Coordinate Measuring (CMM)	PLC programming & integrations	
	Packaging, Inventory, Logistics	
	Vast partner & vendor database	

#### **MIG:**

(Metal Inert Gas) is a great option for quickly welding heavy materials. This process uses inert gases to weld ferrous and non-ferrous metals. MIG produces fast, clean welds perfect for cutting lead times.

#### SPOT:

(Resistance Spot) uses pressure and the application of electrical currents to generate heat in a focused area. SPOT is commonly used to bond sheet metal together and is a highly cost-effective welding option.









### Engineering

The process begins with your ideas: Bring your CAD, hand drawings, or PDFs to our experienced product design engineers, or just come in for a talk. We can work with your existing files, or take the lead for product development, bringing your idea to market quickly and efficiently. With DFMA built in, you know Chapco will be able to scale with your needs.

#### **Prototyping:**

For first run projects, Chapco will generate a prototype of your part, to ensure we are accommodating your needs with regard to fit, form, and function.

#### **Get Certified:**

Our team can coordinate and/or facilitate agency testing. These certifications ensure quality and best practice. Certifications to consider include: UL, ETL, NSF, NAMA

#### **Peace of Mind with FMEA**

Failure Mode and Effects Analysis is a data driven engineering analysis used to identify potentials for failures in design, production, or the manufacturing process. We prepare so your job keeps moving!

### **Original Equipment Manufacturers**

Chapco can provide machined parts, fabricated assemblies, finishing, laser cutting and a host of additional value-added services to cut your company's costs and improve efficiency.

Our combination of industry experience, state-of-the-art equipment, and innovative processes deliver precise Original Equipment Manufacturing (OEM) solutions with shorter lead times and improved quality.

- Exercise Equipment
- Vending/Automated
  Retail Equipment
- HVAC Equipment
- Tooling and Fixtures
- UVC Sanitation



- Automotive
- Marine
- Defense applications
- IOT-enabled





### **Contract Manufacturing and End-to-End Services**

Whether this is your first fabrication project or one of the hundreds you are managing this month, our custom sheet metal fabrication capabilities will set your mind at ease. We have the people, experience, equipment, and facilities to offer turnkey services – delivering your ideas to market with the ability to rapidly scale as your business grows.

We pride ourselves on only committing to what we can do and always delivering on what we promise.

Mechanical Assembly

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- Electrical Assembly
- Hydraulic Assembly
- Pneumatic Assembly
- Electro-Magnetic Assembly

- PLC Programming and Integrations
- Packaging, Inventory Management, and Logistics
- Vast Partner & Vendor Database Tooling
- High Volume Capacity

At Chapco, the process of engineering and manufacturing successful products is in our DNA. Unlike most sheet metal fabricators, we also design and manufacture a diverse range of products for our collaborative companies. So when you come to Chapco, you are partnering with a high performance sheet metal and contract manufacturing company that understands your challenges, inside and out. Experience the difference!



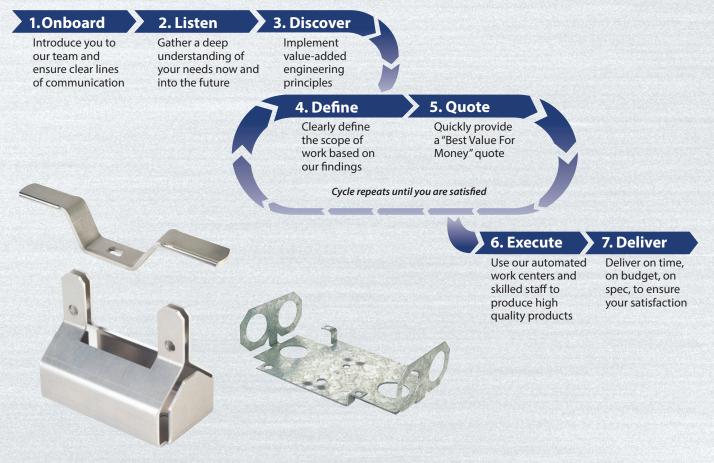




### **Our Promise To You**

We deliver quality metal fabrication solutions to customers from diverse industries across the Northeast and beyond. Our innovative processes, superior customer service, and single-source capabilities will enhance your manufacturing process.

#### Our Proven Process For Building Partnerships To Turn Ideas Into Reality:



### What Our Customers Say

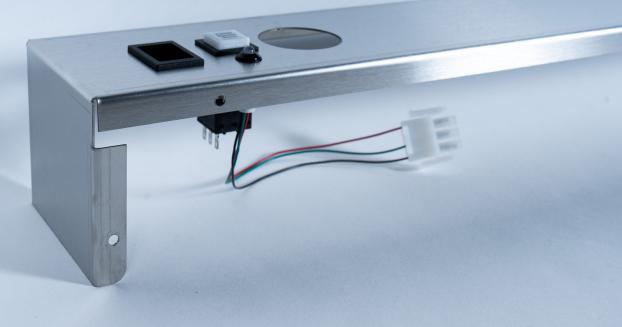
Having numerous manufacturing partners past and present over the years, working with Chapco has been like a breath of fresh air. What has impressed us the most has been their attention to customer service and product detail.

- Hydro-Hitch

Our experience with Chapco has been nothing short of fantastic. Chapco has completed our work ahead of schedule with superior craftsmanship and quality. We are so confident in their ability that we have introduced two additional companies to the Chapco team that have experienced the same outstanding service, support, and quality. - Vengo Labs, LLC

Chapco Inc. has been an integral part of our success over the past two years. Their unwavering commitment to quality and attention to detail has been evident in every aspect of our collaboration, and the results speak for themselves. The updated features incorporated into the Spectra 1000 are a testament to their expertise and ability to bring our vision to life. Their expertise and their commitment to delivering cutting-edge solutions have been invaluable. They have consistently exceeded our expectations and have been a trusted and reliable partner every step of the way. We are proud to work with such a dedicated and talented team and look forward to our continued partnership.

- Integrated UVC Solutions LLC.



# CHAPC

#### A Proud American Manufacturer

10 Denlar Drive Chester, CT 06412 (Corporate Office/Manufacturing) 8 Inspiration Lane Chester, CT 06412 (Assembly Facility) P: 860-526-9535 E: info@chapcoinc.com chapcoinc.com



#### Schedule a call to discuss your project

https://chapcoinc.com/arrange-a-call/



#### **Collaborative Companies:**

Chapco is part of a collaboration of companies that engineer and manufacture best-in-class and unique products for markets around the world. These include DenlarHoods.com, a fire protection company; TrueformRunner.com, curved non-motorized treadmills; and FastcorpVending.com, robotic state-of-the-art vending machines for regulated and non-regulated products.





