



**GIBSON
PRODUCTS**



SPECIALTY PIPE FITTINGS

By Gibson Products

Quality Products for the Petrochemical, Refining, Electrical Utility and Pulp & Paper Industries Worldwide

With a reputation for meticulous in-house testing alongside a solid quality assurance program, Gibson's specialty pipe fittings and flanges can be relied upon to perform in the most challenging industrial conditions.

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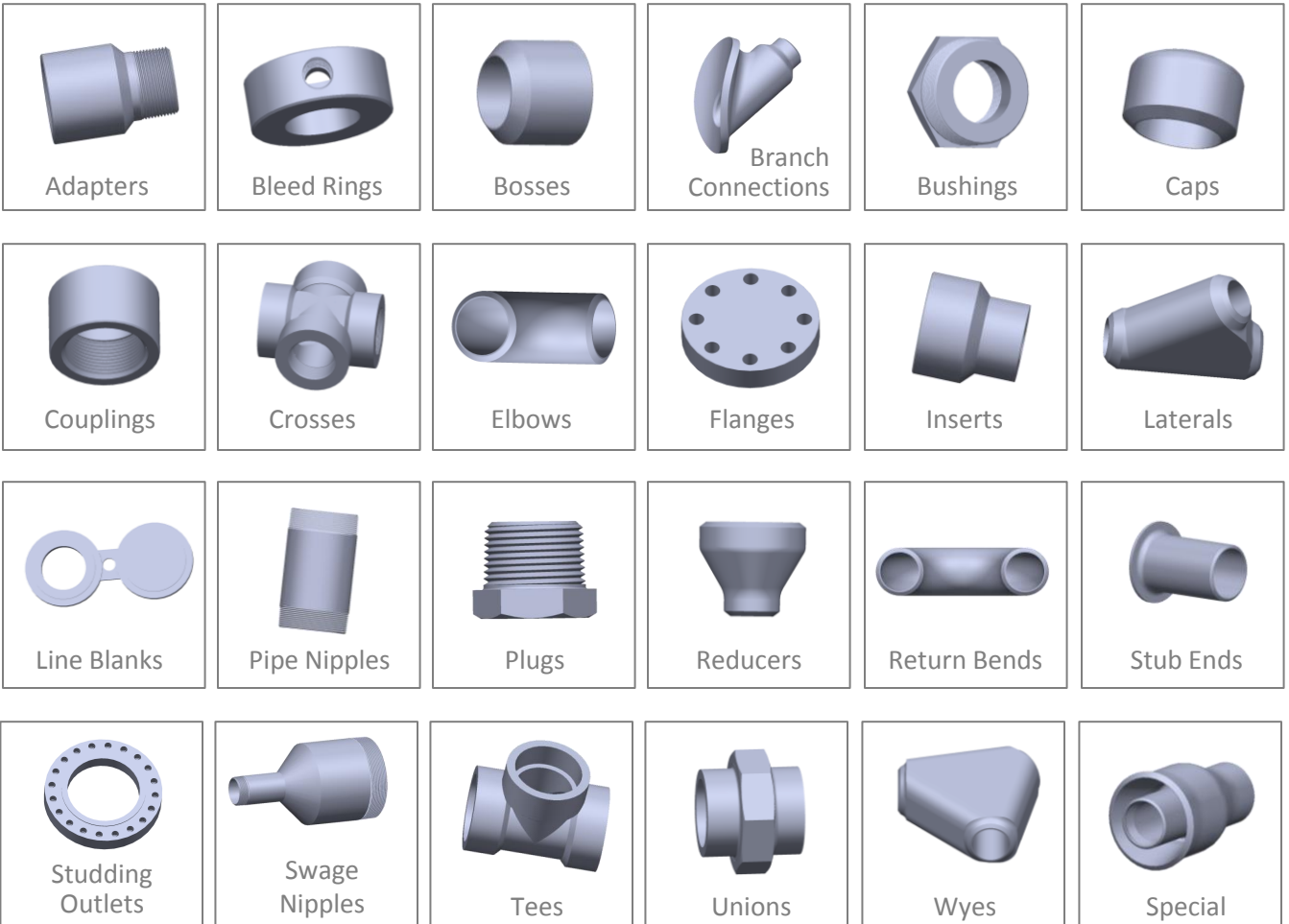
Our team of engineering and machining specialists is available 24/7/365 to assist via phone or email.

800-519-2500 Toll Free
713-941-4890 Phone
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SALES

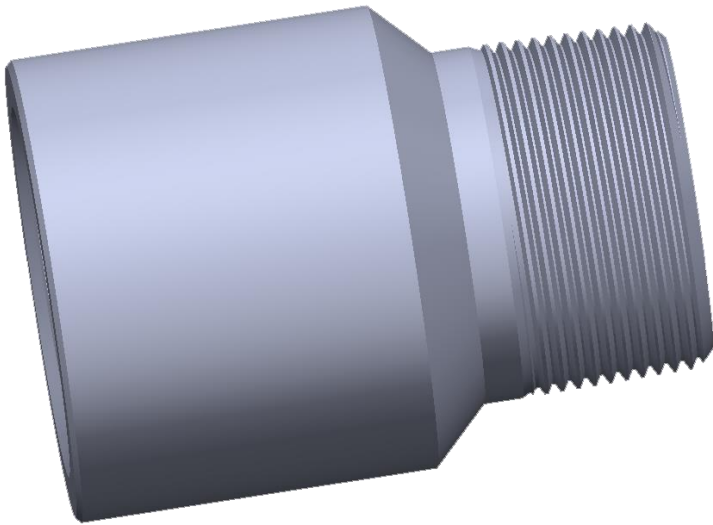
CUSTOMER SERVICE

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Adapters

Similar to inserts, in most cases, adapters have a male threaded end with an opposite female end. The female end can be either Socket-weld, Threaded or Butt-weld. Round and hex adapters can be manufactured per customer prints, and are available in most grades of material.



SPECIFICATIONS

Per customer specifications

End sizes and types per customer specifications. Female end (threaded/socket-weld) size per ASME B16.11

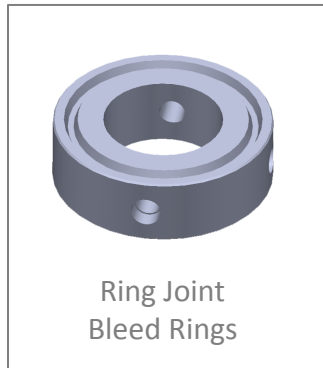
Hex body is also available, as well as special and non-standard threads

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Bleed Rings

Used for instrument installation, monitoring and system measuring purposes.

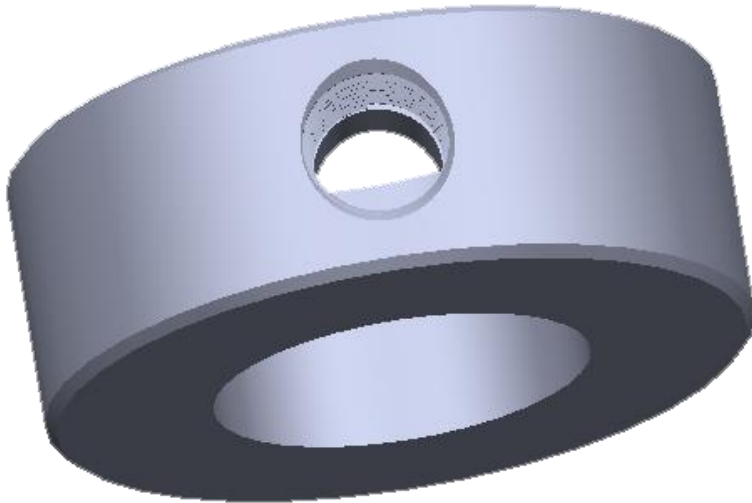


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Raised Face Bleed Rings

Used for instrument installation, monitoring and system measuring purposes.



SPECIFICATIONS

$\frac{1}{2}$ " through 24" all pressure classes

Specifications: ASME B16.5

Standard overall length: 1.5" for Raised Face

Other sizes available per customer request

Port Types: Threaded, Socket-weld and special

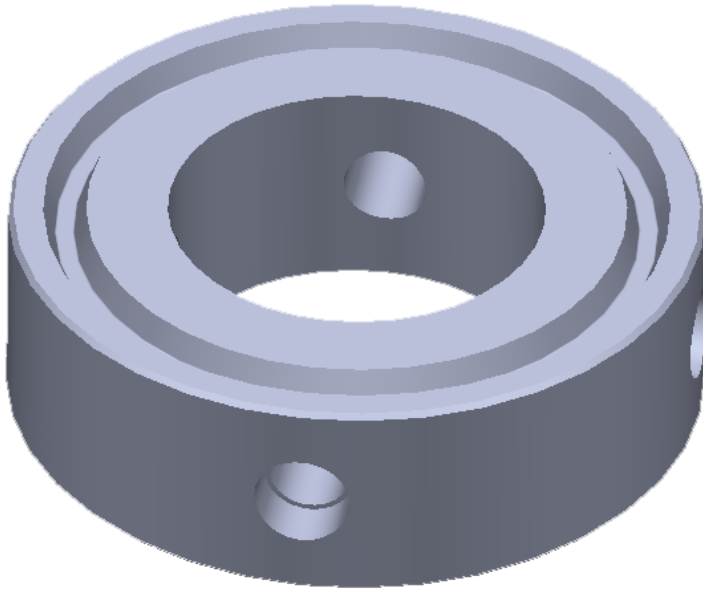
Also available with mounting bolt holes

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Ring Joint Bleed Rings

Used for instrument installation, monitoring and system measuring purposes.



SPECIFICATIONS

1/2" through 24" all pressure classes

Specifications: ASME B16.5

Standard overall length: 2.0" for Ring Joint

Other sizes available per customer request

Port Types: Threaded, Socket-weld and special

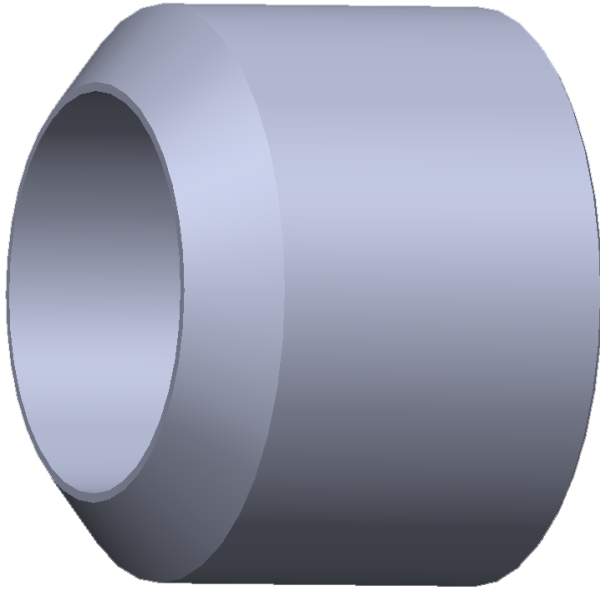
Also available with mounting bolt holes

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Bosses

Designed for a practical and reliable branch or outlet connection. The Butt-weld side is welded onto a pipe wall. The opposite end is usually a Threaded or Socket-weld connection, or a combination of them.



SPECIFICATIONS

Sizes: 1/2" through 2"

Female end, Socket-weld and Threaded, based on ASME B16.11

Weld-on side available with the following geometry:

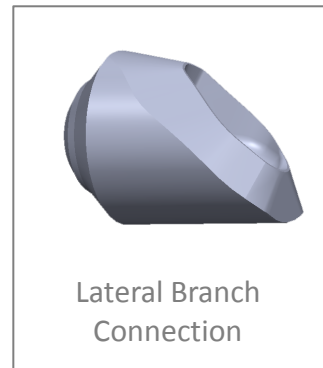
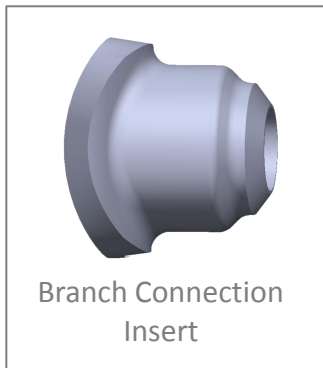
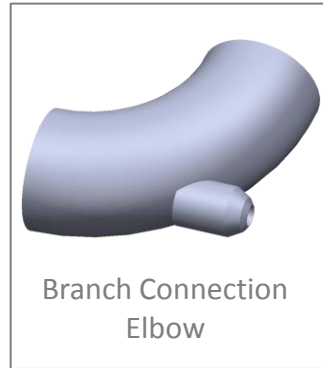
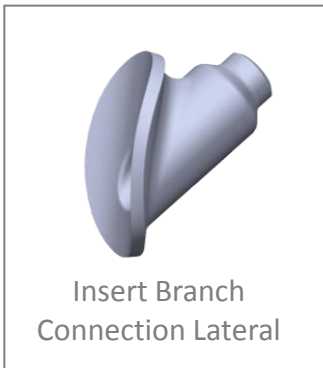
- Weld ring type
- Thermowell type
- Drill thru type
- Extended type

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- Additional alloys per customer specification

Branch Connections

Branch Connections with Threaded, Socket-weld, Butt-weld or Flanged Ends can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 1/8" through 24" for most styles. Special sizes also available per customer request.

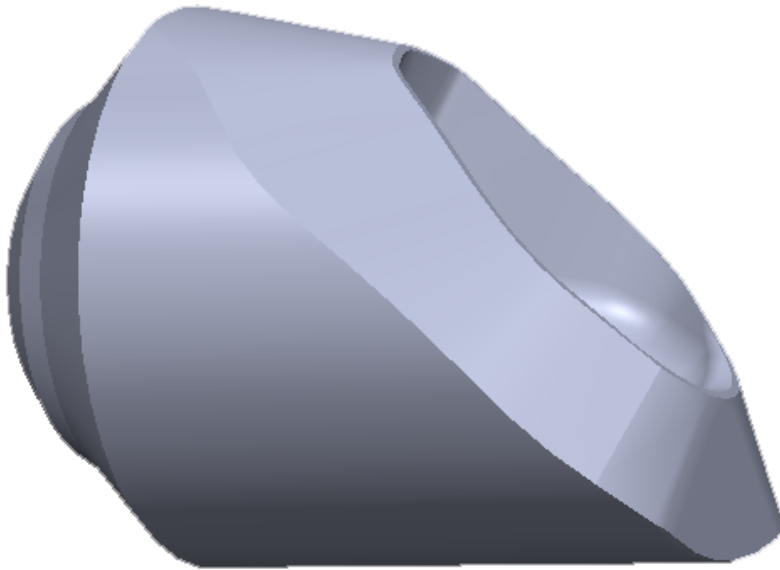


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Lateral Branch Connection

Branch Connections can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 1/2" through 24", depending on run size and schedule.



SPECIFICATIONS

Butt-weld: 1/2" through 24" all schedules

Socket-weld: 1/2" through 4" Class 3000 & 6000

Threaded: 1/2" through 4" Class 3000 & 6000

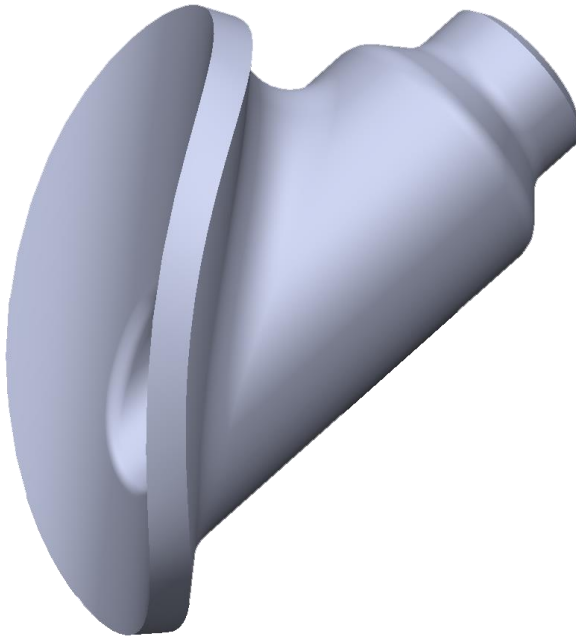
Specifications: MSS-SP-97 and ASME B31.1

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- Additional alloys per customer specification

Insert Lateral Branch Connection

Branch Connections can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 1/2" through 24", depending on run size and schedule.



SPECIFICATIONS

Butt-weld: 1/2" through 24" all schedules

Socket-weld: 1/2" through 4" Class 3000 & 6000

Threaded: 1/2" through 4" Class 3000 & 6000

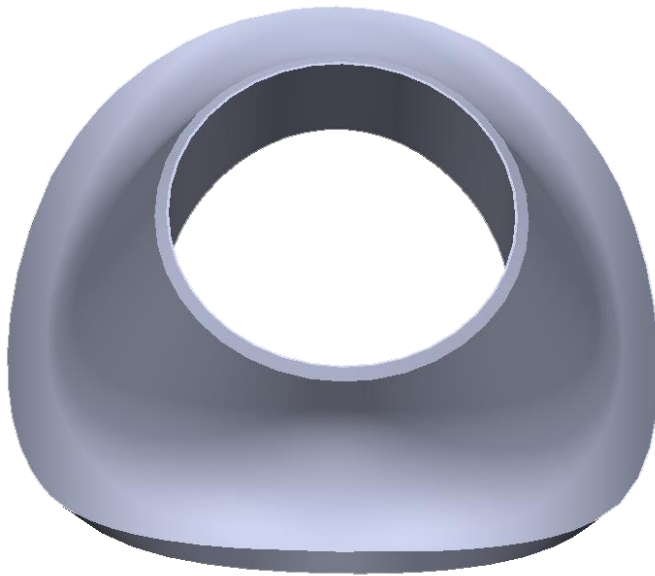
Specifications: MSS-SP-97 and ASME B31.1

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- Additional alloys per customer specification

Sweep Branch Connection

Branch Connections can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 3/4" through 20", depending on run size and schedule.



SPECIFICATIONS

Butt-weld: 3/4" through 20" all schedules

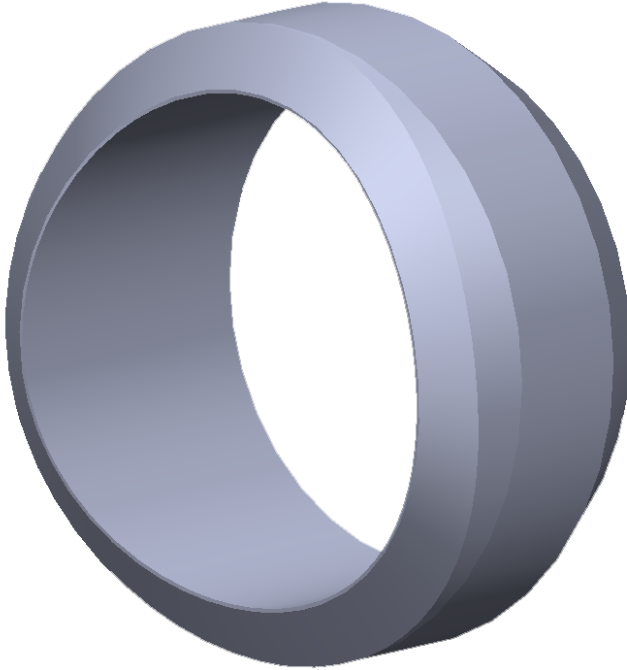
Specifications: MSS-SP-97 and ASME B31.1

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- Additional alloys per customer specification

Weld-on Branch Connection

Branch Connections can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 1/8" through 24", depending on run size and connection type.



SPECIFICATIONS

Butt-weld: 1/8" through 24" all schedules

Socket-weld: 1/8" through 6" Class 3000, 6000 & 9000

Threaded: 1/8" through 6" Class 3000, 6000 & 10,000

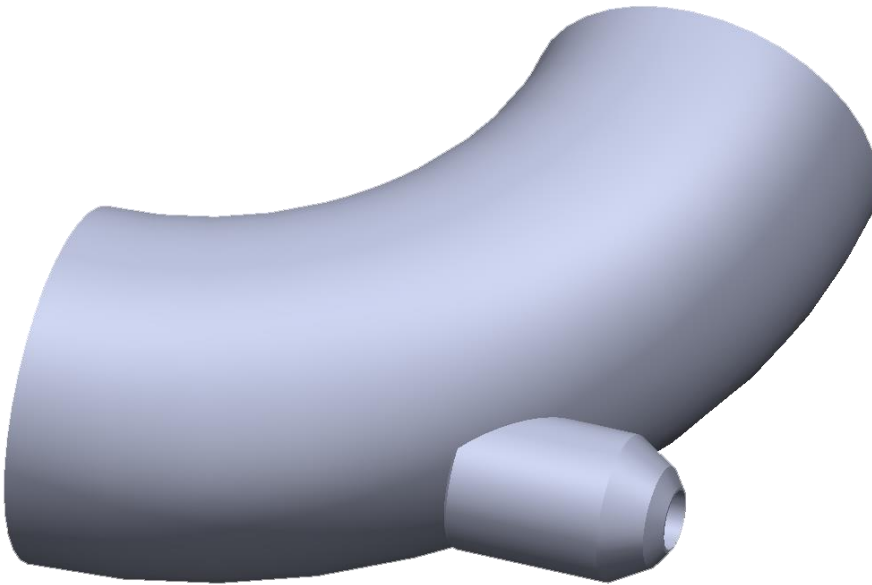
Specifications: MSS-SP-97, ASME B16.11 and ASME B31.1

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- Additional alloys per customer specification

Elbow Branch Connection

Branch Connections can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 1/8" through 24", depending on run size and end connection type.



SPECIFICATIONS

Butt-weld: 1/8" through 24" all schedules

Socket-weld: 1/4" through 4" Class 3000, 6000 & 9000

Threaded: 1/4" through 4" Class 3000, 6000 & 9000

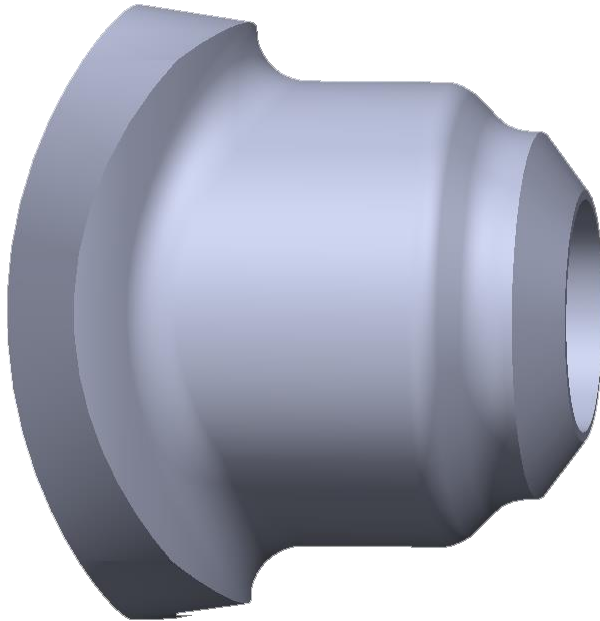
Specifications: MSS-SP-97, ASME B16.11 and ASME B31.1

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- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Insert Branch Connection

Branch Connections can be supplied in any applicable schedule or pressure rating and are available in all materials and in sizes ranging from 3/4" through 20", depending on run size and schedule.



SPECIFICATIONS

Butt-weld: 3/4" through 20" all schedules

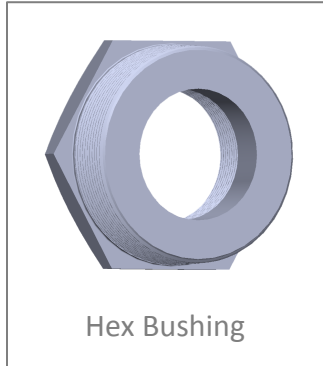
Specifications: MSS-SP-97 and ASME B31.1

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- Additional alloys per customer specification

Bushings

Threaded Bushings are available in all types of materials.

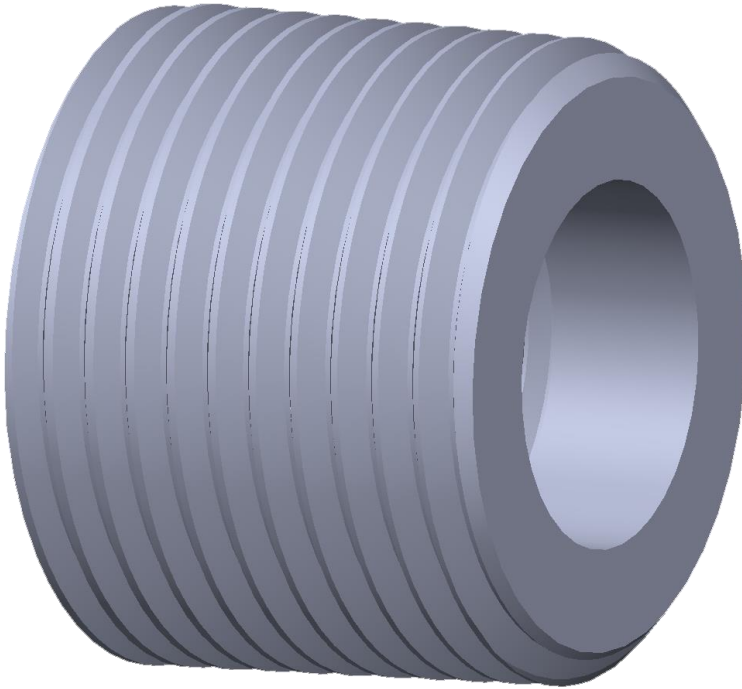


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- Additional alloys per customer specification

Flush Bushings

Threaded Bushings are available in all types of materials.



SPECIFICATIONS

External (male): Threads $\frac{1}{4}$ " through 8"

Internal (female): Threads $\frac{1}{8}$ " through 6"

Specifications: ASME B16.11 and ASME B16.14

Styles: Flush (Face)

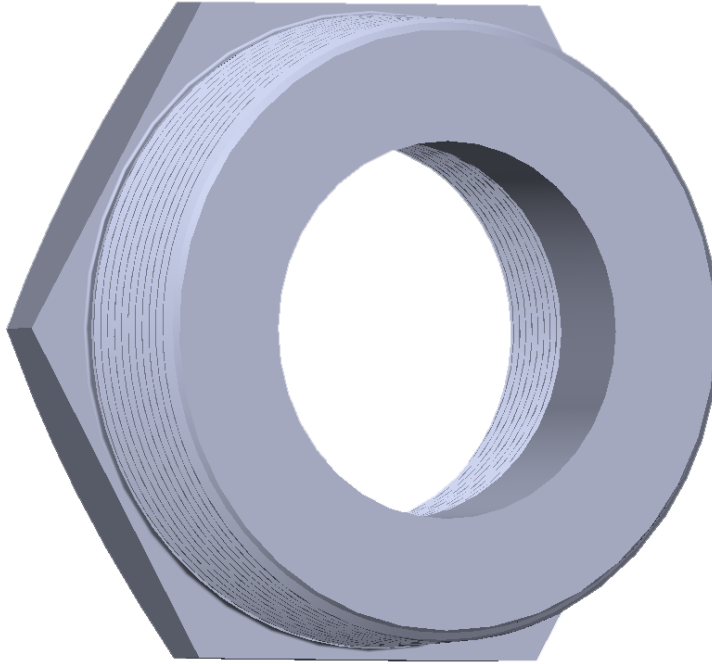
Non-standard and special threads also available

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- Additional alloys per customer specification

Hex Bushings

Threaded Bushings are available in all types of materials.



SPECIFICATIONS

External (male): Threads $\frac{1}{4}$ " through 8"

Internal (female): Threads $\frac{1}{8}$ " through 6"

Specifications: ASME B16.11 and ASME B16.14

Styles: Hex Head (outside/inside)

Non-standard and special threads also available

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Caps

Butt-weld, Socket-weld and Threaded Caps are available in all types of materials.

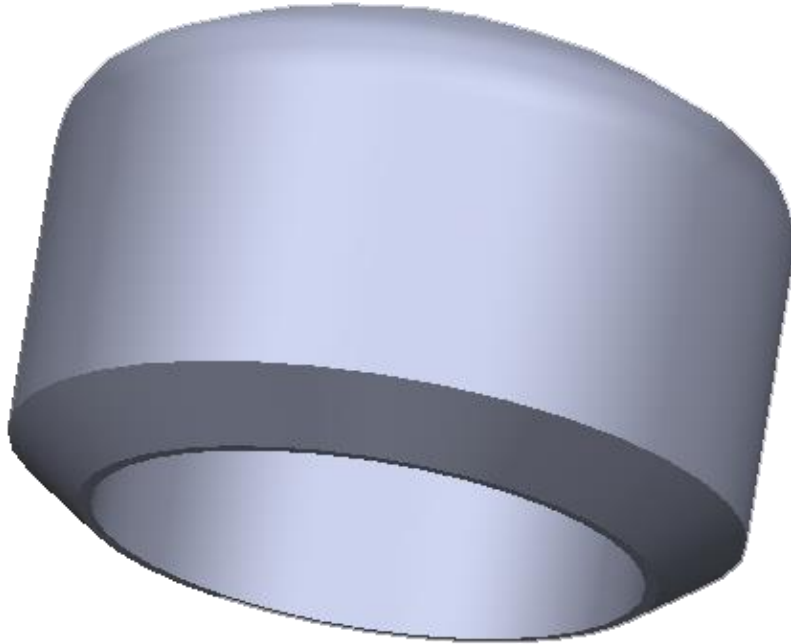


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- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Butt-weld Caps

Butt-weld Caps are available in all types of materials.



SPECIFICATIONS

Butt-weld: 1/2" through 24"

Specification: ASME B16.9

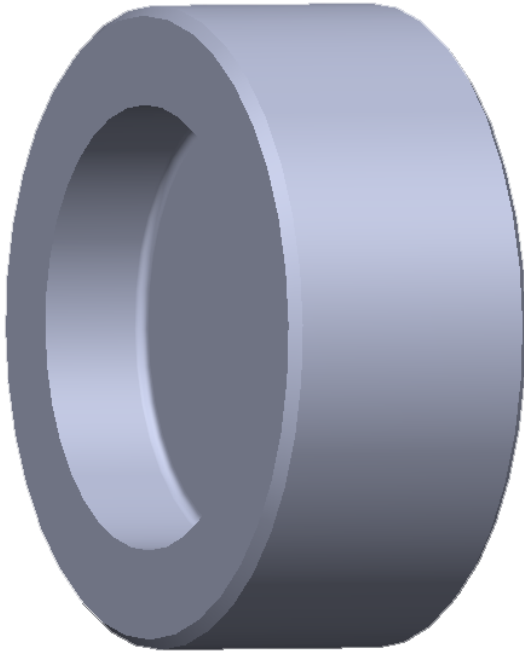
Other sizes and pressure classes available per customer request

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- Additional alloys per customer specification

Socket-weld Caps

Socket-weld Caps are available in all types of materials.



SPECIFICATIONS

Socket-weld: 1/8" through 4" Class 3000 & 6000

Specification: ASME B16.11

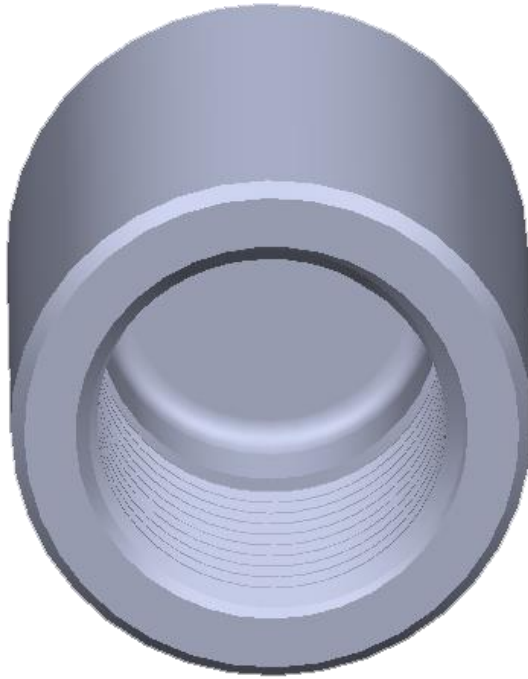
Other sizes and pressure classes available per customer request

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- Additional alloys per customer specification

Threaded Caps

Threaded Caps are available in all types of materials.



SPECIFICATIONS

Threaded: 1/8" through 6" Class 3000

Threaded: 1/8" through 4" Class 6000

Specification: ASME B16.11

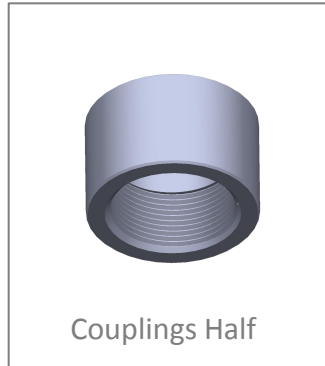
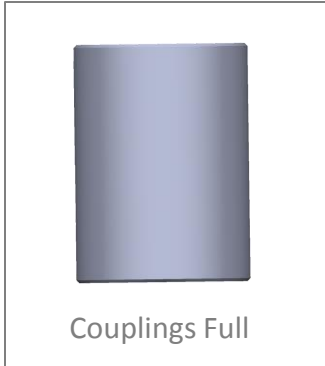
Other sizes and pressure classes available per customer request

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Couplings

Threaded and Socket-weld Pressure Fittings are available in all types of materials for couplings.



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Couplings Full

Threaded and Socket-weld Couplings are available in all types of materials.



SPECIFICATIONS

Socket-weld: 1/8" through 8" Class 3000

Socket-weld: 1/8" through 4" Class 6000

Socket-weld: 1/2" through 2" Class 9000

Threaded: 1/8" through 8" Class 3000

Threaded: 1/8" through 4" Class 6000

Threaded: 1/4" through 3" Class 10,000

Specifications: ASME B16.11 except for Class 10,000

Also available in reducing, combination (socket-weld and threaded) and eccentric configurations

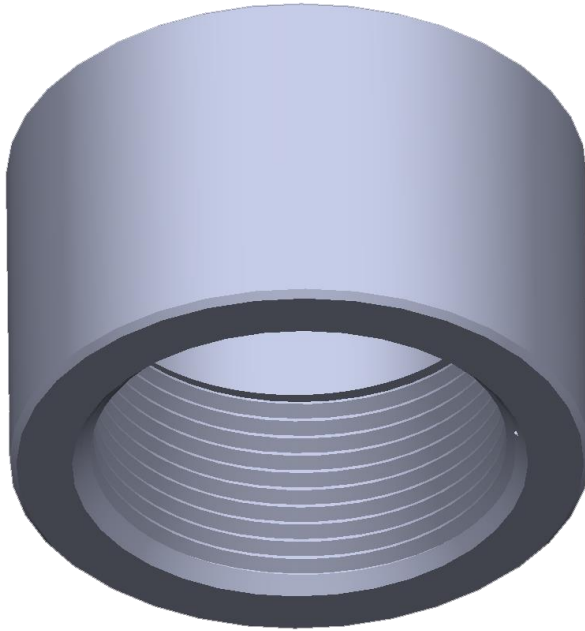
Other sizes and pressure classes available per customer specifications

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- Additional alloys per customer specification

Couplings Half

Threaded and Socket-weld Pressure Fittings are available in all types of materials for couplings.



SPECIFICATIONS

Socket-weld: 1/8" through 8" Class 3000

Socket-weld: 1/8" through 4" Class 6000

Socket-weld: 1/2" through 2" Class 9000

Threaded: 1/8" through 8" Class 3000

Threaded: 1/8" through 4" Class 6000

Threaded: 1/4" through 3" Class 10,000

Specifications: ASME B16.11 except for Class 10,000

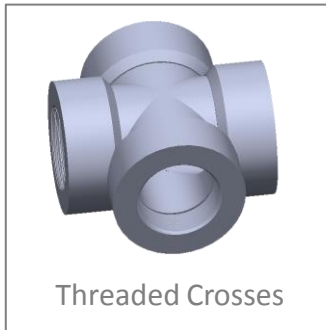
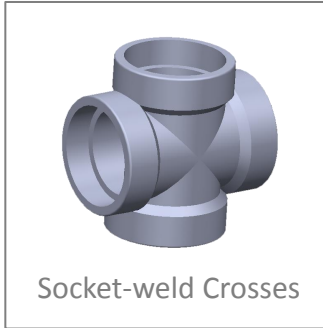
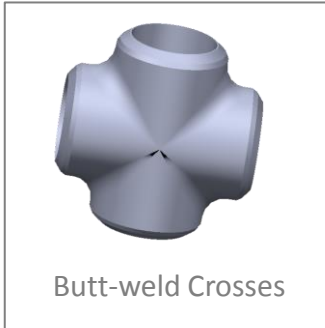
Other sizes and pressure classes available per customer specifications

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Crosses

Butt-weld, Socket-weld and Threaded crosses are available in all types of materials.

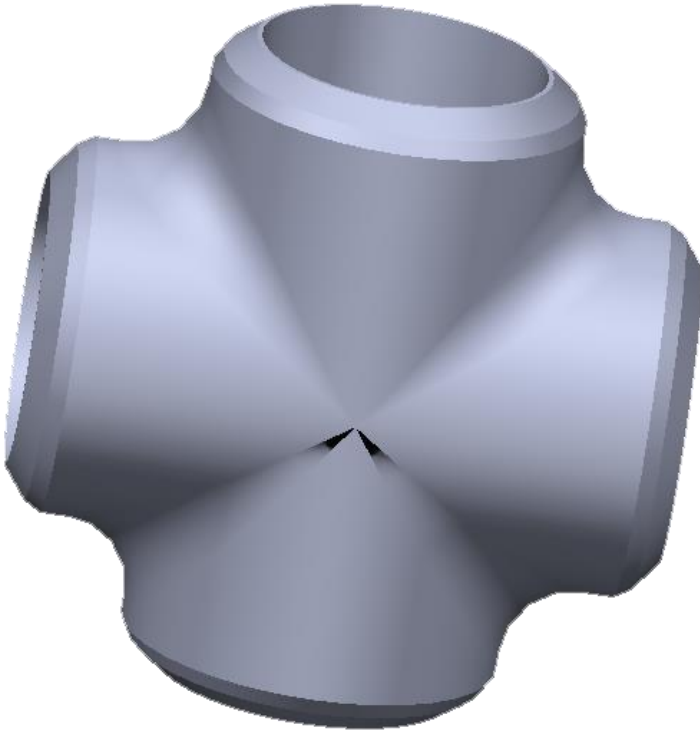


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Butt-weld Crosses

Butt-weld Threaded crosses are available in all types of materials.



SPECIFICATIONS

Butt-weld $\frac{1}{2}$ " through 12" All schedules per ASME B16.9

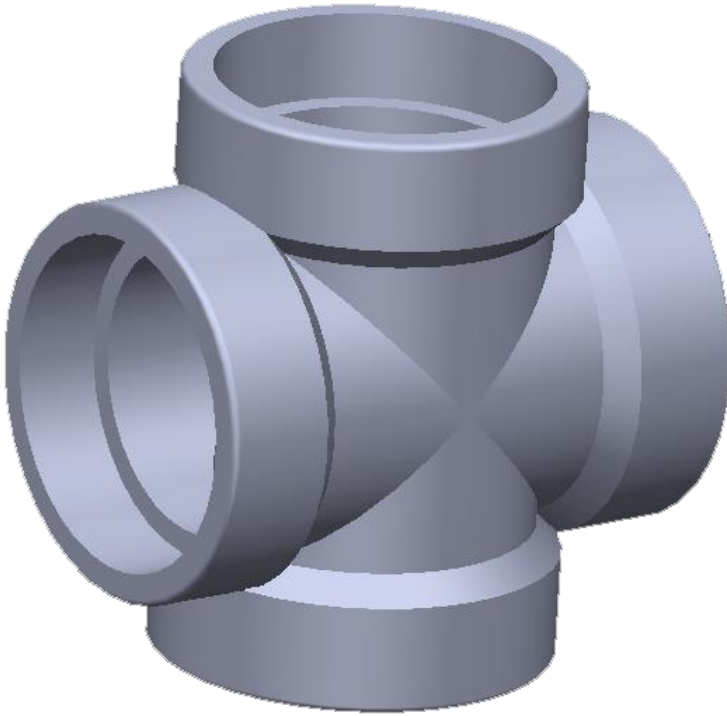
Other sizes and pressure classes available per customer request

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Socket-weld Crosses

Socket-weld crosses are available in all types of materials.



SPECIFICATIONS

Socket-weld $\frac{1}{8}$ " through 4" Class 3000 & 6000 per ASME B16.11

Socket-weld $\frac{1}{2}$ " through 2" Class 9000

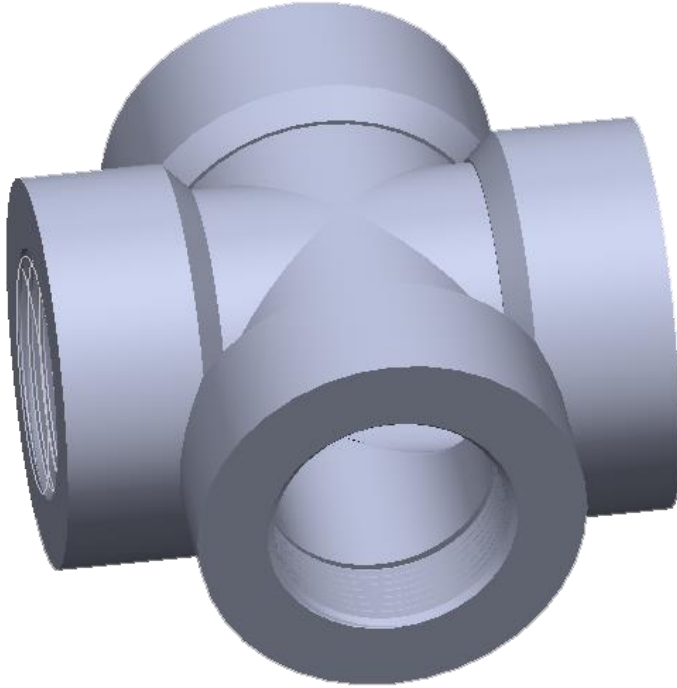
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Threaded-weld Crosses

Threaded crosses are available in all types of materials.



SPECIFICATIONS

Threaded 1/8" through 4" Class 3000 & 6000 per ASMEB16.11

Threaded 1/4" through 3" 10,000

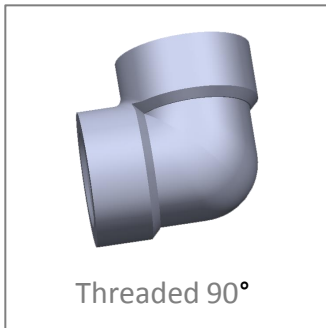
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- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Elbows

Butt-weld, Socket-weld and Threaded Elbows 90 & 45 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Butt-weld Elbow 90°

Butt-weld Elbows 90 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



SPECIFICATIONS

Butt-weld S/R 90° 1" through 8" all schedules

Butt-weld L/R 90° 1/2" through 8" all schedules

Specifications: ASME B16.9

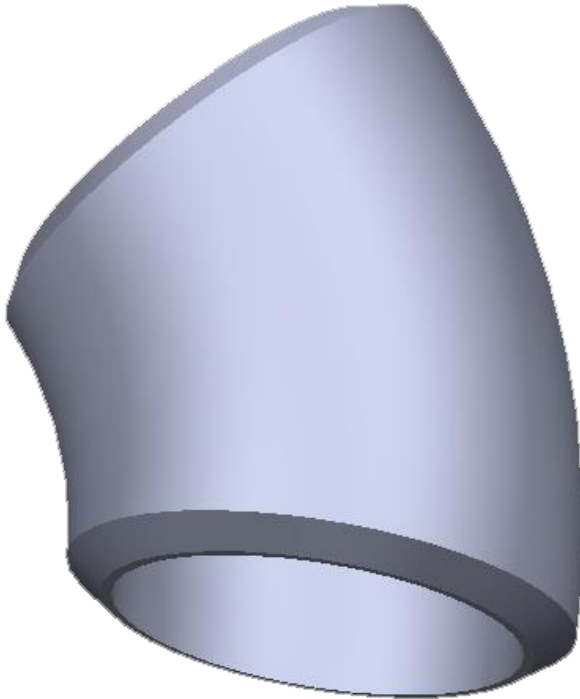
Other angles, sizes and pressure classes available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Butt-weld Elbow 45°

Butt-weld Elbows 45 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



SPECIFICATIONS

Butt-weld S/R 45° 1" through 8" all schedules

Butt-weld L/R 45° 1/2" through 8" all schedules

Specifications: ASME B16.9

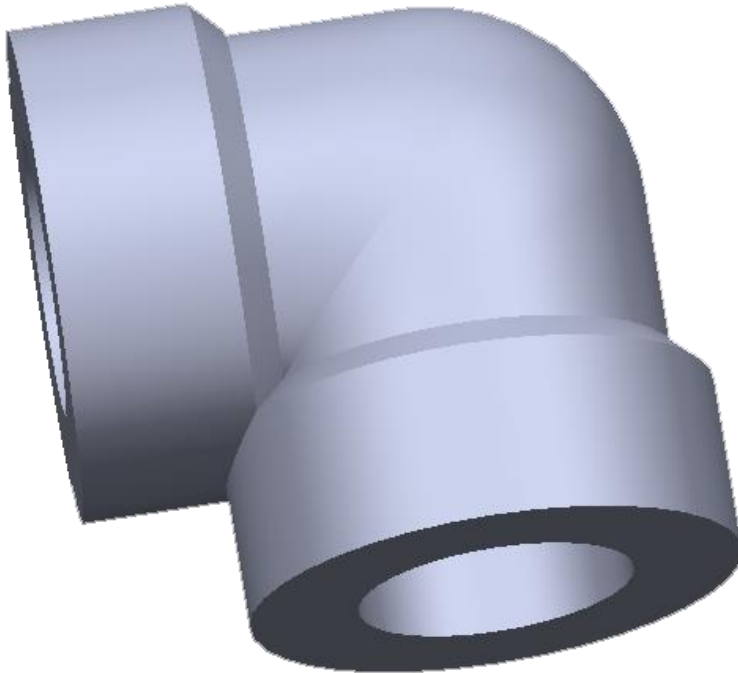
Other angles, sizes and pressure classes available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Socket-weld Elbow 90°

Socket-weld Elbows 90 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



SPECIFICATIONS

Socket-weld 90° 1/8" through 4" Class 3000

Socket-weld 90° 1/8" through 4" Class 6000

Socket-weld 90° 1/2" through 2" Class 9000

Specifications: ASME B16.11

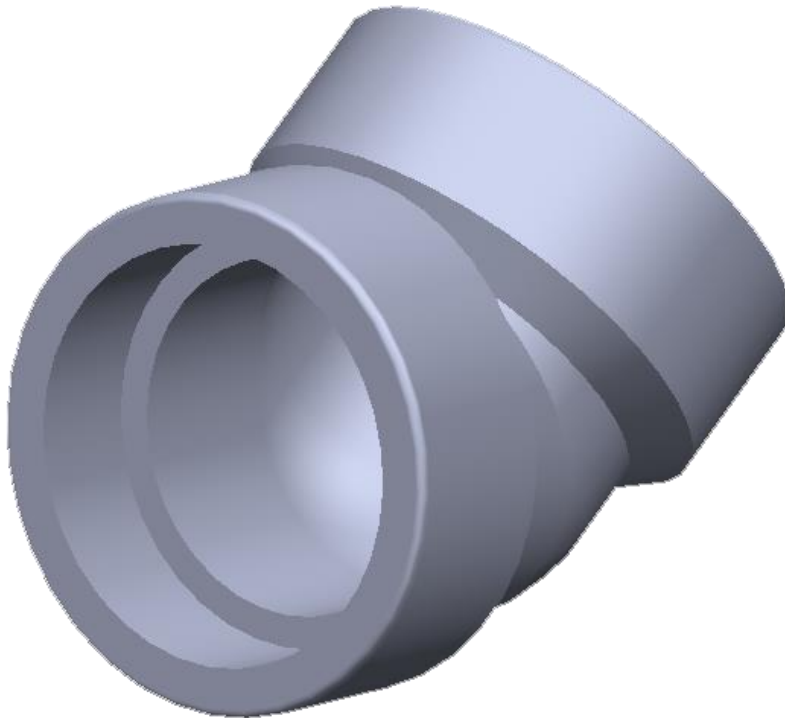
Other angles, sizes and pressure classes available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Socket-weld Elbow 45°

Socket-weld 45 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



SPECIFICATIONS

Socket-weld 45° 1/8" through 4" Class 3000

Socket-weld 45° 1/8" through 4" Class 6000

Socket-weld 45° 1/2" through 2" Class 9000

Specifications: ASME B16.11

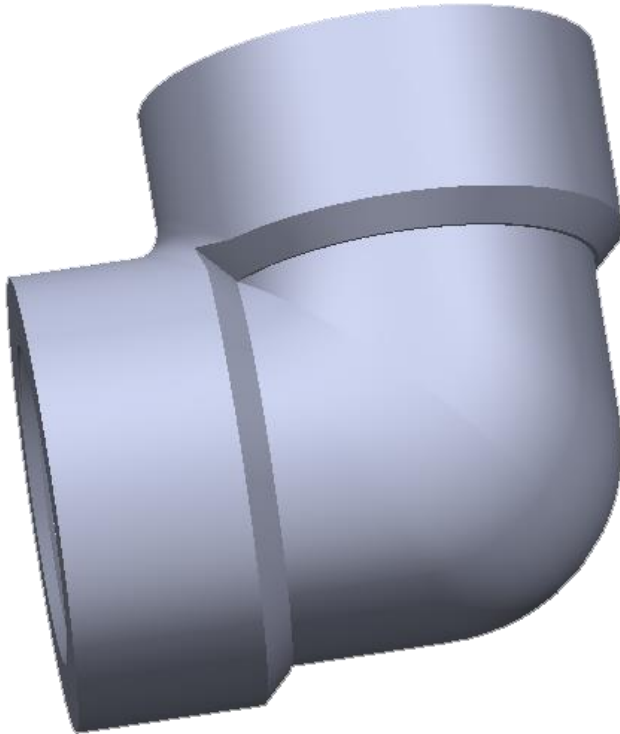
Other angles, sizes and pressure classes available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
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- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Threaded Elbow 90°

Threaded Elbows 90 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



SPECIFICATIONS

Threaded 90° 1/8" through 4" Class 2000

Threaded 90° 1/2" through 4" Class 3000 & 6000

Threaded 90° 1/4" through 3" Class 10,000

Specifications: ASME B16.11

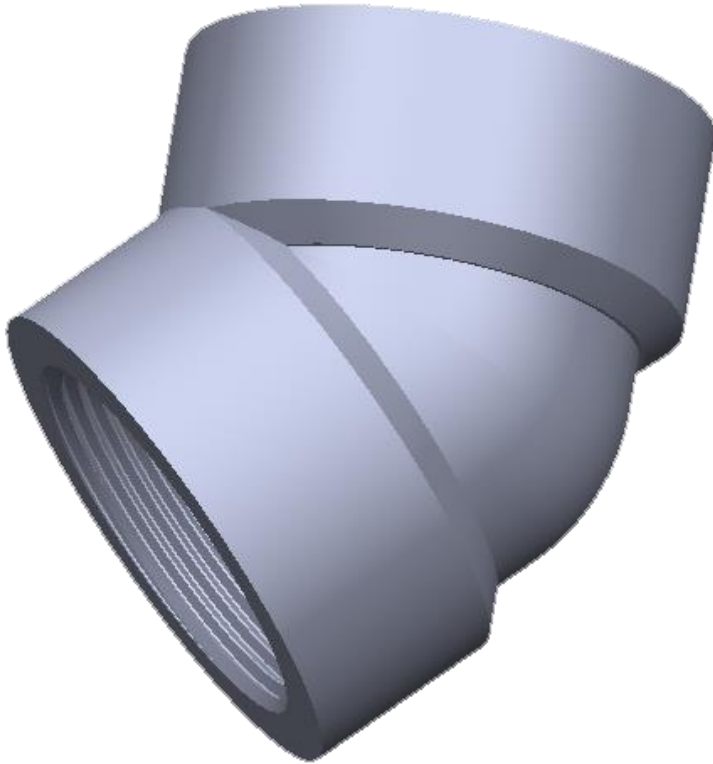
Other angles, sizes and pressure classes available per customer request

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PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

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- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Threaded Elbow 45°

Threaded Elbows 45 degrees are available in all types of materials. Custom elbows can be manufactured per customer drawing.



SPECIFICATIONS

Threaded 45° 1/2" through 4" Class 3000 & 6000

Threaded 45° 1/8" through 4" Class 2000

Threaded 45° 1/4" through 3" Class 10,000

Specifications: ASME B16.11

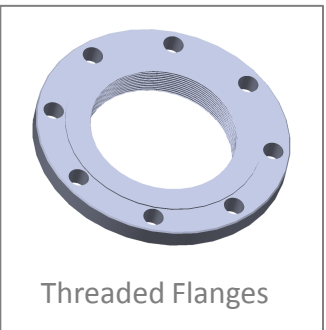
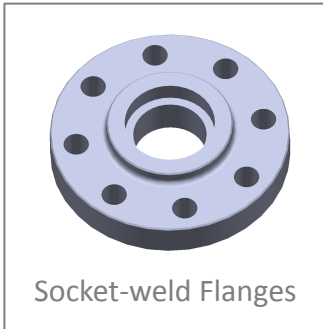
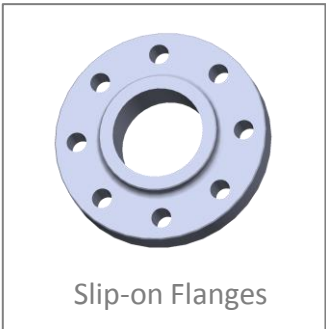
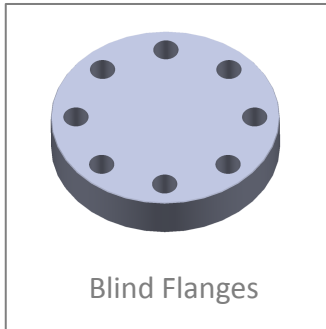
Other angles, sizes and pressure classes available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
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- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Flanges

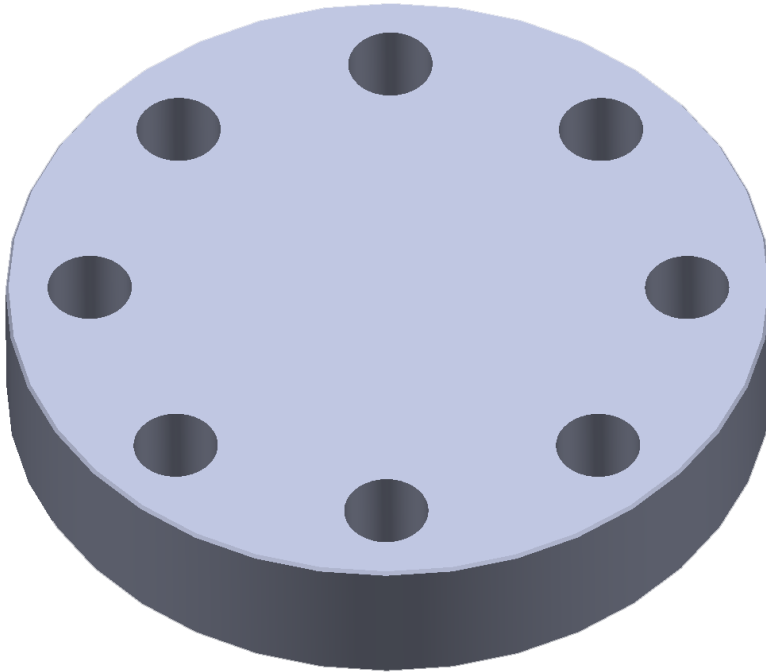
Manufactured to ASME B16.5 - Pipe Flanges and Flanged Fittings; ASME B16.36 - Orifice Flanges; ASME B16.47 – Large Diameter Steel Flanges; ASME B16.1 – Cast Iron Pipe Flanges and Flanged Fittings; JIS B2220 – Steel Pipe Flanges; MSS SP-44 – Steel Pipeline Flanges; and DIN EN 1092-1 – Steel Flanges – Part 1 . Other specifications and sizes are available per customer request.



**GIBSON
PRODUCTS, INC.
MANUFACTURES
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MATERIALS**

- Carbon steel
- Stainless steel
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- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Blind Flanges



SPECIFICATIONS

$\frac{1}{2}$ " through 24" Class 150, 300, 600, 900, 1500 per ASME B16.5

$\frac{1}{2}$ " through 12" Class 2500 Per ASME B16.5

Facing Types: Raised Face, Flat Face, Ring Type Joint, Male, Female, Groove

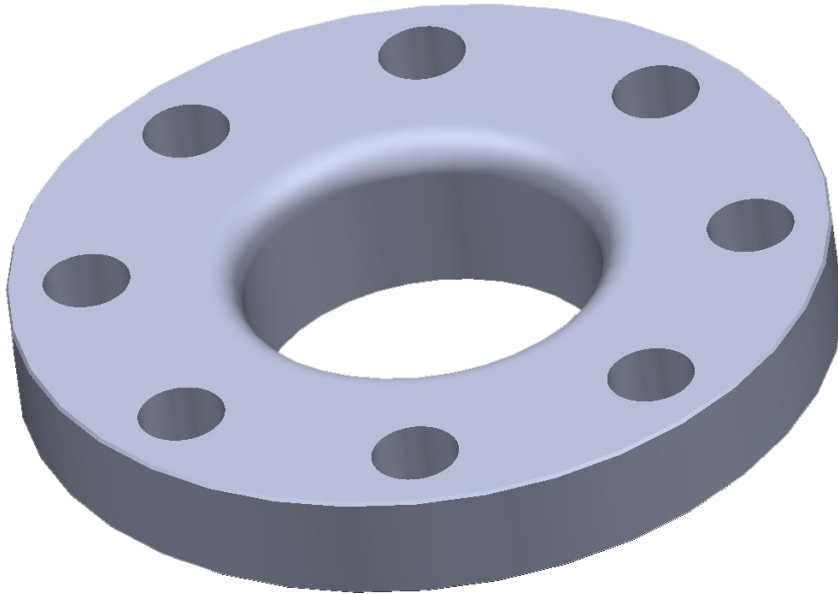
Specifications Available: ASME B16.5 - Pipe Flanges and Flanged Fittings; ASME B16.36 - Orifice Flanges; ASME B16.47 – Large Diameter Steel Flanges; ASME B16.1 – Cast Iron Pipe Flanges and Flanged Fittings; JIS B2220 – Steel Pipe Flanges; MSS SP-44 – Steel Pipeline Flanges; and DIN EN 1092-1 – Steel Flanges – Part 1

Reducing and Expanding sizes are also available for all facing and point of attachment type

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Lapped Joint Flanges



SPECIFICATIONS

1/2" through 24" Class 150, 300, 600, 900, 1500 per ASME B16.5

1/2" through 12" Class 2500 Per ASME B16.5

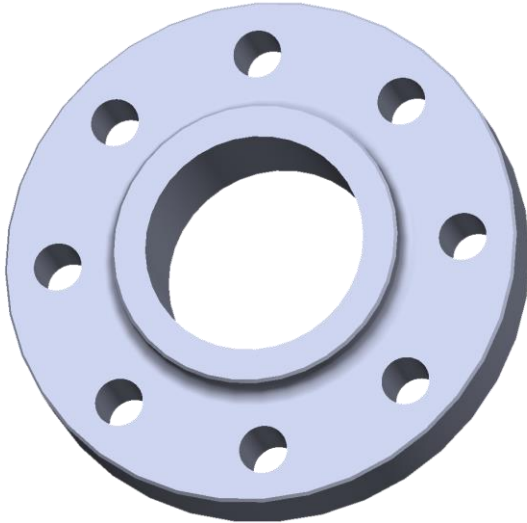
Specifications Available: ASME B16.5 - Pipe Flanges and Flanged Fittings

Reducing and Expanding sizes are also available

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Slip-on Flanges



SPECIFICATIONS

1/2" through 24" Class 150, 300, 600, 900, 1500 per ASME B16.5**

1/2" through 12" Class 2500 Per ASME B16.5**

Facing Types: Raised Face, Flat Face, Ring Type Joint, Male, Female, Groove, Lens Joint, Lap Joint

Specifications Available: ASME B16.5 - Pipe Flanges and Flanged Fittings; ASME B16.36 - Orifice Flanges; ASME B16.47 - Large Diameter Steel Flanges; ASME B16.1 - Cast Iron Pipe Flanges and Flanged Fittings; JIS B2220 - Steel Pipe Flanges; MSS SP-44 - Steel Pipeline Flanges; and DIN EN 1092-1 - Steel Flanges - Part 1

Reducing and Expanding sizes are also available for all facing and point of attachment type

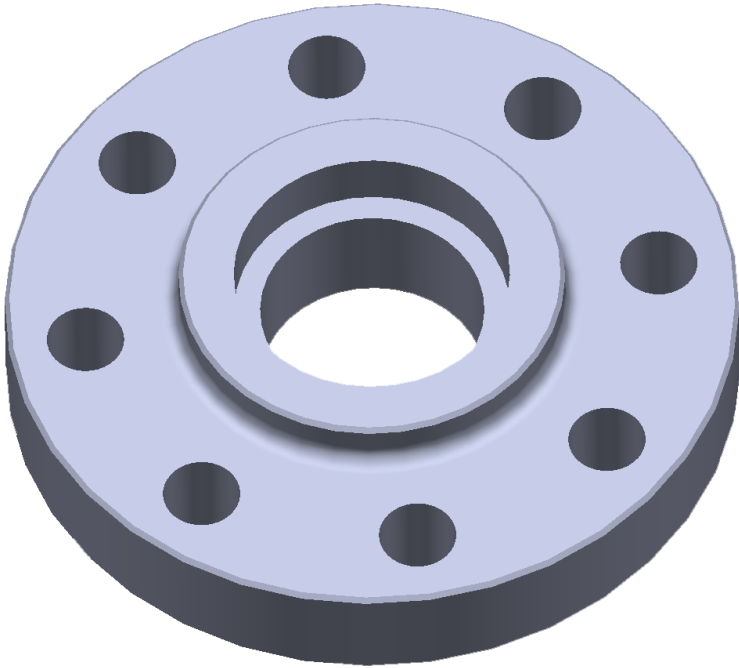
Also available in Orifice Flange configuration

**NOTE: ASME B16.5 only covers 1/2" through 2 1/2" for 1500# class flanges. Larger sizes can be made, but will not be stamped as B16 flanges. The same applies to all 2500# class sizes

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Socket-weld Flanges



SPECIFICATIONS

$\frac{1}{2}$ " through 24" Class 150, 300, 600, 900, 1500 per ASME B16.5**

$\frac{1}{2}$ " through 12" Class 2500 per ASME B16.5**

Facing Types: Raised Face, Flat Face, Ring Type Joint, Male, Female, Groove, Lens Joint, Lap Joint

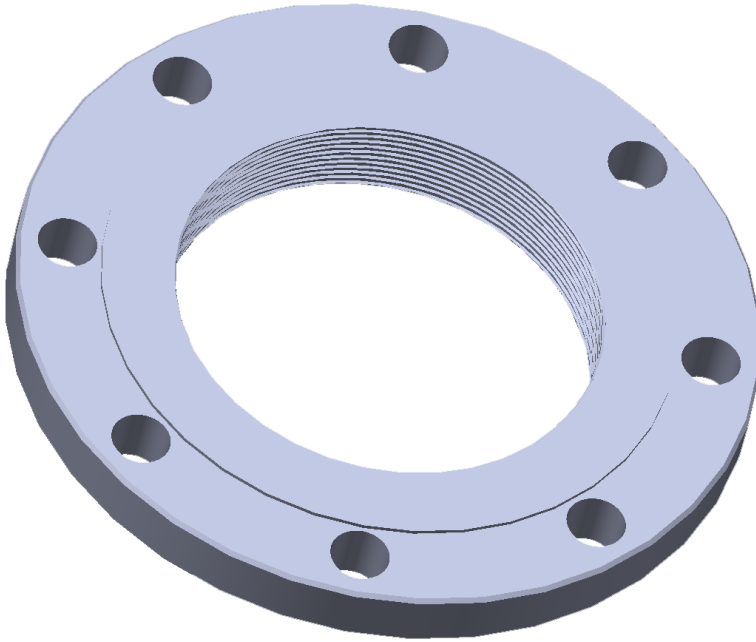
Specifications Available: ASME B16.5 - Pipe Flanges and Flanged Fittings; ASME B16.36 - Orifice Flanges; ASME B16.47 - Large Diameter Steel Flanges; ASME B16.1 - Cast Iron Pipe Flanges and Flanged Fittings; JIS B2220 - Steel Pipe Flanges; MSS SP-44 - Steel Pipeline Flanges; and DIN EN 1092-1 - Steel Flanges - Part 1

**NOTE: ASME B16.5 only covers $\frac{1}{2}$ " through 3" for 150, and 600# class, and $\frac{1}{2}$ " through 2 $\frac{1}{2}$ " for 900 and 1500# class. Larger sizes can be manufactured, but will not be stamped as B16 flanges. The same applies to all 2500# class sizes

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
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- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Threaded Flanges



SPECIFICATIONS

$1/2$ " through 24" Class 150, 300, 600, 900 per ASME B16.5**

$1/2$ " through 12" Class 1500, and 2500 per ASME B16.5**

Facing Types: Raised Face, Flat Face, Ring Type Joint, Male, Female, Groove, Lens Joint, Lap Joint

Specifications Available: ASME B16.5 - Pipe Flanges and Flanged Fittings; ASME B16.36 - Orifice Flanges; ASME B16.47 - Large Diameter Steel Flanges; ASME B16.1 - Cast Iron Pipe Flanges and Flanged Fittings; JIS B2220 - Steel Pipe Flanges; MSS SP-44 - Steel Pipeline Flanges; and DIN EN 1092-1 - Steel Flanges - Part 1

Also available in Orifice Flange configuration

**NOTE: ASME B16.5 only applies through $1/2$ " through $2 1/2$ " for class 1500, and 2500#. Larger sizes can be manufactured, but will not be stamped as B16 flanges

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Weld-neck Flanges



SPECIFICATIONS

$1/2$ " through 24" Class 150, 300, 600, 900, 1500 per ASME B16.5

$1/2$ " through 12" Class 2500 per ASME B16.5

Facing Types: Raised Face, Flat Face, Ring Type Joint, Male, Female, Groove, Lens Joint, Lap Joint

Specifications Available: ASME B16.5 - Pipe Flanges and Flanged Fittings; ASME B16.36 - Orifice Flanges; ASME B16.47 – Large Diameter Steel Flanges; ASME B16.1 – Cast Iron Pipe Flanges and Flanged Fittings; JIS B2220 – Steel Pipe Flanges; MSS SP-44 – Steel Pipeline Flanges; and DIN EN 1092-1 – Steel Flanges – Part 1

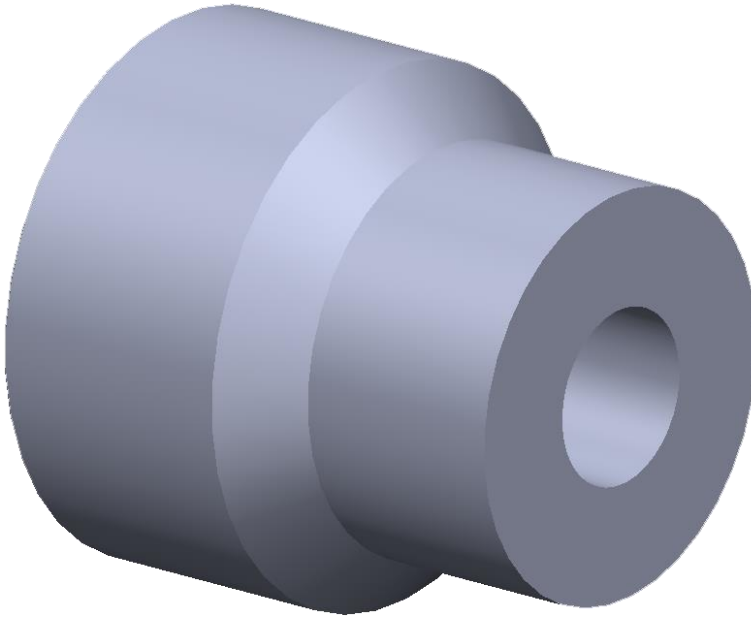
Also available in Orifice Flange configuration

**GIBSON
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MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
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- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Inserts

Threaded and Socket-weld Inserts are available in all types of materials.



SPECIFICATIONS

Socket-weld Reducer Type 1 & Type 2

$\frac{1}{4}$ " X $\frac{1}{8}$ " through 4" X 1"

Specifications: MSS SP-79

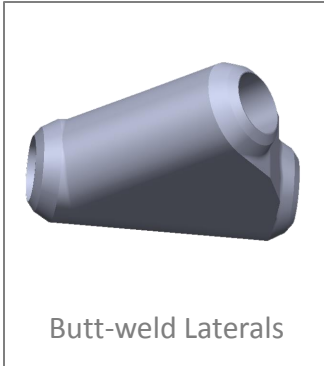
The female end is defined by the equivalent coupling O.D. ASME B16.11 respective class (3000, 6000, & 9000). Female side is also available in threaded configurations

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- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Laterals

Butt-weld, Socket-weld and Threaded laterals are available in all types of materials.

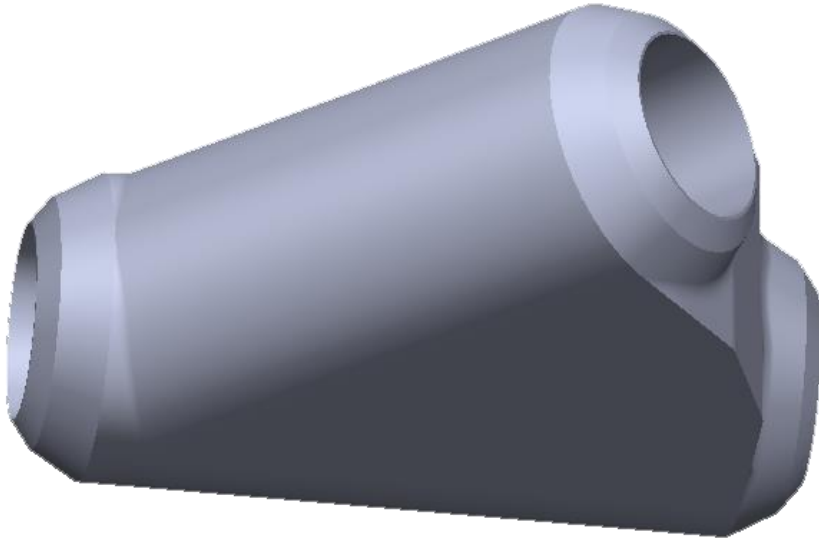


**GIBSON
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MANUFACTURES
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- Additional alloys per customer specification

Butt-weld Laterals

Butt-weld, Socket-weld and Threaded laterals are available in all types of materials.



SPECIFICATIONS

Butt-weld: $\frac{3}{4}$ " through 30" all schedules

Specifications: Butt-weld ends per ASME B16.25

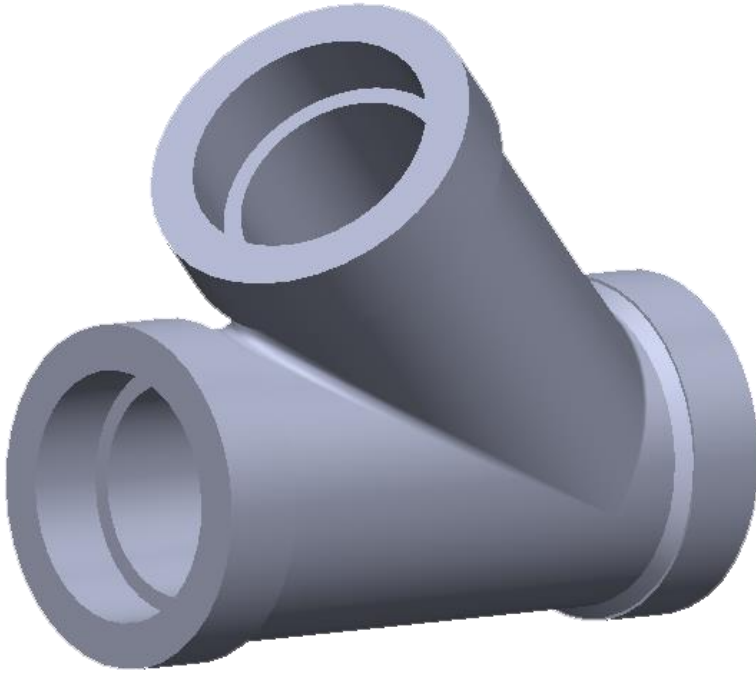
Also available in reducing configurations

**GIBSON
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MANUFACTURES
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VARIETY OF
MATERIALS**

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- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Socket-weld Laterals

Butt-weld, Socket-weld and Threaded laterals are available in all types of materials.



SPECIFICATIONS

$\frac{3}{8}$ " through 3" Class 3000

$\frac{1}{2}$ " through 2" Class 6000 & 9000

Specifications: Socket-weld ends per ASME B16.11

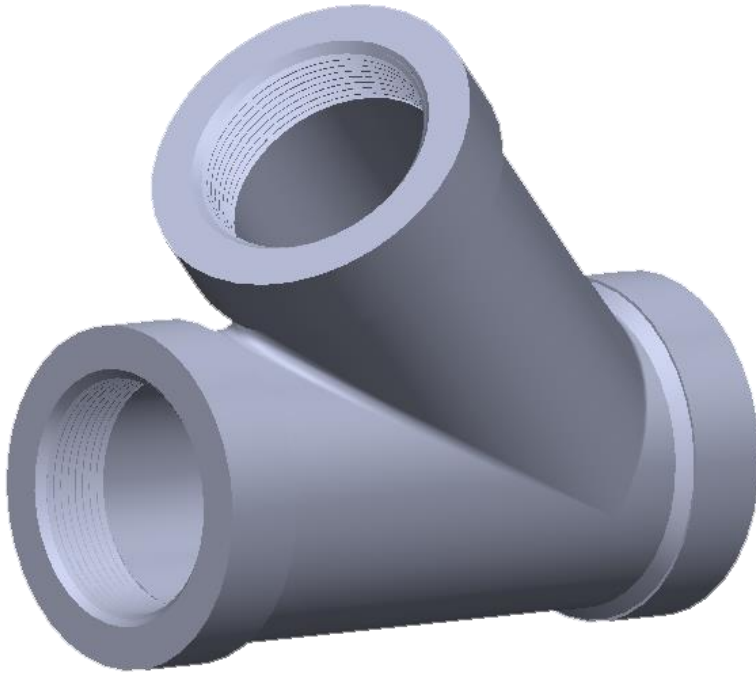
Also available in reducing configurations

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
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- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Threaded Laterals

Butt-weld, Socket-weld and Threaded laterals are available in all types of materials.



SPECIFICATIONS

1/4" through 3" Class 3000

1/4" through 2" Class 6000

1/4" through 1 1/4" Class 10,000

Specifications: Threaded ends per ASME B16.11

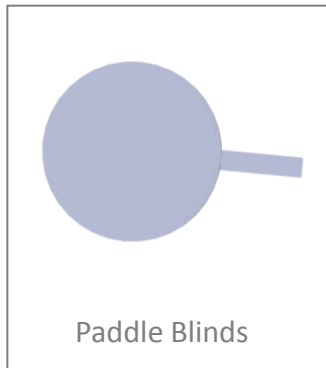
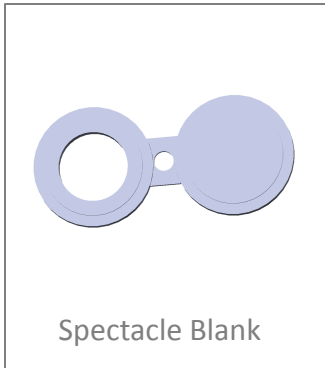
Also available in reducing configurations

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
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- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Line Blanks

Gibson Line Blanks can be relied upon to perform in the most challenging of applications.

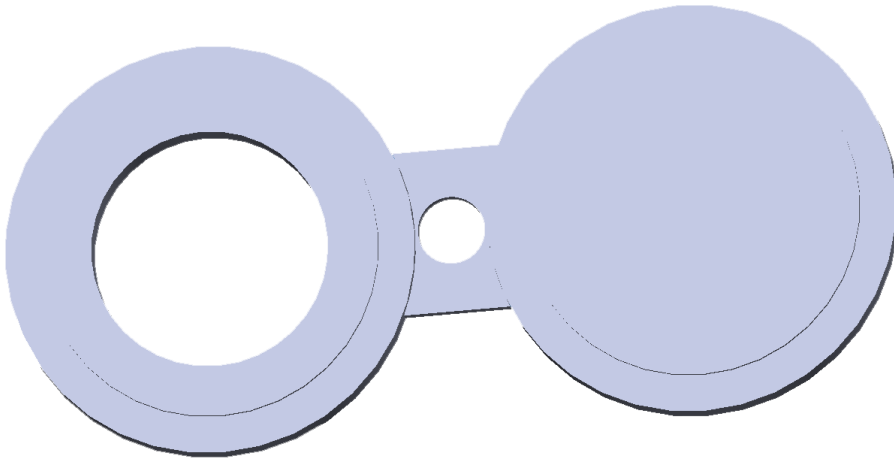


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MANUFACTURES
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- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Spectacle Blank

Also called Figure-8 Blanks, a Spectacle Blank is a pressure-retaining plate with one solid end and one open end connected with a web or tie bar.



SPECIFICATIONS

Line Blank: RF and RTJ $\frac{1}{2}$ " through 24" Class 150, 300, 600, 900, 1500

Line Blank: RF and RTJ $\frac{1}{2}$ " through 12" Class 2500

Spectacle Blank: RF and RTJ $\frac{1}{2}$ " through 24" Class 150, 300, 600, 900, 1500

Spectacle Blank: RF and RTJ $\frac{1}{2}$ " through 12" Class 2500

Specifications: ASME B16.48

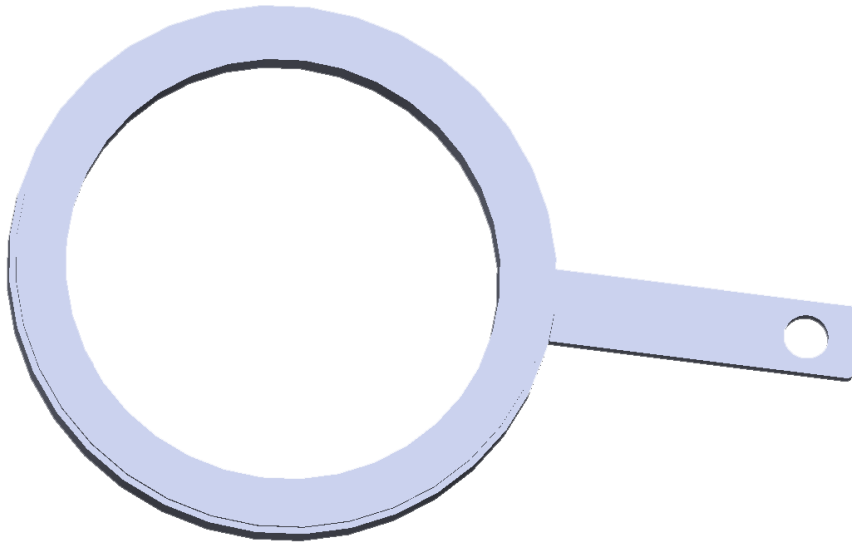
Special thicknesses and handle configurations are available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Paddle Spacer

A Paddle Spacer is similar to the open end of a Figure-8 Blank. It has a plain radial handle and is generally used in conjunction with a Paddle Blind.



SPECIFICATIONS

Line Blank: RF and RTJ 1/2" through 24" Class 150, 300, 600, 900, 1500

Line Blank: RF and RTJ 1/2" through 12" Class 2500

Paddle Spacer: RF and RTJ 1/2" through 24"
Class 150, 300, 600, 900, 1500

Paddle Spacer: RF and RTJ 1/2" through 12" Class 2500

Specifications: ASME B16.48

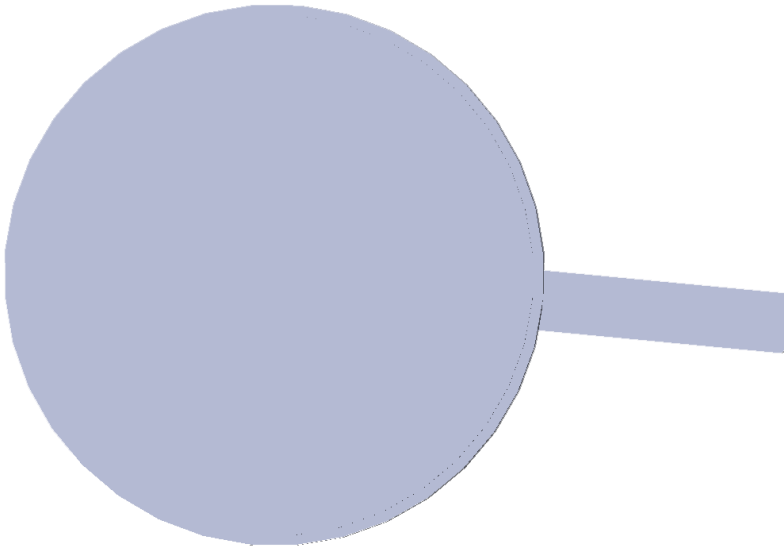
Special thicknesses and handle configurations are available per customer request

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
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- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Paddle Blinds (Blanks)

A Paddle Blind (Blank) is similar to the solid end of a Figure-8 Blank. It has a plain radial handle and is generally used in conjunction with a paddle spacer.



SPECIFICATIONS

Line Blank: RF and RTJ $\frac{1}{2}$ " through 24" Class 150, 300, 600, 900, 1500

Line Blank: RF and RTJ $\frac{1}{2}$ " through 12" Class 2500

Paddle Blind: RF and RTJ $\frac{1}{2}$ " through 24"
Class 150, 300, 600, 900, 1500

Paddle Blind: RF and RTJ $\frac{1}{2}$ " through 12" Class 2500

Specifications: ASME B16.48

Special thicknesses and handle configurations are available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

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- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Pipe Nipples

Pipe Nipples are available in many sizes and schedules, and are manufactured in many grades of material.



SPECIFICATIONS

Butt-weld: $\frac{1}{16}$ " through 24" all schedules

Plain End: $\frac{1}{16}$ " through 24" all schedules

Threaded End: $\frac{1}{16}$ " through 24"*** all schedules

Square End: $\frac{1}{16}$ " through 24" all schedules

Grooved End: $\frac{3}{4}$ " through 24" all schedules

Special sizes and wall thicknesses available per customer request

Specifications: ASTM/ASME pipe material requirements

All combination of ends are available

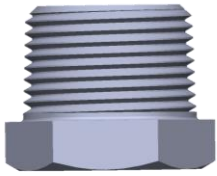
**Note: Standard wall or thicker is required in order to machine a male thread on pipe nipple

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

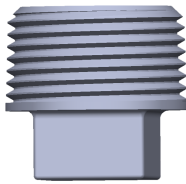
- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Plugs

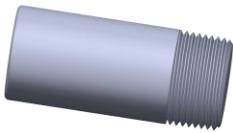
Gibson offers a complete range of male Socket-weld and male Threaded plugs with round or hex bodies. Plugs are available in all grades of materials.



Hex Head Plugs



Square Head Plugs



Round Head Plugs



Countersunk Plugs



Radiographic Plugs



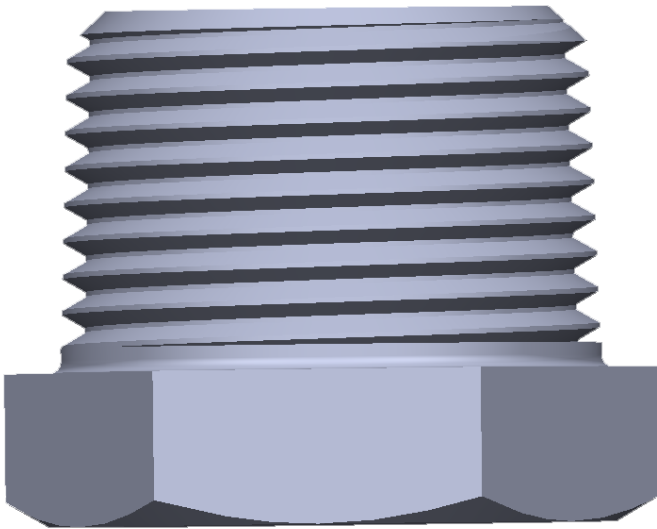
Bull Plugs

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Hex Head Plugs

Gibson offers a complete range of male Socket-weld and male Threaded plugs. Plugs are available in all grades of materials.



SPECIFICATIONS

Available sizes: 1/4" through 8"

Specifications: ASME B16.11

Non-standard and special threads also available

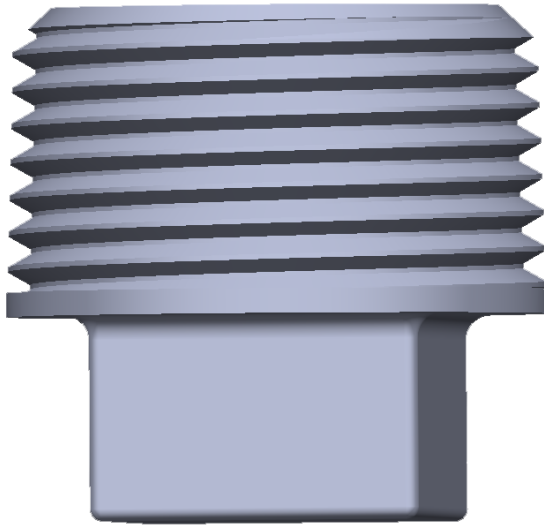
Also available in special lengths

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Square Head Plugs

Gibson offers a complete range of male Socket-weld and male Threaded plugs. Plugs are available in all grades of materials.



SPECIFICATIONS

Available sizes: 1/8" through 6"

Specifications: ASME B16.11 and ASME B16.14

Non-standard and special threads also available

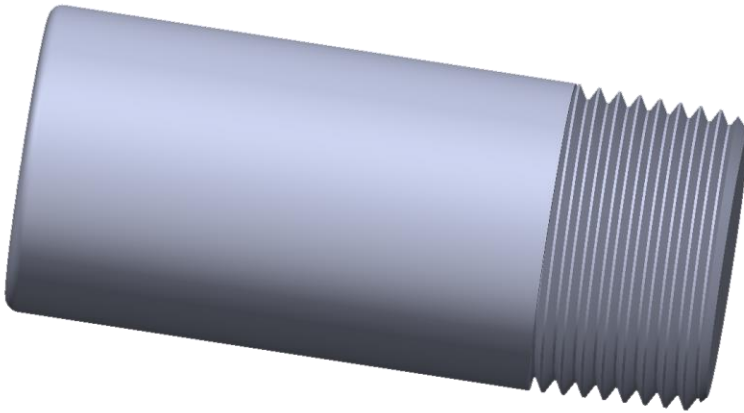
Also available in special lengths

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Round Head Plugs

Gibson offers a complete range of male Socket-weld and male Threaded plugs. Plugs are available in all grades of materials.



SPECIFICATIONS

Available sizes: 1/8" through 5"

Specifications: ASME B16.11

Non-standard and special threads also available

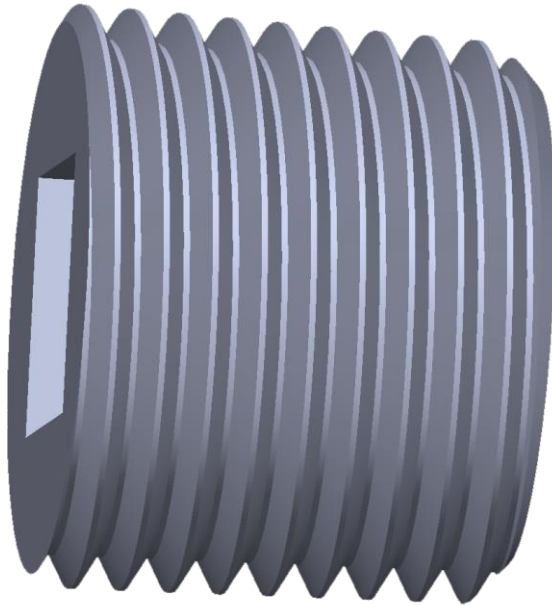
Also available in special lengths

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Countersunk Plugs

Gibson offers a complete range of male Socket-weld and male Threaded plugs. Plugs are available in all grades of materials.



SPECIFICATIONS

Available sizes: 1/8" through 4"

Specifications: ASME B16.14

Non-standard and special threads also available

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Radiographic Plugs

These plugs are for radiographic inspection of pipe Butt-welds where the radiographic source is inside of the pipe. They are available in all grades of material.



SPECIFICATIONS

Available sizes: All figures

Specifications: PFI ES-16

Non-special lengths also available

Also available in special lengths

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Bull Plugs

Gibson offers a complete range of male Socket-weld and male Threaded plugs. These plugs are available in all grades of materials.



SPECIFICATIONS

Available sizes: $\frac{1}{8}$ " through 12"

Specifications: MSS SP-95

Available in Butt-weld configuration all schedules

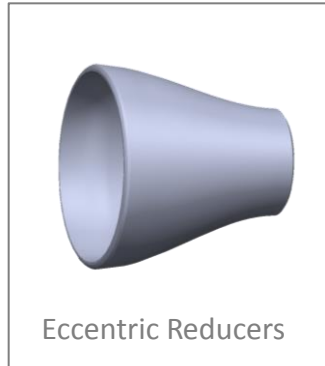
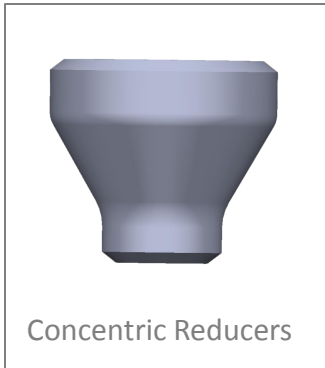
Also available in male Socket-weld configuration

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Reducers

Butt-weld Reducers are available in all types of materials, for both Concentric and Eccentric configurations.

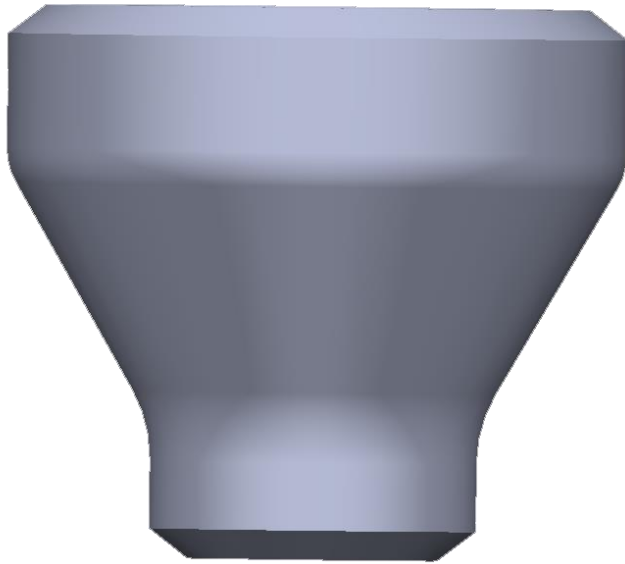


**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Concentric Reducer

Concentric Butt-weld Reducers are available in all types of materials.



SPECIFICATIONS

Available sizes: $\frac{3}{4}$ " x $\frac{1}{2}$ " through 26"x 16" all schedules

Specifications: ASME B16.9

Custom end preps, special sizes and conical shape are also available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Eccentric Reducer

Eccentric Butt-weld Reducers are available in all types of materials.



SPECIFICATIONS

Available sizes: $\frac{3}{4}$ " x $\frac{1}{2}$ " through 26" x 16" all schedules

Specifications: ASME B16.9

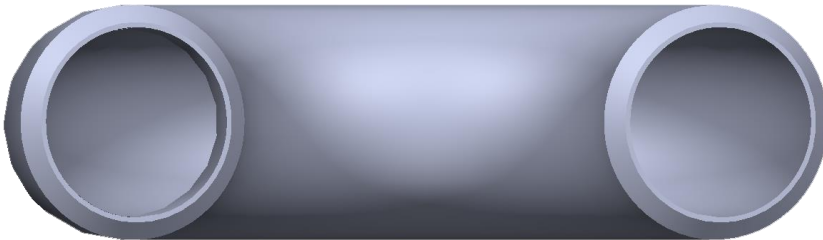
Custom end preps, special sizes and conical shape are also available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Return Bends

Formed Return Bends manufactured by Gibson can be trusted to work in the most demanding of industrial applications. Return bends are available in most grades of material.



SPECIFICATIONS

Butt-weld 180 Short Radius 1" through 4" all schedules

Butt-weld 180 Long Radius $1\frac{1}{2}$ " through 4" all schedules

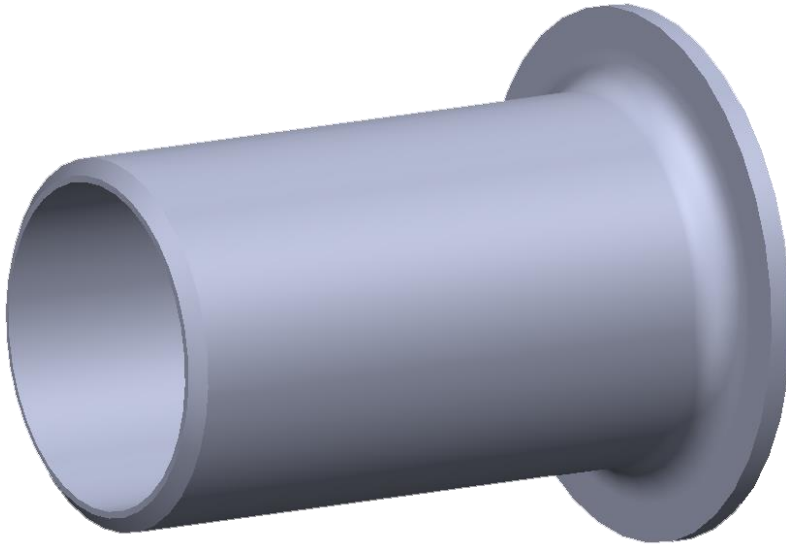
Specifications: ASME B16.9

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Stub Ends

Gibson stub ends can be relied upon to perform in the most demanding of applications. Stub ends are available in most grades of material.



SPECIFICATIONS

$\frac{1}{2}$ " through 24" Short and Long Pattern for all pipe schedules

Specifications: MSS SP-43 and ASME 16.9

Custom overall lengths are available per customer request

Available in RTJ configuration as well as reducing configuration

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Studding Outlets

Studding outlets by Gibson are available in all ANSI flange pressure classes.

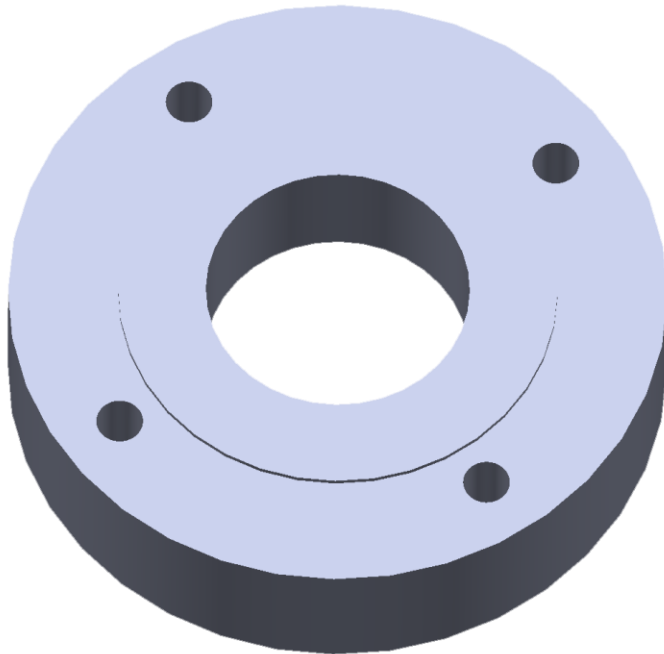


**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloys
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Insert Studding Outlets

Studding Outlets by Gibson are available in all ANSI flange pressure classes, and are available in most grades of material.



SPECIFICATIONS

Raised Face: 1/2" through 24" Class 150, 300, 600, 900, 1500

Raised Face: 1/2" through 12" Class 2500

Ring Joint facing also available

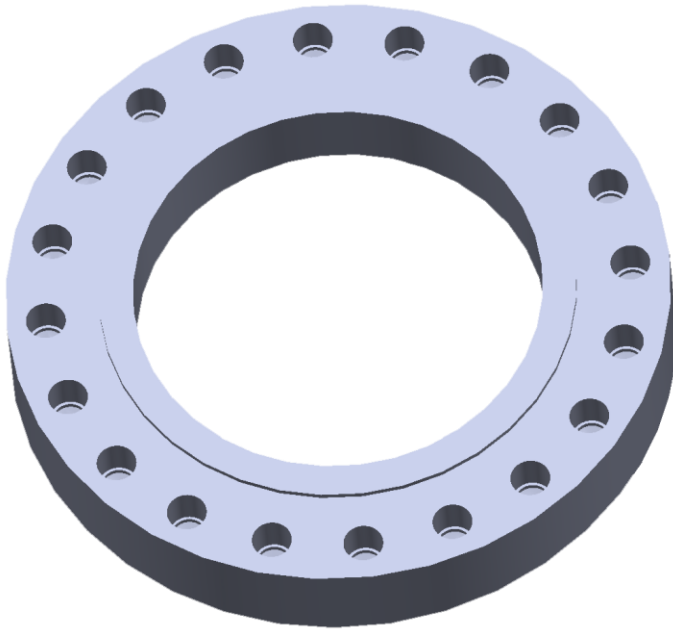
Specification: ASME B16.5

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Tangential Studding Outlets

Studding Outlets by Gibson are available in all ANSI flange pressure classes, and are available in most grades of material.



SPECIFICATIONS

Raised Face: 1/2" through 24" Class 150, 300, 600, 900, 1500

Raised Face: 1/2" through 12" Class 2500

Ring Joint facing also available

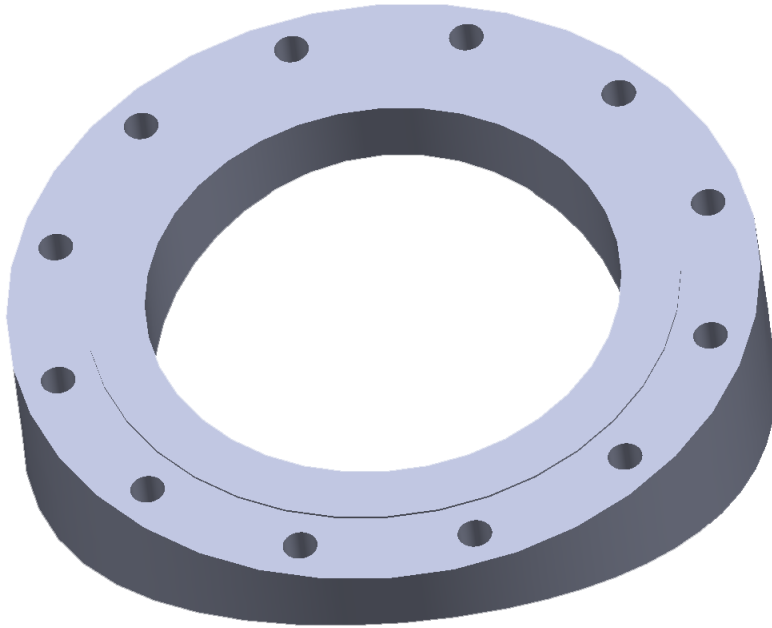
Specification: ASME B16.5

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Weld-on Studding Outlets

Studding Outlets by Gibson are available in all ANSI flange pressure classes, and are available in most grades of material.



SPECIFICATIONS

Raised Face: 1/2" through 24" Class 150, 300, 600, 900, 1500

Raised Face: 1/2" through 12" Class 2500

Ring Joint facing also available

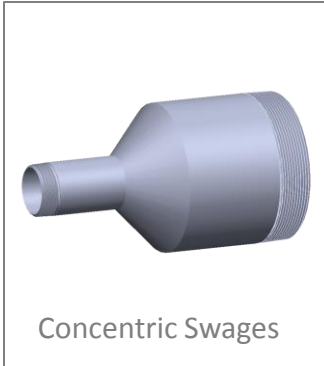
Specification: ASME B16.5

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

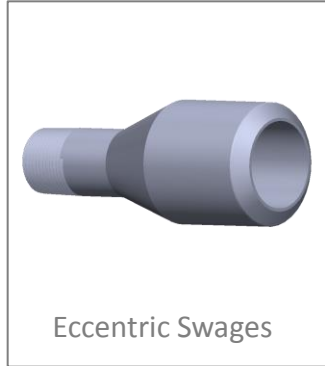
- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Swage Nipples

Gibson Swages can be relied upon to perform in the most challenging industrial applications.



Concentric Swages



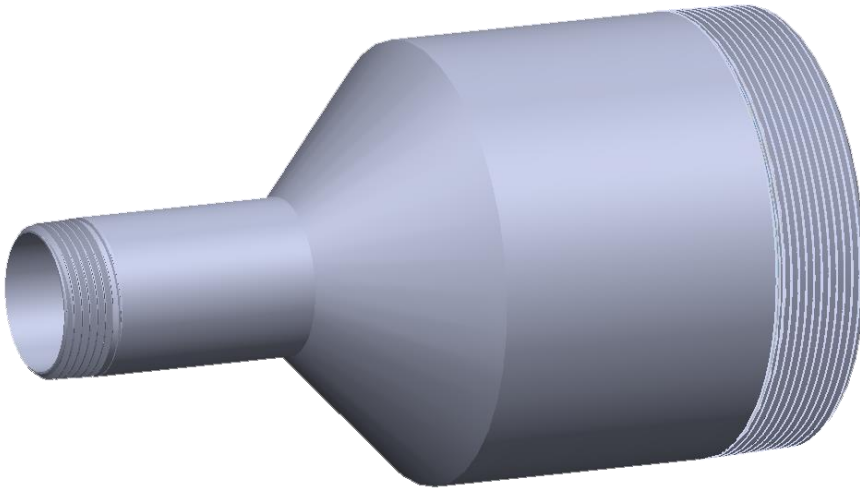
Eccentric Swages

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Concentric Swages

Gibson Swages can be relied upon to perform in the most challenging industrial applications. Swages are available in most grades of material.



SPECIFICATIONS

$1/4"$ x $1/8"$ through 12" x 10" all schedules

Specifications: MSS SP-95

Available end preps: Male threaded end, Butt-weld beveled end, Plain square end, Grooved end and any combination of the ends listed above

Special end preps and lengths are available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Eccentric Swages

Gibson Swages can be relied upon to perform in the most challenging industrial applications, and are available in most grades of material.



SPECIFICATIONS

$1/4$ " x $1/8$ " through 12" x 10" all schedules

Specifications: MSS SP-95

Available end preps: Male threaded end, Butt-weld beveled end, Plain square end, Grooved end and any combination of the ends listed above

Special end preps and lengths are available per customer request

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Tees

Butt-weld, Threaded and Socket-weld Tees are available in all types of material.

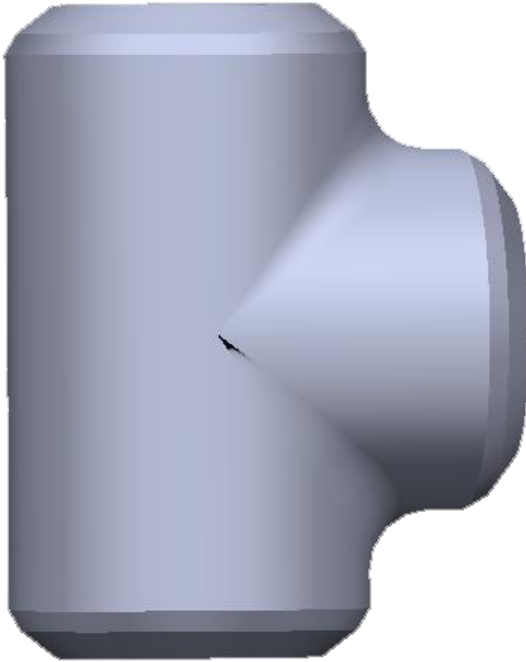


**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Butt-weld Tees

Butt-weld, Threaded and Socket-weld Tees are available in all types of material.



SPECIFICATIONS

Butt-weld: 1/2" through 20" all schedules

Specifications: ASME B16.9

Other classes and sizes are available per customer request

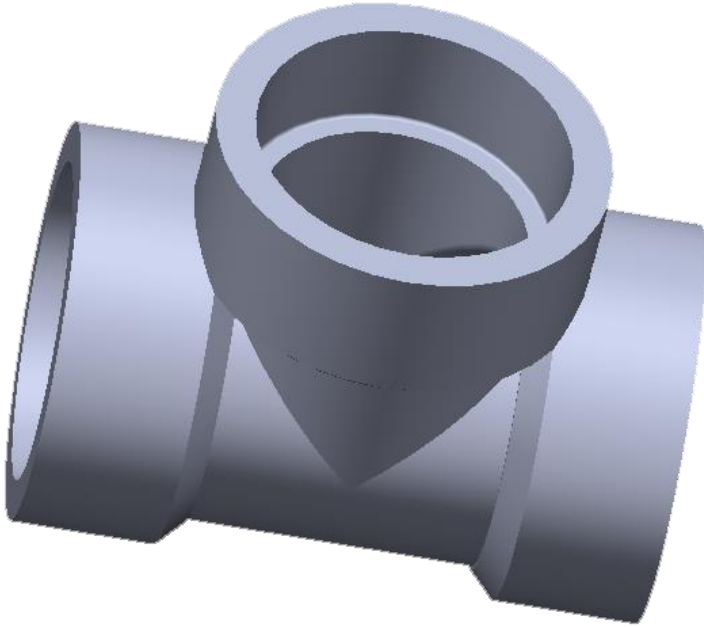
Also available in reducing and combination configurations

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Socket-weld Tees

Butt-weld, Threaded and Socket-weld Tees are available in all types of material.



SPECIFICATIONS

Socket-weld: 1/8" through 4" Class 3000

Socket-weld: 1/8" through 4" Class 6000

Socket-weld: 1/2" through 3" Class 9000

Specifications: ASME B16.11

Other classes and sizes are available per customer request

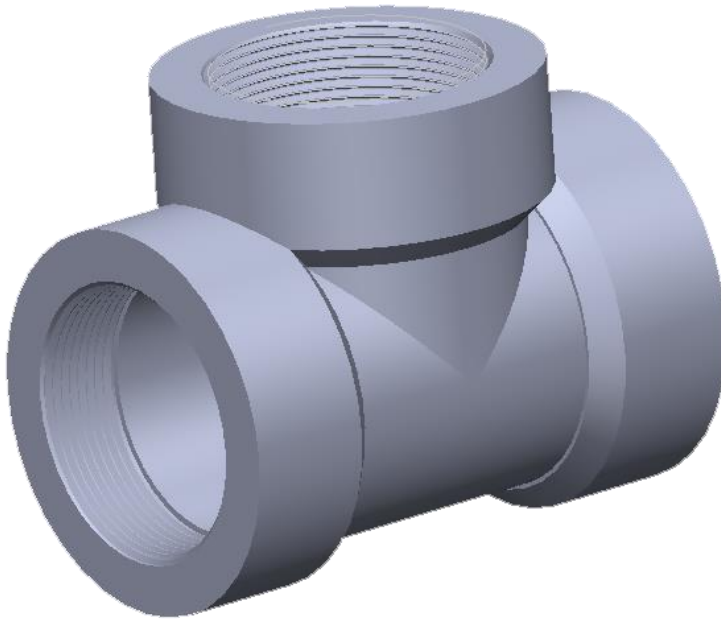
Also available in reducing and combination configurations

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Threaded Tees

Butt-weld, Threaded and Socket-weld Tees are available in all types of material.



SPECIFICATIONS

Threaded: 1/8" through 4" Class 3000 and 6000

Threaded: 1/4" through 3" Class 10,000

Specifications: ASME B16.11

Other classes and sizes are available per customer request

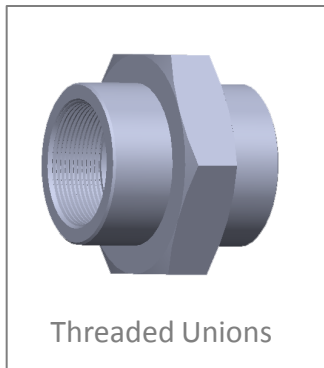
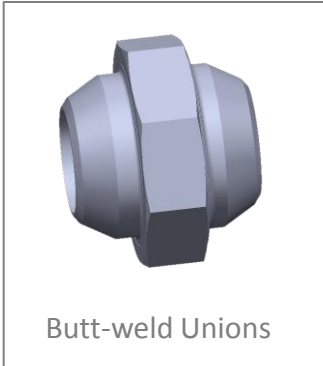
Also available in reducing and combination configurations

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Unions

Butt-weld, Socket-weld and Threaded Unions are available in all types of materials.

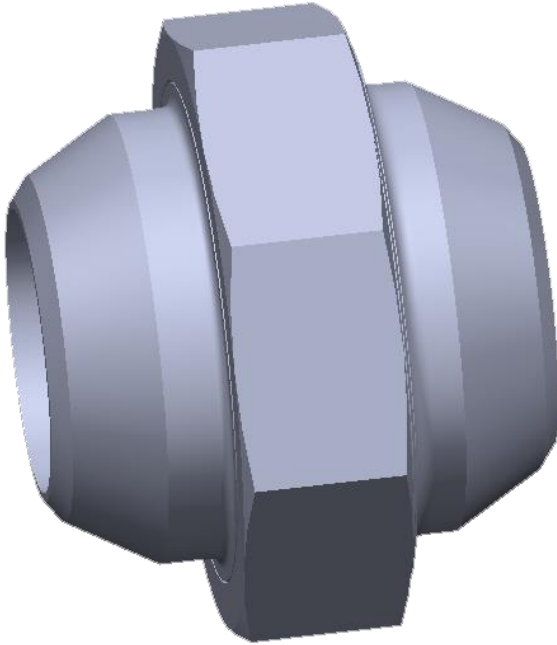


**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Butt-weld Unions

Butt-weld, Socket-weld and Threaded Unions are available in all types of materials.



SPECIFICATIONS

Butt-weld: $\frac{3}{4}$ " through 2" all schedules

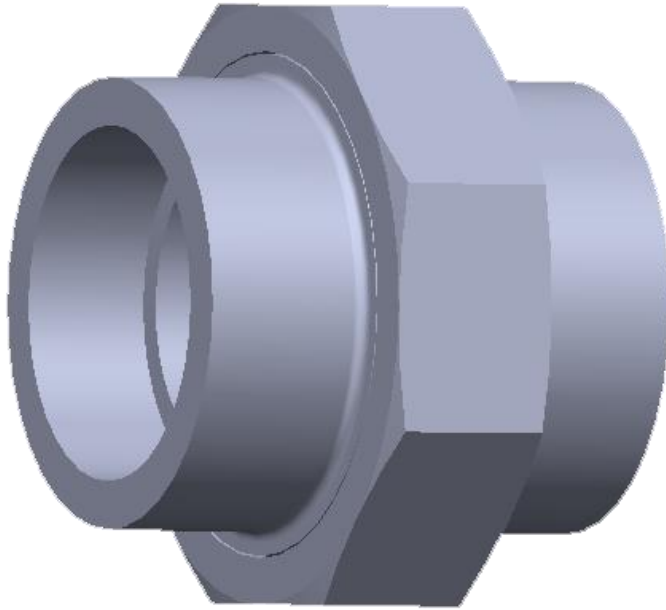
Specifications: Butt-weld ends per ASME B16.25

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Socket-weld Unions

Butt-weld, Socket-weld and Threaded Unions are available in all types of materials.



SPECIFICATIONS

Socket-weld: 1/8" through 3" Class 3000

Socket-weld: 1/8" through 2 1/2" Class 6000

Socket-weld: 1/4" through 2" Class 9000

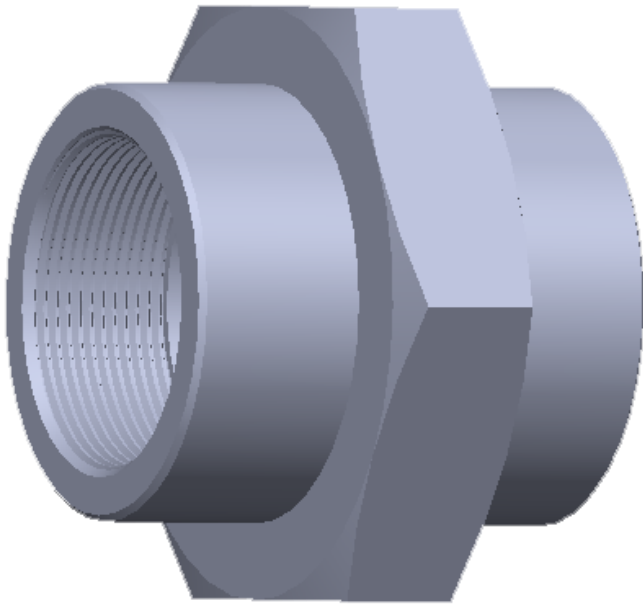
Specifications: MSS SP-83

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Threaded Unions

Butt-weld, Socket-weld and Threaded Unions are available in all types of materials.



SPECIFICATIONS

Threaded: $\frac{1}{8}$ " through 4" Class 3000

Threaded: $\frac{1}{8}$ " through 2 $\frac{1}{2}$ " Class 6000

Threaded: $\frac{1}{4}$ " through 2" Class 9000

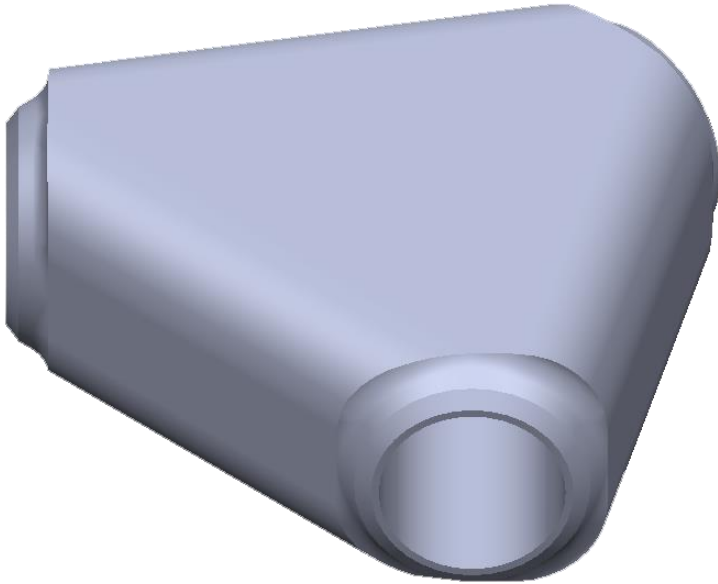
Specifications: MSS SP-83

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Wyes

Gibson Wyes are designed to perform well in the most demanding of applications, and are available in most grades of material.



SPECIFICATIONS

1/2" through 6" all schedules

3/8" through 2" Class 3000

3/4" through 1 1/2" Class 6000

3/8" through 2" Class 3000

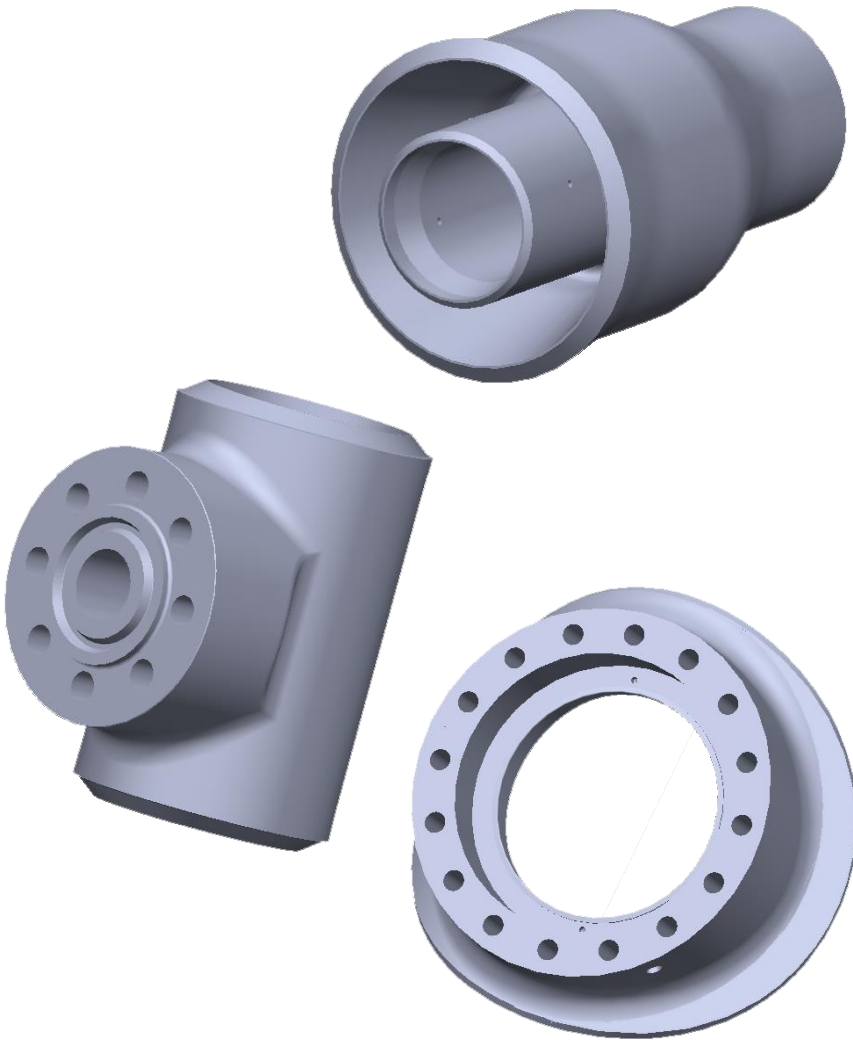
Specifications: Butt-weld ends per ASME B16.25

**GIBSON
PRODUCTS, INC.
MANUFACTURES
FROM A WIDE
VARIETY OF
MATERIALS**

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification

Special

Gibson can manufacture a range of "Special" products designed to perform in a range of challenging industrial applications, and in any grade of material per customer specification.



SPECIFICATIONS

Specifications: Per customer requirements

GIBSON PRODUCTS, INC. MANUFACTURES FROM A WIDE VARIETY OF MATERIALS

- Carbon steel
- Stainless steel
- Chrome moly
- Nickel alloy
- Aluminum
- Copper nickel
- Titanium
- Zirconium
- Ferralium
- Materials used for Hydrofluoric Acid (HF) Alkylation Service
- Additional alloys per customer specification