

Equipment List



Connecticut Spring & Stamping

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Introduction

Connecticut Spring & Stamping (CSS)

manufacturers and prototypes all varieties of
Springs, Metal Stampings, Fourslide/Vertislide
Products, and Assemblies.

We specialize in close tolerance precision parts to
support cost effective low and high volume
production.

We supply the Medical, Firearm, Aerospace, Plastic
Injection Molder and many more markets.

Our manufacturing operations are contained in one
modern single story facility with
over 150,000 square feet of space.

ISO 9001:2008 AS9100 Rev B

Springs



Battery Contact



Catheter Springs



Torsion Spring



Recoil Springs



Contact Spring



Medical Battery Contacts

Primary Spring Manufacturing

Small Order

Short-run and prototype production of extension springs,
compression springs and wire forms.

Small Coil

7900 High Production Sleeper Hartley Coilers	.002 to .026
720 Sleeper Hartley Coilers	.008 to .028
Torin Coilers	.008 to .030

Medium Coil

790 High Production Sleeper Hartley Coilers	.008 to .042
7910 High Production Sleeper Hartley Coilers	.014 to .063
Torin Coilers	.025 to .080

Large Coil

BHS-Torin CNC II Coilers	.015 to .080
BHS-Z-CNC Coilers	.026 to .080
Torin Coilers	.048 to .335
Simplex Rapid Coilers	.062 to .148

In Line Ovens For All Coilers
Lion Precision and Moyer Merlin Gauges

Wire diameters ranging from .002" to .350"

Primary Spring Manufacturing

Automatic Looping

Itaya MCS 4 Spring Generators	.004 to .015
Itaya MCS 8 and 8G Spring Generators	.008 to .031
Itaya MX8	.008 to .031
MEC CLS 10 Spring Loopers	.008 to .039
MEC 10V	.008 to .039
Itaya MCX 10 Spring Generators	.015 to .040
MEC CL 16 Spring Loopers	.015 to .055
Shinko VF 812 MFT Spring Loopers	.017 to .042
SX-15 Computer Controlled Spring Coilers	.025 to .059
Itaya MX20	.025 to .079
Itaya MCX 20 Spring Generators	.025 to .079
Shinko VF 820 MFT Spring Loopers	.028 to .079
Shinko VF 830 MFT Spring Loopers	.048 to .125
In Line Ovens For All Generators and Loopers	

Torsion

SIMCO & MEC 10 Coilers	.007 to .040
Torin Coilers	.025 to .090
MEC 20, 23, & 40 Coilers	.028 to .156

Truing

Load testers for all types of loads on a wide range of wire sizes.

Metal Stampings



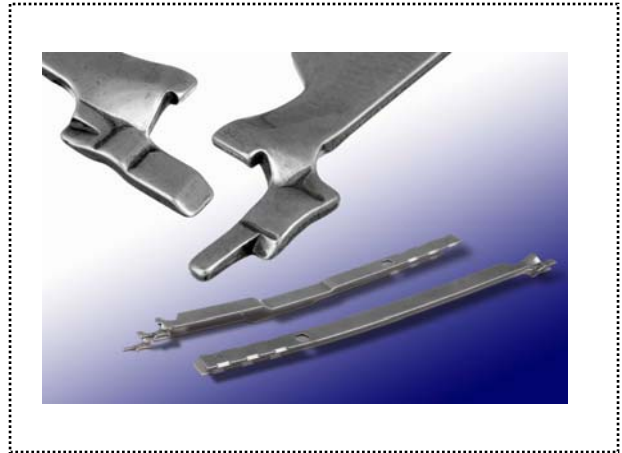
Receiver End Plate



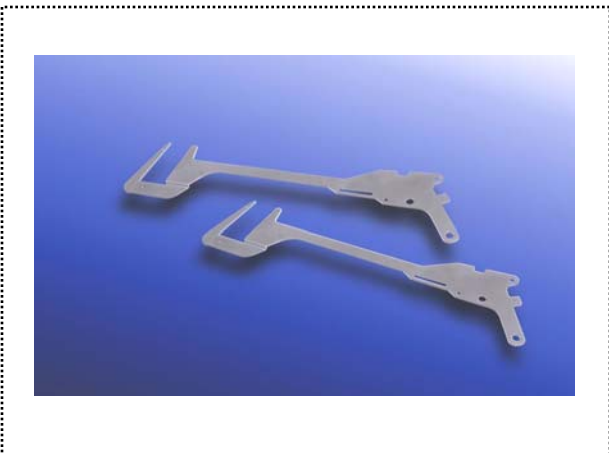
Shield Lock



Inceptor Latches



Shot Gun Shell Latches



Medical Hooks



Endoscopic Clip

Primary Metal Stamping Manufacturing

Automatic Power Press

Automatic presses from 30 ton to 300 ton provide a full range of metal stamping. High speed presses capable of 1,500 parts per minute. Large parts requiring heavy tonnage can be accommodated by 300 ton presses with die beds up to 84 inches long.

High Speed Bruderers	30 and 60 Ton
Straight Side Minsters	60 to 300 Ton

Material thickness ranging from .002 to .250

Secondary Power Press

Presses	3 to 10 Tons
Presses	10 to 15 Tons
Presses	15 to 50 Tons
Minsters	75 Tons
Greenerd Hydraulics	200 Tons

Miscellaneous

Foot and Drill Presses
Tapping Machines
Bridgeports
Surface and Bench Grinders
CNC Machining Center
Time Savers

Fourslide



Trigger Bar



Battery Connector



Bipolar Clip



Flat M Springs



Wire Formed Clamps



Retention Spring Clips

Primary Fourslide Manufacturing

Fourslide / Multislide / Vertislide

FS3R's

700L Nilson's

#1 Nilson FS1S's

#1 Nilson FS1F's

752 Nilson's

#4 Nilson

#3 Nilson FS3F's

#2 Nilson FS2F

V81 Torrington Verti-Slides

V82 Torrington Verti-Slides

Kick Presses

WAFIOS – BM3

Wire diameters ranging from .005" to .250"

Flat stock ranging from .003" to .156"

Secondary Manufacturing

Grinding

Heat Set Machines

Automatic Air Cycle Setout Machines

Empire and Pangborn Shot Peen Machines

Large OMD Downfeed Grinders

Bennett 9" Grinders

Besley 10" Grinders

Bennett 14" Grinders

Besley 18" Grinders

Gardner 20" Grinders

Bench Grinders

Moyer CNC 15-30-2VCD Grinders

Tumbling Barrels

Harperizers

Pangborn Roto Blast

Wheelabrators

Sweco Vibrators

Uni Hone Dry Blasting

Automatic Setout Presses

Secondary Manufacturing

Heat Treating

Complete stress relieving capabilities
Fixture Heat Treating (Electric and Salt Set)
Lindberg Oven #8
Type 11-HC-242424-13
is approved for stress relieving and
precipitation type treatments requiring temperatures of less than 1000
degrees F to MIL-H-6875

Secondary Wire Forms

Foot Presses
Air Presses
Power Presses
Hand Winders

Looping

Foot presses for secondary extension spring operations
Torin 10A and Torin 11A's

Welding

Induction Heaters (10 KW Max.)
Spot Welders (0-25 KVA Range)
Precision Welders

Assemblies



Magazine Tube



Retension Spring



Cassette



Breaker Spring



Slide Stop Lever



Low Profile Slip

Assembly and Subassembly

Assembly

We offer..

- expertise in project management
- flexibility
- reliability
- competitive pricing

From prototype to high volume production, using innovative tech-aided single-part throughput assembly.

Subassembly Solutions Incorporating:

- Welding (ultrasonic, EB, resistance laser)
- Pem and other fastener insertion
- Semi and full automation

Quality Assurance

Testers

Probat SF 201 Computer Spring Testers	<i>(Capacity 44 pounds)</i>
Carlson Electronic Spring Testers	<i>(Capacity 50 pounds)</i>
Carlson Electronic Torsion Testers	<i>(Capacity up to 200 inch pounds)</i>
Carlson Precision Spring Testers	<i>(Capacity 200 pounds)</i>
Link Spring Testers	<i>(Capacity 1900 pounds)</i>
Tinios Olsen Tensile Testers	<i>(Capacity 5000 pounds)</i>
Wilson Twin Hardness Testers	
Tukon Superficial Hardness Testers	
CT-200 Automated Spring Analyzer	

Gauges

Check Line Plating Thickness Gauges
Brown & Sharpe Cadillac Hite Gauges

Major Inspection Equipment

30" Optical Comparators
Starrett Digital Height Indicators
Federal Profilometers
Tool Maker Microscopes
Buehler Specimen Mount Presses
OGP Smart Scope 500 Vision Measuring System with Touch Probe

Software

Statistical Process Control
Production Part Approval Process
Corrective Actions and Quality Process Management
Calibration
MeasureMind 3D Multisensor and MeasureFit for OGP Smart Scope

Facilities and Certification

to perform Eddy Current Test for Surface Defects

Tooling



Tool Room

Complete Tool Building Facilities for Power Presses and
Four Slide / Multislide / Vertislide

Wire EDM

Mitsubishi Wire EDM Machines With DNC Links To CAD/CAM Systems
Elox EDM Machines

Grinders

Surface Grinders
Moore Jig Grinders
Okamoto 12 X 24
Okamoto 20 X 48 Wet Grinder

Drills

Current EDM Drills
Radial Arm Drills
Drill Presses

Presses

75 Ton Straight Side Tryout Press For New Tools
50 Ton Hydraulic Arbor Presses

Miscellaneous Equipment

Lathes
Bandsaws
Kalamazoo Cut Off Saws

Milling Machines

CNC Vertical Machining Center With Tool Changer
Bridgeports
Haas VF4 CNC Vertical Machining Center
Milltronics CNC Vertical Machining Center
Fadal 2016L CNC Vertical Machining Center
Fadal 2216 CNC Vertical Machining Center
Fadal 3016L Vertical Machining Center
Hyundai – Kia VX400 Vertical Machining Center

Engineering

PC Based Workstations

AutoCad Mechanical Desktop 2008 and AutoCad 2010 software

AutoCad Lite 2010 CAD software

Autodesk Inventor Suite 2010

Pro Engineer 2001 and Wildfire by PTC

DP Esprit

CNC Programming System

(with direct electronic down load capability to NC Wire EDM)

Mastercam

Solidworks – Basic, Premium, Simulation Premium FMEA 2010

Electronic File Transfer Capability

Import and Export capabilities for the following file types:

- AutoCad DWG (R12-R14 and AutoCad 2004-2010)
- Autodesk Inventor .IPT
- DXF
- IGES
- STEP
- Cadkey
- Pro E
- Solid Works
- Parasolid
- E-Drawings

Printers & Plotters

Hewlett-Packard LaserJet 5000N large format laser printer

Hewlett-Packard Designjet 1050C Roll Feed Plotter

Hewlett-Packard Designjet 700 Roll Feed Plotter

Technical Support

Capabilities

EDI

Bar Code Shipping Labels

Broadband Internet and Email

11 x 17 Flat Bed Scanning

Ricoh Aficio Wide Format Machine

High Speed FAX and Printing

Workstations and Servers

Dell, Hewlett Packard & Compaq in a Windows Environment

Systems

Microsoft Office

Global Shop

Please visit our website at <http://www.ctspring.com>