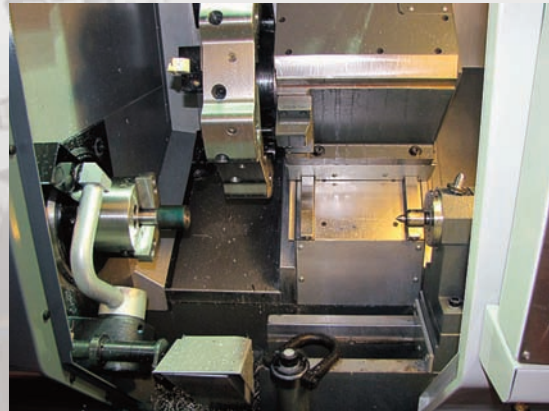


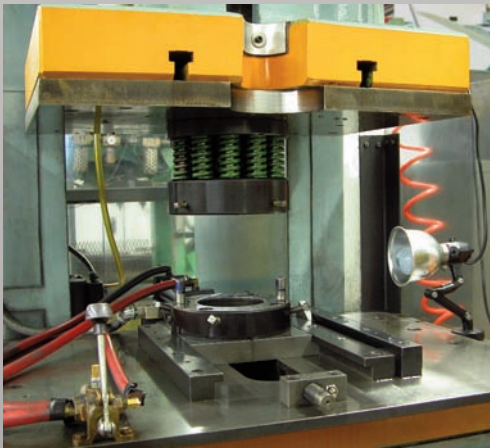
Manufacturing Equipment

Fastener Dimensions, Inc. manufactures the finest quality aerospace bolts, screws and small machined components. We have the technology and experience to meet and exceed the most challenging quality standards. With our new state-of-the-art facilities, we have produced some of the most complicated parts found on the market today. We manufacture standard and custom Mil-Spec fasteners on a daily basis. These parts also consist of but, are not limited to AN, AS, DIN, DS, MIL, MS, NA, NAS, NASM and much more. We specialize in A286, Waspaloy, Titanium and Inconel.



Hot Forging Department

- 1 – 60 Ton OBI Hot Forging Press
- 1 – 80 Ton OBI Hot Forging Presses
- 1 – 400 Ton AIDA Punch Press
*Equipped with Slide Table
Cap 30" long heading capacity*
- 1 – 110 Ton OBI Hot Forging Press
*Equipped with Slide Table
Cap 30" long heading capacity*
- 4 – 25KW Induction Heaters with Chillers
- 3 – Fully Automatic Bar Saws with Loaders



CNC Machine Department

- 3 – Haas SL10
- 1 – Haas SL20
- 2 – Haas ST15
- 1 – Haas ST25Y
- 2 - Super Mini-Mills with 4th Axis
- 1 – Haas TL-1 Tool Room Lathe
- 1 – 5 ft. x 10 ft. CNC Plasma Table

Thread Rolling Department

- 1 – Reed A22B
- 1 – Reed A22 HD
- 1 – Reed A22
with Single Cycle System
- 2 – Reed A22 STD
- 1 – Waterbury Farrel #10
- 1 – Waterbury Farrel #30
- 1 – Waterbury Farrel #50

Heat Treating Department

Currently an Outside Process

110 Ton OBI Hot Forging Press Equipped with Adjustable Slide Table and Custom Base Plate

Manufacturing Equipment

Our onsite facilities feature operations such as CNC Turning, CNC Milling, CNC Screw Machining, CNC Wire and Sinker EDM's, Centerless Grinding, Thread Rolling, Fillet Rolling, Tool Making, Tool Design, Fastener Drilling for safety wire, Hot Forging up to 1 1/2" diameter and over 30 inches in length under the head, among many other high-precision processes.



Centerless Grinding Department

- 5 – Cincinnati OM #2
- Grinding Tolerance +/- .00001
- In-feed and Thru-feed Tooling and Equipment

EDM Department

- Makino U3 Heat CNC Wire EDM
- Charmilles Sinker EDM

General Tool Support Equipment

- 2 – Bridgeport Milling Machines
- 1 – Hardinge DV59 Lathe
- 1 – Hardinge HLV Lathe
- 2 – Harig Surface Grinders
- 1 – Band Saw Vertical 20"
- 1 – Clausing 18" Gap Lathe
- Multiple pieces of Support Equipment and Secondary Machinery

Drilling Safety Wire Department

- 60 – Custom-built Automatic Drill Presses
- 150 – Custom Fastener Drilling Fixtures (for safety wire and cotter pin holes)
- 3 Corner, Flat-to-Flat 1, 2 and 3 holes thru, Shank Drilling, Index Drilling (for multiple holes thru)

Inspection Equipment

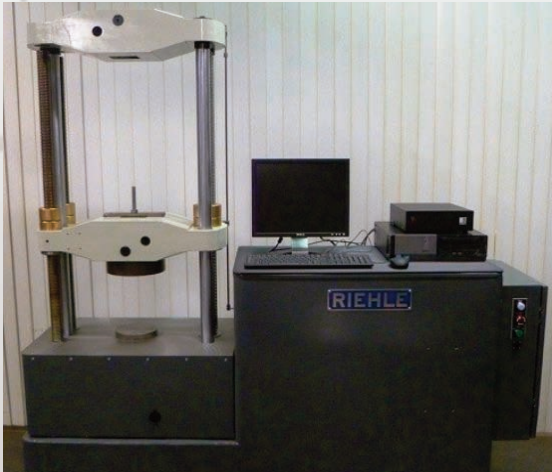
- Johnson segment and Tri-Roll gauges, UNF, UNC, UNEF, UNJF, UNR, UNRF, UNJC Segments. Internal and External segments are on site.
- Multiple Optical Comparators up to 30"
- Micrometers (all types)
- Knife Edge Veneers
- Surface Plates up to 48"
- Height Gauges to 30"
- Bore Gauges
- Thread Ring Gauges
- Plug Gauges
- Hex Gauges
- Keyence Inspection Machine



- Full Dimension Inspection
- Certified by the U.S. Government for System 21, 22 and 23
- FAI- 9102

Laboratory Testing and Evaluation

As a family owned company, Fastener Dimensions Inc. has always taken the quality of our products and services as a personal reflection of our standards. We carefully inspect each part that we make at every step of the manufacturing process and have procedures in place to ensure a level of excellence that meets even the most demanding requirements.



Laboratory Testing of Fasteners

Destructive Testing

- Ultimate Tensile, Axial Tensile, Wedge Tensile, Yield Tensile Strength test
- Riehle 60,000 LB.
- Riehle 300,000 LB.
- Clamp Furnace for elevated temp. testing
- Stress Rupture
- Creep Rupture
- Fatigue Testing
- Clamp Furnace to perform elevated temp. Fatigue test

Non-Destructive Testing (NDT)

- Florescent Penetrant Inspection
- Magnetic Partial Inspection



Metallurgical Examination Laboratory

Mounting

- Struers Cito-Press 5 – Mounting Press
- Pace Tech TP-7001-Mounting Press

Cutting Specimen Preparation

- Struers Labotom 5 Metallurgical Specimen Saw
- Lecco 15"
- Lecco 8" Automatic

Polishing and Grinding

- 2 – Pace Nani 2000T with Automatic Heads

Specimen Evaluation and Inspection

- 5 Stereo Microscopes with Digital Camera
- Pace IM-5000 Metallurgical Microscope with Digital Camera

Hardness Testing

(Rockwell, Brinell, Knoop, Vickers)

- Wilson Rockwell Model: 4JR
- Lecco Model LM700AT With Digital Camera



***We can manufacture any bolt in any head configuration and any material.
AN, AS, MS, NAS, NASM fasteners – standard and custom***

Machining Options

- Hot Heading
- Cold Heading
- CNC Turning
- CNC Milling 4, 5 & 6 Axis Available
- CNC Screw Machines
- CNC Swiss Operations
- Conventional Screw Machines
(Brown & Sharp)

***FDI Specializes
in Custom Parts
to Blueprint.***

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*If you can't find
the parts you need
on our web site
we can manufacture
them on a short run
or outsource them
for you.*

.....

Onsite Secondary Operations

- Broaching
- Roll Forming
- Fillet Rolling
- Wire Bending
- Tool Making

**Precision Hole
Drilling & Tapping**

- Gun Drilling
- Three Corner Head Drilling
- One Hole Thru Head
- Index Multi-Hole Drilling
- Shank Type Bleeder
Hole Drilling
- Thread Drilling for Cotter Pins
- Drilling Holes for Safety Wire

Part Marking

- Dot Peen / Vibro Engraving
- Electro Etch
- Impression Stamping
- Wire Tag Identification
- Ink Stamp
- Laser Engraving
- Custom Engraving All Types
- Knurling

- Stamping
- Polishing
- Tumbling
- Abrasive Blasting

Thread Forming

- Thread Cutting
- Thread Rolling
- Thread Grinding

Precision Grinding

- CNC Surface Grinding
- Centerless Grinding
.0001" Tolerance
- Profile Grinding
- Crush Grinding
- OD Grinding
- ID Grinding

EDM Services

- CNC Wire Cut EDM
- Sinker EDM
- EDM Precision
Hole Popping

Plating or Finish

Cadmium	Aluminum Coating	Anodize	Dry Lube
Silver	NAS4006	Alodine	Solid Film Lubes
Gold	Vacuum Cadmium	Electro-less Cadmium	Chem Film
Zinc	Diffused Nickel	Mechanical Cadmium	Teflon
Nickel	Olive Drab	Cadmium Fluoborate NAS672	Oil
Hard Chrome	Paint (all types)	Passivation	Grease
Hot-Dip Galvanize	Black Oxide	Phosphate	Cosmoline

We have the ability and technology to work with all of the high-strength aerospace alloys.

Fastener Dimensions has years of experience working with every standard material, as well as, with special alloys and exotic materials.

Standard & Exotic Materials

Alloy Steel and Tool Steel

- 1095, 135 MOD
- 17-22A
- 17-22A(S)
- 19-9DL
- 300M
- 4130
- 4140
- 4142 MOD
- 4320H
- 4330 MOD
- 4340
- 4620
- 52100
- 6130
- 6150
- 8620
- 8735
- 8740
- 9160
- 9310
- AERMET 100
- AF-1410
- ALLOY 53
- BG-42
- CBS 1000M
- CBS50NIL
- CBS 600
- CROMOLOY
- CRONIDUR 30
- CS5-42L
- CUSTOM 450 & 455
- D6
- D6AC
- FERRIUM C64
- GALL TOUGH
- H13
- H11
- HASTELOY S
- HP9-4-20, -25 & -30
- HY-180
- HY-TUF
- M50
- MAR300
- MARAGING
- MARAGING 250 & 300

Stainless Steel

- 13-8
- 15-5 PH
- 17-4
- 17-4 PH
- 301, 302, 303, 303SE, 303PH, 304, 304L, 305, 309S, 310, 310S, 316, 316L, 317L, 321, 330, 333, 347, 410, 420, 422, 430, 431, 440
- 17-7 PH
- 21-6-9
- A286
- AM350
- AM355
- CUSTOM 450, 455, 465
- DISCALOY
- GREEK ASCOLOY
- JETHETE M-152
- NITRONIC 50 & 60
- PH15-7 MO
- PYROWEAR 675

Titanium Alloy

- 3.0AL 2.5V
- 6-2-4-2 / 6AL 2SN 4ZR 2MO
- 6-2-4-6
- 6-4, 6AL-4V & 6AL-4V STA
- 6-6-2
- GRADE 5

Inconel

- Astrology M
- D-979
- FM62, 69, 92
- Hastelloy C, S, W, X
- Haynes 230, 230W
- Inconel 600, 601, 617, 625, 702, 718, 718SPF, 722, X750
- Incoloy 800, 801, 901, 909

Nickel Copper

- CU-NI
- Monel 400, 502, K500

Aluminum

- 1100
- 2011
- 2014
- 2017
- 2018
- 2024
- 2090
- 2124
- 2219
- 2424
- 2618
- 3003
- 4032
- 5020
- 5052
- 5083
- 5086
- 5454
- 5456
- 6061
- 6063
- 6066
- 6151
- 6162
- 623
- 6262
- 630
- 642
- 7049
- 7050
- 7075
- 7078
- 7149
- 7150
- 7175
- 7178
- 7249
- 7475

Cobalt

- Engiloy
- Haynes 188
- HS-556
- L-605
- MP159
- MP35n
- N-155
- Stellite 6B
- F-75
- TJA-1537
- Monel R405
- Nichrome V
- Nickel 201, 25
- Nimonic 263, 90
- Rene 41
- Waspaloy

Miscellaneous

- Beryllium Copper
- Brass 360
- Bronze ni-al-630
- Nylon
- Teflon®
- Fry alloy c276
- Fry Alloy X

And far too many more materials than there is room to list.