

# NCT, INC.

*Friction Welding Specialists*

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July 2020

# 20 Holmes Rd. Newington CT

2,500 sf Office



10,000 sf Machine Shop



# About NCT, Inc.

- ▶ Established 1983
- ▶ 12,500 sq. ft. facility in Newington, CT
- ▶ 20 CNC and friction welding machines
- ▶ Supporting aerospace, automotive, electrical, mining, military and tools industries
- ▶ Servicing clients in the US, Canada, Mexico
- ▶ Serving Government contractors & ISO9000 companies
- ▶ Cage code: 1LUB9, DUNS:118376102

# Complete In-House Services

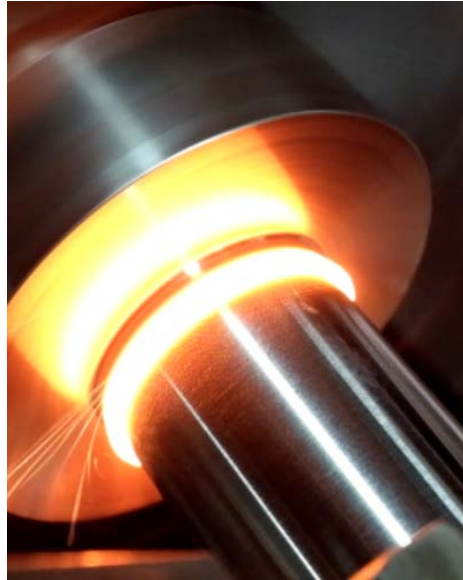
- ▶ One of few full-service, in-house friction welding vendors in the United States capable of:
  - Weld development
  - Weld design
  - Compliance: ISO 15620 & ANSI/AWS C6.1-89 Standards
- ▶ Material procurement
- ▶ Swiss Screw CNC machining
- ▶ CNC turning and milling
- ▶ High speed cutting facility for rod, bar and tubes
- ▶ Bend & tensile tests

# Friction Welding Process



## PHASE 1

Low temperature interface heat stage - spinning one component against another stationary component



## PHASE 2

Second portion of the welding cycle shows displaced plastic state material while increasing pressure.



## PHASE 3

Rotation is stopped and final axial forging force applied. Flashing is shown here or optionally could be removed.

# Sample Applications

Bimetallic Engine Valve  
Steering Shaft  
C.V. Joint Bell Shaft  
Tie Rod End  
Universal Joint Yoke  
Axle Banjo Bearing  
Brake "S" Cam  
Turbine Shaft  
Helicopter Rotor Shaft  
Landing Gear Strut  
Drill Pipe  
Cluster Gear

Brake Caliper  
Tubular Prop Shaft  
F.W.D. Tubular Axle  
Air Brake Push Pad  
Drive Axle Shaft  
Jet Engine Turbine  
Pinion Shaft  
Diesel Injector  
Missile Turbine  
Lathe Spindle Blank  
Gear Hub  
Rock Drill Piston

# NCT, Inc. Sample Products



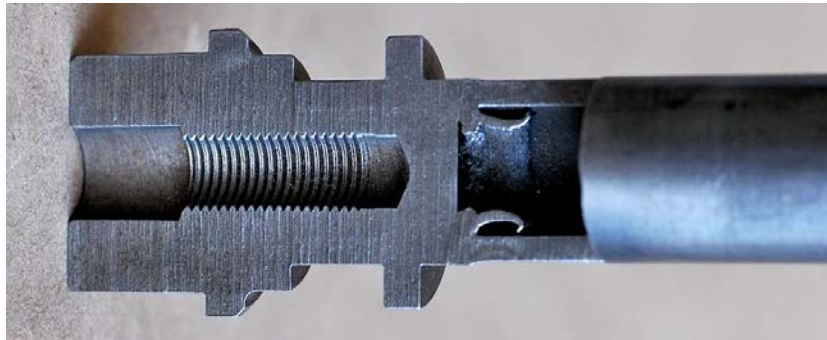


# NCT, Inc. Sample Products





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# Benefits & Advantages

## ▶ Environmentally Friendly

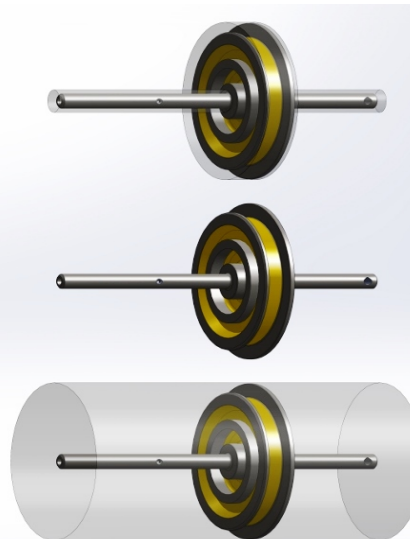
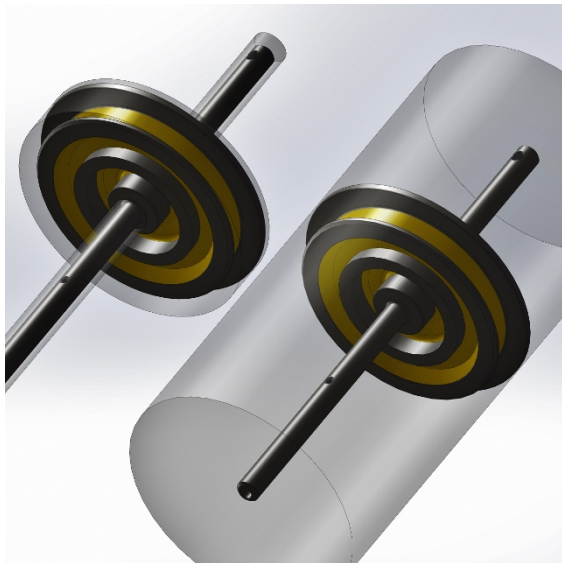
- Minimizes energy consumption
- No smoke, gasses, or waste stream

## ▶ Product Improvement

- Join highly dissimilar metal combinations
- Joint strength equal to or greater than that of parent material
- Preserves microstructure and material properties (no melting)
- Full cross-sectional porosity-free bond
- Very narrow heat-affected zone

# Cost Savings

- ▶ Near net shape geometries not producible with forging, casting, or forming that reduce machining and waste
- ▶ Savings on labor, material, and operations through near net size design
- ▶ Simplification of component design
- ▶ Ideal for small quantities/prototypes
- ▶ Low cycle times = High production rates and low costs
- ▶ In-process flash removal eliminates costly grinding



# Why Colchester?

- ▶ *We wish to invest in the building of a new manufacturing facility that will have a low impact on the environment. New, 21st century, standards of building, heating, and cooling, will reduce level resources consumed and provide comfort for employees. Conducting business from a new facility will improve our company's image, allow us to concentrate on growth by acquiring an ISO certification.*
- ▶ *We are evaluating plans to develop 124 Upton Rd. with approximately 8,400 sf owner-occupied building.*
- ▶ *Colchester became a town of choice due to the:*
  - *proximity to a highway*
  - *potential for industrial growth in the future*
  - *tight knit business and residential community*
  - *availability of appropriately zoned industrial land*

# Benefits to Colchester residents

future contributions to the town's tax base

- ▶ NCT will bring a new type of manufacturing services (friction welding) - a niche business that will not create competition to Colchester manufacturing companies.
- ▶ New building with great environmental footprint
- ▶ Potential for expansion and creation of new jobs
- ▶ Increase in town's Personal Property Tax base
- ▶ Increase in Real Property Tax base
- ▶ Use of local goods and services by employees of NCT
- ▶ Potential for manufacturing-oriented high school students to visit and learn about friction welding

# Proposed Building






# Other locations considered

For Sale > Industrial > CT > East Hartford > 43 Franklin 7,2...

Request Info



**43 Franklin 7,200 SF Industrial Building**  
7,200 SF | EAST HARTFORD, CT

Download OM Flyer Submit LOI

Gallery 7 Map View Street View

**Listing Contacts** Active

Jay Morris PRO Asking Price: \$410,000

**Property** Due Diligence

**Address**

43 Franklin St, East Hartford, CT 06108 [Show on Map](#)

Days on Market 152 Days Time Since Last Update 1 Month

**Details**

Property Type	Industrial	Square Footage	7,200
Net Rentable (sq ft)	7,200	Price/Sq Ft	\$56.94
Year Built	1977	Buildings	1
Stories	1	Zoning	B3
Lot Size (acres)	0.4		

**Marketing Description**

- ▶ East Hartford Enterprise Zone Benefits
- ▶ A 5-year, 80% abatement of local property taxes on real and personal property
- ▶ A 10-year, 25% credit on that portion of the CT corporation business tax attributable to a business expansion or renovation project



Possibility to purchase currently leased property at 20 Holmes Rd. Newington CT.

By going this route we continue business without any interruptions, as well as avoid the costly moving expense.

