

# DROP FORGED WIRE ROPE CLIPS



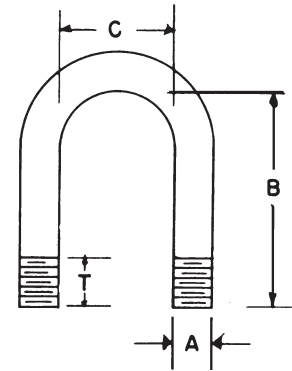
“CHICAGO” the Trade-Mark of quality in wire rope fittings is on all forged steel clip bases. This identification symbolizes wire rope clips that are manufactured to rigid specifications. Component parts are galvanized. U-bolts, with or without nuts, prices on application.

- Meets performance requirements of federal specification FF-C-450, Type 1, Class 1.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements.



Efficiency rating of a properly applied termination is 80% for 1/8" through 7/8" and 90% for sizes 1" through 1-1/2".  
Should be used in heavy duty applications

Rope Size	Hot Galvanized	U-Bolt Dimensions				Weight Per 100
	Part No.	A	B	C	T	
1/8"	23460 3	12-24	3/4"	9/32"	1/2"	6.5
3/16"	23465 8	1/4"-20	15/16"	5/16"	5/8"	10
1/4"	23470 2	5/16"-18	1-5/32"	3/8"	3/4"	18.5
5/16"	23475 7	3/8"-16	1-1/2"	1/2"	1"	29.5
3/8"	23480 1	7/16"-14	1-5/8"	9/16"	1-7/8"	44
7/16"	23485 6	1/2"-13	2-1/8"	11/16"	1-3/8"	64
1/2"	23490 0	1/2"-13	2-1/8"	11/16"	1-3/8"	75
9/16"	23495 5	9/16"-12	2-3/8"	3/4"	1-3/8"	106
5/8"	23500 6	9/16"-12	2-3/8"	3/4"	1-3/8"	106
3/4"	23505 1	5/8"-11	2-3/4"	7/8"	1-5/8"	153
7/8"	23510 5	3/4"-10	3-1/4"	1"	1-7/8"	237.5
1"	23515 0	3/4"-10	3-5/8"	1-1/8"	2"	272.5
1-1/8"	23520 4	3/4"-10	3-13/16"	1-1/4"	2-1/4"	325
1-1/4"	23525 9	7/8"-9	4-3/8"	1-11/32"	2-1/2"	441
1-1/2"	23535 8	7/8"-9	5-1/8"	1-11/16"	2-3/4"	550



NOTE: Hex Nuts are imported – Domestic Nuts are available, price on application.

1



2



3



## RECOMMENDED APPLICATION FOR CHICAGO DROP FORGED WIRE ROPE CLIPS

Clip Size Inches	Minimum No. of Clips	Amount of Rope to Turn Back in Inches	Torque in Ft. Lbs.
1/8"	2	3-1/4"	4.5
3/16"	2	3-3/4"	7.5
1/4"	2	4-3/4"	15
5/16"	2	5-1/4"	30
3/8"	2	6-1/2"	45
7/16"	2	7"	65
1/2"	3	11-1/2"	65
9/16"	3	12"	95
5/8"	3	12"	95
3/4"	4	18"	130
7/8"	4	19"	225
1"	5	26"	225
1-1/8"	6	34"	225
1-1/4"	7	44"	360
1-1/2"	8	54"	360

1. The correct way to attach wire rope clips is illustrated above. Apply the first clip one base width from the dead end of the wire rope. The base or saddle should bear on the live end of the rope – U-bolt on the short end. Tighten nuts firmly.

2. Attach second clip as close to loop as possible. Tighten nuts but not firmly.

3. Attach balance of clips spaced equally between first two clips. Tighten all nuts completely. Apply initial load – inspect nuts and retighten. Inspect all clips periodically.

The number of clips shown is based on using right regular or Lang lay wire rope, 6x19 class or 6x37 class, fibre core IWRC, IPS or XIPS. The number of clips shown also applies to right regular lay wire rope, 8x19 class and 18x7 class, fibre core, IPS or XIPS, sizes 1-1/2-inch and smaller.

If Seale construction or similar large outer wire type construction in the 6x19 class is to be used for sizes 1-inch and larger, add one additional clip. For other classes or wire rope not mentioned, it may be necessary to add additional clips to the number shown. If more clips are used than shown, amount of rope turn back should be increased proportionately.



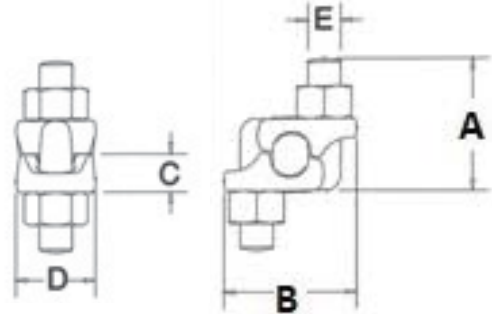
# CHICAGO GRIP CLIP

- Product Identification Codes (PIC Code), product size, and "CHF" are forged into each base.
- Meets performance requirements of federal specification FF-C-450, Type 3, Class 1.
- Chicago grip clips have an 80% efficiency rating when proper applications instructions followed.
- Forged with a single piece design and used in pairs with heavy duty nuts.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements.



Size	Min. No. of Clips	Rope Turn Back (in.)	Torque (ft/lbs)
5/16"	2	5	30
3/8"	2	5.5	45

Size	Part No.	A	B	C	D	E	Weight Per 100 (lbs)
5/16"	71820 2	1.41	1.84	0.41	1.09	0.38	28
3/8"	71823 3	1.72	2.70	0.50	1.13	0.40	40



## CHICAGO GRIP CLIP APPLICATION INSTRUCTIONS

- Match the same Grip Clip Size to the Wire Rope Size
- Do Not mismatch with other manufacturers wire rope clips
- Do not use on plastic coated ropes

Efficiency ratings for wire rope terminations are based upon the minimum breaking strength of wire rope. The efficiency rating of a properly prepared termination of clip sizes 5/16" or 3/8" is 80%.

### Application Information

1. Refer to table above in for application instructions. Turn back specified amount of rope from loop or thimble. Apply first clip one base width from dead end of wire rope. Use torque wrench to tighten nuts evenly, alternating from one nut to the other of the same clip until reaching the recommended torque. (See Figure 1)
2. Apply the second Grip Clip as near the loop or thimble as possible. Turn nuts to firm and then use torque wrench to tighten nuts on the clip evenly, alternating from one nut to the other on the second clip making sure that the recommended torque is met. (See Figure 2)
3. Apply first load to test the assembly. The load should be of equal to or greater weight than loads expected in use. Follow up applying the load with using a torque wrench to again check that the nuts are torqued to the recommended values in the above table.
4. As with all good rigging practice, the wire rope termination should be inspected periodically for wear, abuse and general adequacy.

WARNING

- Read and understand instructions prior to usage
- Failure to read, understand, and follow instructions may lead to death or serious injury.
- Apply first load to test assembly. This load should be greater than or equal to the weight of expected loads.



Figure 1



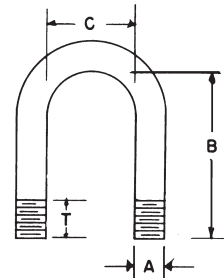
Figure 2

## MALLEABLE WIRE ROPE CLIPS

Clips supplied with self-colored, galvanized or hot galvanized finish. U-bolts for clips are available with or without nuts — price on application. Some sizes available in Stainless Steel. See page 41. Meets Performance Requirements of Federal Specification FF-C-450, Type 1, Class 2.



Rope Size	Self-Colored	Galvanized	Hot Galvanized	U-Bolt Dimensions				Weight Per 100
	Part No.	Part No.	Part No.	A	B	C	T	
3/32"	23005 6	23155 8	N.A.	10-24	3/4"	19/64"	1/2"	3.7
1/8"	23010 0	23160 2	N.A.	1/4"-20	15/16"	5/16"	5/8"	6.5
3/16"	23015 5	23165 7	N.A.	1/4"-20	15/16"	5/16"	5/8"	6.8
1/4"	23020 9	23170 1	23320 0	5/16"-18	1-5/32"	3/8"	3/4"	12.2
5/16"	23025 4	23175 6	23325 5	5/16"-18	1-5/32"	3/8"	3/4"	12.2
3/8"	23030 8	23180 0	23330 9	3/8"-16	1-1/2"	1/2"	1"	18.5
7/16"	23035 3	23185 5	23335 4	3/8"-16	1-1/2"	1/2"	1"	24
1/2"	23040 7	23190 9	23340 8	7/16"-14	1-13/16"	9/16"	1-1/8"	33.3
9/16"	23045 2	23195 4	23345 3	1/2"-13	2-1/8"	11/16"	1-3/8"	51.5
5/8"	23050 6	23200 5	23350 7	1/2"-13	2-1/8"	11/16"	1-3/8"	55.9
3/4"	23055 1	23205 0	23355 2	9/16"-12	2-11/16"	3/4"	1-5/8"	80.8
7/8"	23060 5	23210 4	23360 6	5/8"-11	3-1/4"	1-1/8"	1-7/8"	140
1"	23065 0	23215 9	23365 1	5/8"-11	3-1/4"	1-1/8"	1-7/8"	150
1-1/8"	23070 4	23220 3	N.A.	3/4"-10	4-3/8"	1-5/16"	2-1/2"	263
1-1/4"	23075 9	23225 8	N.A.	3/4"-10	4-3/8"	1-5/16"	2-1/2"	300
1-3/8"	23080 3	23230 2	N.A.	7/8"-9	5-1/8"	1-11/16"	2-3/4"	441
1-1/2"	23085 8	23235 7	N.A.	7/8"-9	5-1/8"	1-11/16"	2-3/4"	488
1-3/4"	23095 7	23245 6	N.A.	1"-8	6-1/4"	2-1/16"	3-3/4"	899.5
2"	23100 8	23250 0	N.A.	1"-8	7-1/4"	2-1/2"	4"	1285



NOTE: Hex Nuts are imported. Domestic Nuts are available, price on application.

Should be used only in light duty applications