

# ABOUT US

Monroe specializes in the manufacturing of a variety of hinge types including: continuous hinge, piano hinge, butt hinge, plastic piano hinge and custom designed hinges. We also provide related hardware and stamping.

Materials used in our manufacturing process include: steel, galvanized steel, stainless steel, brass, aluminum, and bright stainless steel.

We are equipped to produce special and fabricated hinges and perform such operations as hole punching, forming, offsetting, notching, countersinking, finishing and plating.

#### AMERICAN HINGE MAKERS



# How can we help?

Here at Monroe, we take great pride in our commitment to quality, value and service. We are proud of our extensive line of stock hinges as well as our custom manufacturing capabilities. Our skilled team members offers a wide variety of services to help meet your needs.

We place great value on forming strong, lasting customer relationships. Our goal is to help you with your "problem of the day". Please give us a chance to earn your business.





**Hinge Styles** 



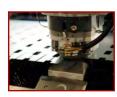
**Hinge Styles 2** 











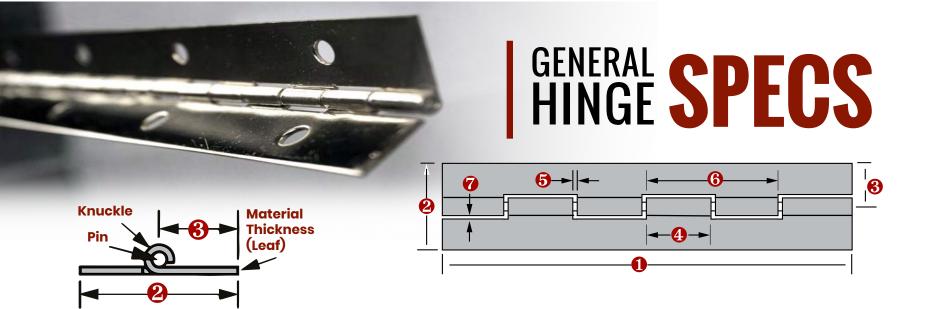
**Industries Served** 





2990 Technology Drive Rochester Hills, MI 48309





- **1** Hinge Length The length of the leaves measured parallel to the pin.
- Hinge Width The overall dimension of the leaves measured across the knuckle.
- **3** Leaf Width Dimension from the center of the pin to the outer edge of the leaf.
- 4 Knuckle Length The nominal or typical dimension of the knuckle measured parallel to the pin.

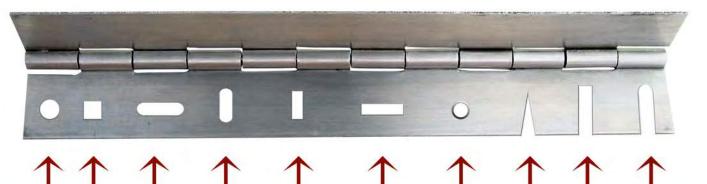
- **6** End Play The amount of axial movement that is between the leaves.
- **6 Pitch** The dimension from a point on the knuckle to the same point on an adjacent knuckle on the same leaf.
- Paint Clearance The minimum dimension between the outer face of the knuckle and the opposing edge of the leaf cut out over the entire range of pivotal movement of the hinge.

# MONROE HINGE

#### Things to **SPECIFY** when ordering

- ♦ Series Number (If known)
- ♦ Material Thickness and Type
- ♦ Hinge Length
- ♦ Open Width

- ♦ Knuckle Length
- ♦ Pin Diameter
- ♦ Staked or Not Staked
- ♦ Finish Required
- ♦ Hinges with Holes
- If yes, what size and are they countersunk or not?
- ♦ Quantity







#### MONROE PIANO CONTINUOUS HINGE

Monroe is the piano hinge (continuous hinge) specialist. We have a large selection of standard piano hinges and can manufacture any variety of specialty piano hinges to suit your needs. The piano design allows the hinge to hold more of the object it is attached to and provide better support. They are available in six or seven foot lengths in a variety of materials including steel, stainless steel, aluminum, as well as plastic.

#### **Please Note**

- All Monroe steel piano hinges are constructed of commercial grade materials.
- · We deliver custom ordered steel piano hinges in 2 to 6 weeks based upon type of customization.
- Monroe recommends keeping piano hinge lengths a multiple of knuckle length to ensure a freely rotating pin.

#### your business. With short lead times and strong in-stock position, we're on it. **Monroe Piano Continuous Hinge Series**

\*All our steel piano/continuous hinges (except stop hinges) open a full 270°.

#### M1435 M1240

Low gauge, small open Low gauge, medium width, and small knuckle open width, and for light weight industrial medium knuckle applications

#### M741

Heavy gauge Stainless Steel, large open width, and large knuckle for heavy duty industrial applications

for light to medium industrial applications

#### M1247

Customizable hinae providing heavy gauge Stainless Steel, large open widths, and medium knuckle for medium to heavy duty industrial applications

#### M1250

Medium gauge, medium to large open width, and large knuckle for light to medium industrial applications

#### M901

Heavy gauge Stainless Steel, large open width, and large knuckle for heavy duty industrial applications

#### M1260

If piano/continuous hinges are what you are looking for, Monroe can supply

Large gauge, medium to large open width, and large knuckle for medium to heavy industrial applications

M902 and M1210

Customizable hinge

gauge Stainless Steel,

large open width, and

heavy-duty knuckle for

heavy duty industrial

applications

providing a heavy

#### M1267

M1125

Large gauge Stainless Steel, medium to large open width, and a large knuckle for medium to heavy industrial applications

Heavy gauge Stainless

Steel, large to extra-

and large knuckle for

large open width,

extreme industrial

applications

#### M747

Heavy gauge, large open width, medium to large pin, and large knuckle for heavy duty industrial applications

#### M1110 and M1120

Heavy gauge Stainless Steel, extra-large open width, and heavy knuckle for heavy to extreme industrial applications





# HINGE STYLES





#### PIANO/CONTINUOUS HINGE

Continuous hinges are made with two independent leaves. Generally they are 6 inches or longer in length but are otherwise similar to butt type hinges. Continuous hinges can be modified in many different ways to fit your exact needs.

At Monroe Hinge, we offer a wide variety of continuous hinges in gauges from .025 to .375 inches thick. Continuous hinges can be manufactured to a customer's drawing or a Delson design. When tooling is needed, Delson is equipped with a modern tool room to take your hinge from concept to finished part.



#### **MIL-SPEC HINGE**

We offer every variety of mil-spec hinges. Including the MS 20257 series, MS 35821/35831, MS 2001, AA 55589, MS 20253 Pins and AA 55486 pins. We can supply special and specific hole patterns and special lengths. Identification impression are available at an additional cost.



#### **BUTT HINGES**

A butt hinge is a hinge with two rectangular metal plates with screw holes joined by either a pin or rod.

Butt Hinges are most commonly used in multiples and are usually made are often made of brass, stainless steel, or aluminum to prevent corrosion.



#### PLASTIC LIVING HINGE

Plastic Living Hinges are a safe, non-corroding, and economical alternative to steel and aluminum continuous hinges. Made from flexible alloyed polymers, these one-piece, molded hinges allow for silent and maintenance free operation in custom sizes.

Plastic Living Hinges have numerous benefits including the fact that they do not wear or deteriorate in harsh conditions, and their built in UV resistance provides protection from the brutal effects of the sun. Monroe offers superior plastic living hinges that are available in the standard black or white and also custom colors.



#### WELD STOP CONTINUOUS HINGES

Weld Stop Continuous Hinges differ from standard continuous hinges in the fact that they are welded to stop at a specific angle depending on the project specifications. Weld Stop Continuous Hinges allow for fast and accurate alignment as well as reducing costs and preventing

Monroe Hinge & Stamping is prepared to provide you with quality Weld Stop Continuous Hinges that are custom-made to meet you design requirements.



#### **SPRING LOADED HINGE**

Spring Loaded Hinges utilize the internal energy of a spring to go beyond normal hinge applications. In addition to providing a wide range of motion, Spring Loaded Hinges also can be used to hold a door open or push it shut depending on installation.

Monroe Hinge & Stamping has the capabilities to manufacture Spring Loaded Hinges in a wide variety of lengths, metals, and finishes to meet your project needs.



#### TAKE APART & SLIP JOINT HINGE

Take Apart Hinges or slip joint hinges, are used for easy and quick door removal and are ideal when doors need to be frequently removed. Take Apart Hinges are commonly used on removable doors, panels and gates.





#### FORMED, FABRICATED & LASER CUT HINGES

Monroe Engineering is equipped to form the hinge leaves to almost any desired shape. The usual purpose in bending is to facilitate shaping the hinge to the contour of the door and door-post, or to obtain a certain arc in which the door will swing. We are also able to add-on parts by welding, forming or stamping.



#### **HEAVY DUTY HINGES**

Heavy duty hinges are made of various hinge styles used in heavy duty applications. The material thicknesses for Heavy Duty Hinges range up to 1/4" (one guarter inch) thickness. Monroe Hinge & Stamping Company has the capabilities to manufacture heavy duty hinges in a wide variety of lengths, metals and finishes.

Heavy duty hinges are used in products, industrial settings and many other applications where hinge strength is a crucial factor.



#### **PLASTIC HINGE**

Monroe Hinge offers a wide variety of plastic hinges including plastic living hinges, CFC, CFD and many more.

Monroe can also manufacture plastic hinges to your exact specifications and will are equipped to produce special and fabricated hinges and perform such operations as hole punching, forming, offsetting, notching and etc. Holes can be added depending on quantity requested.



#### **STRAP HINGES**

Monroe's strap hinges come in all styles and sizes, from heavy duty to light duty. They are used in many commercial and residential applications including for gates and doors.

Our strap hinges are all made of steel and are available in zinc plate finish, some strap hinges are available in zinc plate black finish.



#### **TEE HINGES**

Monroe's tee hinges are available in a assortment of sizes and series. Monroe's tee hinges are all zinc plated or zinc plated black and made

Tee hinges are used in many commercial and residential applications including for gates and doors. Characterized by a wide selection of series and sizes our tee hinges are perfect for most applications.



#### **DOOR & CABINET HINGES**

Monroe's door and cabinet hinges enhance the design of any home, with finishes that range from stainless steel and polished brass to yellow zinc and polished bright chrome.

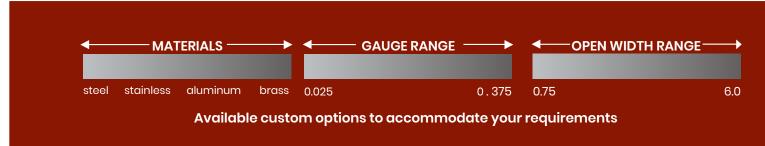
Characterized by a wide selection of finishes, styles and sizes our door hinges are perfect for most around the house applications. We specialize in high-volume orders for door hinges.

Please see our descriptions for finish types.



#### Special & Custom Orders Available





### **OUR** QUALITY

- ◆ Six Sigma/REDX Capabilities
- ♦ EDI Electronic Data Interchange
- ◆ C of C Certificate of Compliance
- Certified to meet ISO 9001:2015
- **♦ JIT**
- ◆ PPAP/APQP
- ♦ KAN BAN/LEAN













#### **CUSTOM HINGES**

We specialize in the production of custom hinges, mil-spec hinges and pins, piano hinges and much more. We use a wide range of materials in our manufacturing process including: steel, stainless steel, aluminum, and others.

We are also equipped to produce special and fabricated hinges and perform such operations as hole punching, forming, offsetting, notching, countersinking, finishing and plating.







Monroe specializes in not only a multitude of standard hinges, but also in custom hinges made exactly to your project requirements. We are equipped to perform operations such as hole-punching, offsetting, notching, countersinking, and plating in order to meet any specialty orders or intricate design requests that you have.

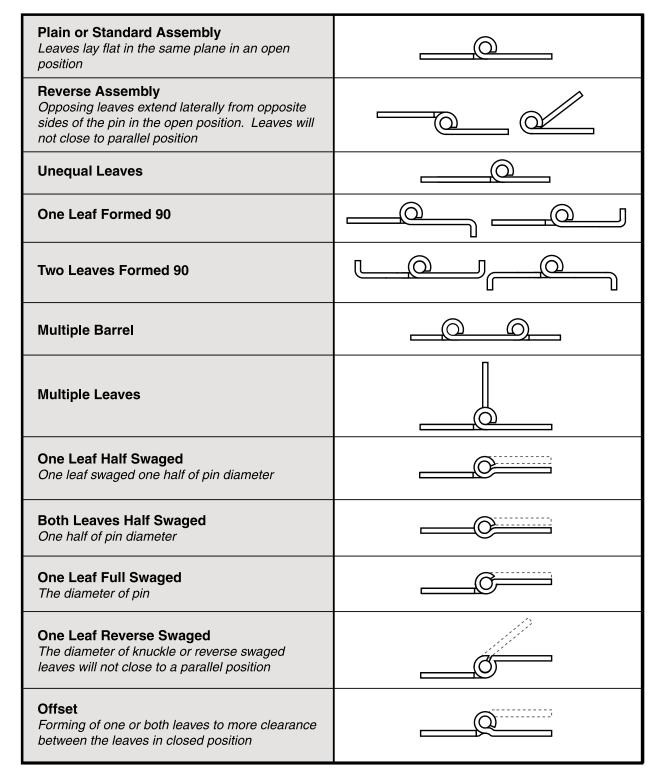
Monroe Hinge & Stamping Company is proud to continue to serve the defense, industrial, aerospace, and commercial industries, and we hope to do business with you in the future!



See our Capabilities & our Online Guide on *How to Order Hinges.* 



## HINGE **ASSEMBL FORMATION**



# CAPABILITIES





Monroe Hinge is your source for custom and off-the-shelf hinges. We have robust manufacturing capabilities with the ability to fabricate your custom hinges. We can fabricate in a wide variety of materials and accomodate most lengths, width forms, swages, hole patterns and much more.

We are proud to serve customers across North America in the automotive, medical, filtration, heavy equipment, oil & gas, and transportation industry sectors.

Find out more about out capabilities!



**CAPABILITIES** Click Here





#### **Hinge Metal Forming**

- CNC Punching
- CNC Laser Cutting
- CNC Stamping
- Press Brake Forming
- Punch Press Stamping
- Metal Stamping

#### **Secondary Operations**

- Tooling Staking
- Plating
- Cleaning
- Painting

- Anodizing
- Die Tapping
- Heat Treating
- Tapping & Deburring
- Value Added Processes

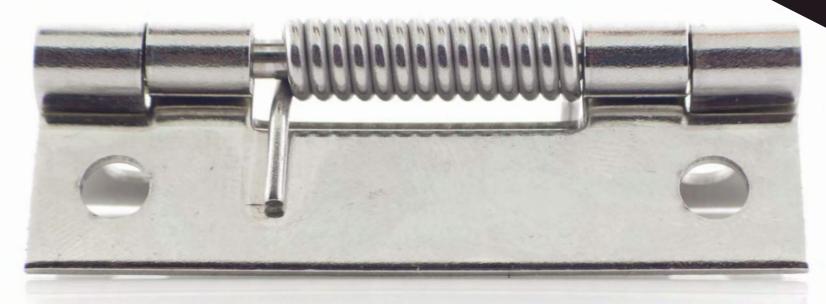




# INDUSTRIES SERVED

Over the years, Monroe and its subsidiary organizations has completed a multitude of projects for customers in a wide variety of industries. Through this experience we understand the unique attributes and specific requirements of these industries.

Below you can find a selection of industries that we have served and have valuable experience and insight with.











































#### Industries & Products Continued

- Air Conditioning Equipment
- Audio Distribution Components
- Automation Equipment • Automotive (tier 2 or 3)
- Bath & Shower
- Cabinets
- Components Automation Equipment
- Computer Equipment
- Controls & Instrumentation

- Heating, Ventilation & AC Manufacturing Equipment
- OEM Products
- Power Systems
- Recreational Vehicles
- Security Equipment
- Subsystem Enclosures
- Storm Doors
- Specialty Vehicles
- Toolboxes





**Request Quote** 

Monroe Hinge & Stamping quality system has been certified to meet ISO 9001:2015 and AS9100D standards to better serve our aerospace customers. We often work with our customers on APQP, PPAP, DFMEA, PFMEA and other customer quality requirements.

Please make quality system inquiries to our Quality Manager, John Birg at jbirg@askmonroe.com

For product infquiries Email: sales@askmonroe.com

CAPABILITIES

**Click Here** 

#### **OUR QUALITY**

- KAN BAN/LEAN
- JIT
- Six Sigma/REDX Capabilities
- EDI Electronic Data Interchange
- · C of C Certificate of Compliance
- PPAP/APQP
- Certified to meet ISO 9001:2015











