When You Need The Best

DIXIE RATCHET TURNBUCKLES

Made in USA

DIXIE INDUSTRIES
A Division of Columbus McKinnon Corporation
3510 North Orchard Knob Avenue • Chattanooga, TN 37406-7600
Toll Free: 800-756-6656 • Fax: 800-374-2329
**End Fitting Choices**

- **H** Hook and Link
- **W** Clevis Jaw
- **F** Formed Eye Bolt
- **S** Stub End
- **D** Drilled Eye Bolt
- **X** Box Hook
- **V** Swivel Jaw

NEW! Stationary Swivel Jaw

We offer any combination of the End Fittings pictured above. Below are a few example configurations. (All end fittings may not be available for all sizes.)

**Specify your ratchet...**

1. Choose the barrel diameter and screw size to suit your needs based on breaking strengths and dimensions shown on next page. Apply in straight tension only with a minimum safety factor of 3 to 1.

2. Specify the barrel length as determined by amount of take-up required.

   - Barrel length = Required take-up plus 2 times the screw diameter. (Round final calculated barrel length up to nearest even inch.)
   - Example: Required Take-up = 8 inches.
   - Screw Diameter = 1 inch.
   - 8 inches + (2 x 1 inch) = 10 inches
   - The Barrel Length would be 10 inches.

3. Pick the end fittings for each end (left and right) to best suit your application. Ratchets and end fittings are designed for straight line pull tension applications only.

4. Call Dixie’s Customer Service staff at 800-756-6656 for delivery information, application information and price.
### Dimensions

All dimensions are inches.

#### Handles / Barrels

<table>
<thead>
<tr>
<th>Screw Dia. (Inches)</th>
<th>Barrel Pipe O.D. (Inches)</th>
<th>WLL* (Lbs.)</th>
<th>MBS** (Lbs.)</th>
<th>Standard Handles Length (In.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8</td>
<td>1/16</td>
<td>2,600</td>
<td>7,800</td>
<td>10 1/2</td>
</tr>
<tr>
<td>3/16</td>
<td>5/32</td>
<td>5,400</td>
<td>16,200</td>
<td>12 1/8</td>
</tr>
<tr>
<td>1/4</td>
<td>1/2</td>
<td>13,000</td>
<td>39,000</td>
<td>14</td>
</tr>
<tr>
<td>1/2</td>
<td>2/5</td>
<td>28,300</td>
<td>85,000</td>
<td>22 /19 LOOSE PAWL</td>
</tr>
<tr>
<td>5/8</td>
<td>2/5</td>
<td>42,000</td>
<td>126,000</td>
<td>22 /19 LOOSE PAWL</td>
</tr>
</tbody>
</table>

*WLL=Working Load Limit. **MBS=Minimum Breaking Strength. Welded End Fittings will reduce breaking strength. Ratings are for straight tension applications only. Note: Ratchet located center of barrel unless specified otherwise.

#### Eyebolts Formed

For use with chain or wire rope

<table>
<thead>
<tr>
<th>Shank Diameter</th>
<th>Thickness</th>
<th>Outside Diameter</th>
<th>Size of Pin that will fit through Eyebolt</th>
<th>Center of Hole to Last Usable Thread (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8</td>
<td>1/2</td>
<td>1/4</td>
<td>1/16</td>
<td>1</td>
</tr>
<tr>
<td>3/16</td>
<td>3/32</td>
<td>7/16</td>
<td>1/4</td>
<td>1/2</td>
</tr>
<tr>
<td>1/4</td>
<td>3/16</td>
<td>3/2</td>
<td>5/32</td>
<td>1/4</td>
</tr>
<tr>
<td>1/2</td>
<td>3/18</td>
<td>4</td>
<td>1/2</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Eyebolts Drilled

For use with pins or bolts

<table>
<thead>
<tr>
<th>Shank Diameter</th>
<th>Thickness</th>
<th>Outside Diameter</th>
<th>Max. Inside Diameter of Drilled Hole</th>
<th>Suggested Dia. of Drilled Hole</th>
<th>Center of Hole to Last Usable Thread (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2/16</td>
<td>1/4</td>
<td>1/4</td>
<td>1/8</td>
</tr>
<tr>
<td>1/8</td>
<td>3/16</td>
<td>1</td>
<td>1/4</td>
<td>1/4</td>
<td>2</td>
</tr>
<tr>
<td>1/4</td>
<td>3/4</td>
<td>2</td>
<td>1/4</td>
<td>1/4</td>
<td>2/2</td>
</tr>
<tr>
<td>2</td>
<td>4/16</td>
<td>2 1/2</td>
<td>1/4</td>
<td>1/4</td>
<td>2 1/2</td>
</tr>
</tbody>
</table>

Actual hole size must be specified. If hole is 1" or less increments of 1/16" are acceptable. If the hole size is larger than 1" the standard increment is 1/8".

#### Clevis Jaws

<table>
<thead>
<tr>
<th>Shank Diameter</th>
<th>Throat To Hole Center</th>
<th>Suggested Bolt Size</th>
<th>Throat Opening</th>
<th>Center of Hole to Last Usable Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>7/8</td>
<td>1/8</td>
<td>4</td>
</tr>
<tr>
<td>1/8</td>
<td>3/2</td>
<td>1</td>
<td>1/4</td>
<td>5 1/2</td>
</tr>
<tr>
<td>1/4</td>
<td>3/4</td>
<td>1</td>
<td>1/8</td>
<td>3/4</td>
</tr>
<tr>
<td>1/2</td>
<td>3/8</td>
<td>1 1/2</td>
<td>1/4</td>
<td>6 1/2</td>
</tr>
<tr>
<td>2</td>
<td>4/8</td>
<td>2</td>
<td>2 1/2</td>
<td>7 1/2</td>
</tr>
</tbody>
</table>

†Use w/1" Barrel  
††=Stationary Swivel Jaw  
†=Special Run Item

#### Box Hooks

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8</td>
<td>2.00</td>
<td>1 3/16</td>
<td>15/32</td>
<td>2.5</td>
<td>12 3/16</td>
<td>8 5/8</td>
<td>1 1/16</td>
</tr>
</tbody>
</table>

Call Dixie Industries toll free: 800-756-6656 or fax: 800-374-2329
Specify your river ratchet

1. Choose the screw diameter to suit your needs.
   Please apply a minimum 4 to 1 design factor when making your selection. For example, if your design load is 10,000 lbs. maximum, then a 1" ratchet with a 40,000 lb. MBS would be the minimum strength required.

2. Specify the barrel length as determined by amount of take-up required.
   Barrel length = Required take-up plus 2 times the screw diameter. In general 18" to 36" in 6" increments are standard, but other lengths can be supplied upon request.

3. Pick the end fittings for each end (left and right) to best suit your application. Ratchets and end fittings are designed for straight line pull tension applications only.

4. Select handle type (spring loaded or loose pawl). See handle information on this page.

5. Call Dixie’s Customer Service staff at 800-756-6656 for delivery information, application information, design help and price.

Handle Choices: The double acting pawls are spring loaded so that the ratcheting can be done at any angle. The loose pawl design works by gravity and is thus only effective when the handle is in the nearly vertical position.
Custom built devices

Custom built screw drive actuators for your OEM application. Special coatings and materials available. Example pictured above was designed for use in extreme temperatures under severe abuse.

The Sidewinding turnbuckle is a versatile push-pull tensioning/positioning device. It operates using a ring and pinion gear design, is equipped with a 1/2" square drive, utilizes different end fittings and is available in 1 inch diameter with either single or double screw design; manual or power driven.

Close up of sidewinding turnbuckle's 1/2" square drive.

**WARNING**

IMPROPER USE OF RATCHET TURNBUCKLES MAY RESULT IN BODILY INJURY, DEATH OR PROPERTY DAMAGE.

TO AVOID INJURY: Inspect before use. Remove from service if cracked, worn or deformed. Operate ratchet turnbuckle from a firm standing position only. Do not operate with anyone standing on the loadline system. Release tension with care. Make sure everyone is clear. Recheck tightness of turnbuckle periodically. Lubricate pivot and swivel points for optimum performance. Use only replacement parts manufactured by Dixie Industries.

When You Need The Best ...

In operation since 1910, Dixie’s manufacturing plant in Chattanooga, TN has continually improved methods and machines to provide the highest quality product available.

All of Dixie’s barrels are upset-forged from high strength steel. This one piece construction eliminates welded insert pull out and provides extended ratchet life. This technology also provides the user with maximum strength and resistance to deformation from misuse. Dixie uses only the highest quality closed die forgings for end fittings.

Our efficiently designed ratchet gears provide years of trouble-free service in any weather.

Stringent quality control, from hot inspection at the forging machines to final assembly, assures our customers of the highest quality products.

Eyebolts and barrels are Acme threaded with proper pitch to provide the ultimate trade-off between take-up tension and speed of operation.

Dixie’s versatile manufacturing capabilities are readily available to suit your engineering and delivery requirements.

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RT 0101
Rigging hardware for every need.

Custom Chain Assemblies—3/16" to 4" Safety Chain, Tie Back Chain, Load Securement Chains all built to your exact specifications. Contact a customer service representative for additional information on your requirements.

Hooks—Columbus McKinnon hooks range from a 3/16" weld on chain hook up to a 22 ton alloy rigging hook. Forged hardware and hooks to meet your requirements are available through your customer service representative.

Tarp hooks for lacing tarpaulins and ropes quickly and easily.

Chain—Dixie Industries is a division of Columbus McKinnon Corporation which offers a wide variety of welded chain from Grade 30 Proof Coil to Grade 100 Alloy. Sizes range from 3/16" to 4". Packaging is also versatile to suit your need. Our chain is packed in continuous lengths in pails, half drums and drums. Because of its flexibility and ability to follow contours readily, chain is a versatile medium for lifting, towing, pulling and securing, or for any application where a force is to be exerted.

Shackles—super strong anchor and chain shackles have higher working load limits than specified by Federal specifications. All shackles are marked with size (inches and millimeters) and working load limit in tons.

Hammerlok Coupling Link—Dependable and easy to use for fast assembly on the job, for attaching chain to master links and eye type hooks and many other uses. Made from larger size stock than the chain they are used with, they provide greater inter-link wearing surface. Load pin and stud can be assembled quickly and easily with just a hammer. Every link is proof tested at the time of manufacture. A wide variety of other connecting links are also available to fill your needs. Please contact our customer service representatives at 800-756-6656.