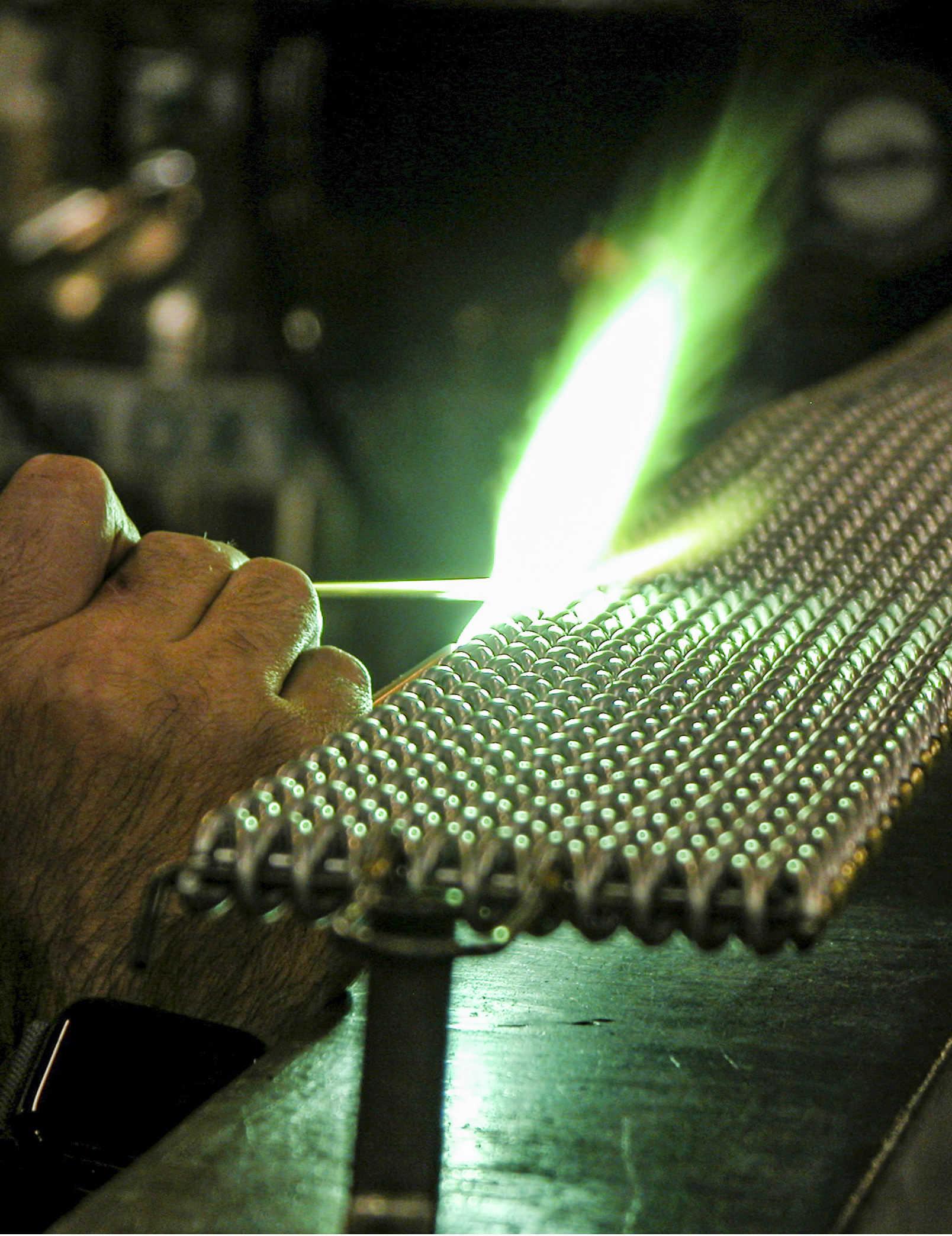


# WIRE MESH SLINGS

Widely used in metalworking shops and steel warehouses where loads are abrasive, hot or tend to cut web slings.

## Features and Benefits

### Promotes Safety

- Steel construction resists abrasion and cutting.
- Each sling is permanently stamped with capacity and serial number.
- Grips contour of the load.
- Each sling is proof-tested and certified.

### Saves Money

- Grips load firmly without stretching - reduces load damage.
- Resists abrasion and cutting for greater sling life.
- Low stretch and wide-bearing area distributes load to help avoid damage.
- The slings are repairable.
- Alloy steel end fittings are zinc plated for long life.
- Wire mesh is galvanized to resist corrosion.

### Saves Time

- Width of mesh helps control and balance load.
- End fittings accommodate most large crane hooks.

### Environmental Considerations

- Wire mesh slings shall not be used at temperatures above 550°F.
- Store in a clean, dry area.

### *Roughneck* Wire Mesh Sling Construction - 10 Gage Standard

Alloy steel end fittings are zinc plated. Mesh is 10 gage galvanized high tensile steel (12 gage upon request).
**Optional:** Type 304 stainless steel mesh is available for use in corrosive environments.

## HOW TO ORDER WIRE MESH SLINGS

**6** – Mesh Width in inches

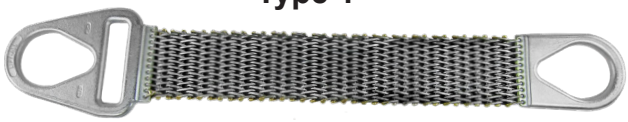
**T1** – Type 1 (Triangle/Choker)
**T2** – Type 2 (Triangle/Triangle)

**10** – Wire Gage Construction (**10**ga. or **12**ga.)

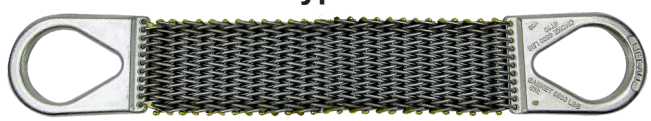
**X** – ‘X’

**10** – Sling Length in feet
Use pull to pull length

**Type 1**



**Type 2**



* **⚠ WARNING** Do not edge load. Full width of mesh must contact load.

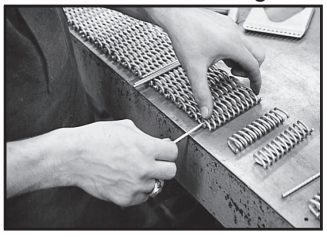
# WIRE MESH SLINGS

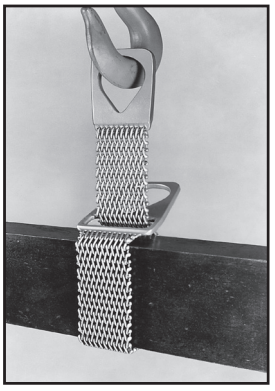
| Wire Mesh Width (in.) | Rated Capacity* (lbs.) | | |
|---|---|---|---|
| | Vertical | Choker | Basket |
| **10 Gage – Heavy Duty** | | | |
| **2** | 2,300 | 2,300 | 4,600 |
| **3** | 3,500 | 3,500 | 7,000 |
| **4** | 4,800 | 4,800 | 9,600 |
| **6** | 7,200 | 7,200 | 14,400 |
| **8** | 9,600 | 9,600 | 19,200 |
| **10** | 12,000 | 12,000 | 24,000 |
| **12** | 14,400 | 14,400 | 28,800 |
| **14** | 16,800 | 16,800 | 33,600 |
| **16** | 19,200 | 19,200 | 38,400 |
| **18** | 21,600 | 21,600 | 43,200 |
| **20** | 24,000 | 24,000 | 48,000 |
| **12 Gage – Medium Duty** | | | |
| **2** | 1,600 | 1,600 | 3,200 |
| **3** | 2,400 | 2,400 | 4,800 |
| **4** | 3,200 | 3,200 | 6,400 |
| **6** | 4,800 | 4,800 | 9,600 |
| **8** | 6,400 | 6,400 | 12,800 |
| **10** | 8,000 | 8,000 | 16,000 |
| **12** | 9,600 | 9,600 | 19,200 |

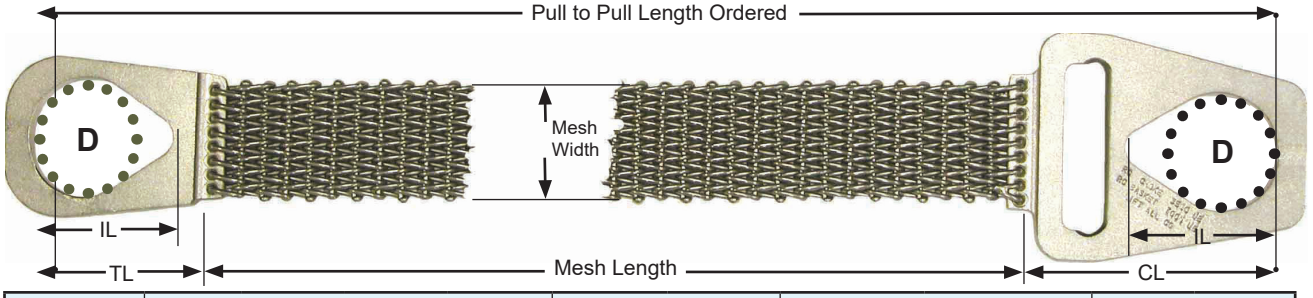
**NOTE:** The choker fitting must not be positioned against a load edge or directly on the triangle fitting.

Under normal usage, wire mesh slings will eventually need repairs. *Lift-All* can perform this service and re-certify all sling brands at a relatively low cost. Wire mesh slings that are repaired are guaranteed to meet or exceed original specifications. Five *Lift-All* factories are strategically located in the U.S. to ensure prompt service. Wire mesh slings should be removed from service and/or repaired under the following conditions:

- A broken weld or brazed joint along the sling edge.
- A broken wire in any part of the mesh.
- Reduction in wire diameter of 25% due to abrasion or 15% due to corrosion.
- Lack of flexibility due to distortion of the mesh.
- Visible distortion or wear of either end fitting.
- Cracked end fitting.








| Nom. Mesh Width (in.) | Terminal Dimensions (in.) | | | | Terminal Thickness (in.) | | Approx. Weight of 3-ft. (lbs.) Type 1 Slings | | Mesh Weight (Per ft. in lbs.) | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MW** | **D** | **IL** | **TL** | **CL** | **10-GA** | **12-GA** | **10-GA** | **12-GA** | **10-GA** | **12-GA** |
| **2**<br>**3** | 2.00<br>2.25 | 3.00<br>3.38 | 3.88<br>4.38 | 5.63<br>6.25 | 1/2<br>1/2 | 1/2<br>1/2 | 6<br>8 | 5<br>8 | 1.3<br>1.9 | 1.1<br>1.8 |
| **4**<br>**6** | 3.00<br>3.50 | 4.00<br>4.50 | 5.00<br>5.63 | 6.75<br>7.75 | 1/2<br>1/2 | 1/2<br>1/2 | 10<br>16 | 10<br>14 | 2.5<br>3.9 | 2.3<br>3.4 |
| **8**<br>**10** | 4.50<br>4.75 | 6.00<br>6.25 | 7.50<br>8.00 | 9.00<br>10.88 | 1/2<br>1/2 | 1/2<br>1/2 | 22<br>28 | 21<br>26 | 5.1<br>6.4 | 4.5<br>5.6 |
| **12**<br>**14** | 5.00<br>5.00 | 6.50<br>6.50 | 8.63<br>8.75 | 11.38<br>12.75 | 1/2<br>1/2 | 1/2<br>1/2 | 34<br>40 | 32<br>37 | 7.6<br>8.9 | 6.8<br>7.9 |
| **16**<br>**18** | 5.25<br>5.50 | 7.00<br>7.50 | 9.13<br>9.75 | 14.13<br>15.75 | 3/4<br>3/4 | 1/2<br>1/2 | 57<br>67 | 38<br>44 | 10<br>11 | 9.0<br>10 |
| **20** | 5.75 | 7.75 | 10.13 | 17.00 | 3/4 | 1/2 | 77 | 51 | 13 | 11 |

* **⚠ WARNING** Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°. Refer to Effect of Angle chart in General Information section.

# CHAIN MESH SLINGS

**Specialty slings for rugged applications**

## Features and Benefits

### Promotes Safety

- Each sling is permanently stamped with capacity and serial number for traceability.
- Steel construction resists abrasion and cutting.
- Each sling proof-tested and certified.

### Saves Time

- Width of mesh helps to balance and control loads.
- End fittings accommodate most large crane hooks.

### Saves Money

- Alloy steel end fittings coupled with G100 chain resist abrasion and cutting for greater sling life.
- Repairable.
- Sling flexibility allows fast and easy connection to load.
- Low stretch and wide-bearing area distributes load to help avoid damage.

## Inspection Criteria+ for *Roughneck* Chain Mesh Slings

Remove sling from service if any of the following conditions are visible:

- Wear, nicks, cracks, breaks, gouges, stretch, bends or weld spatter on chain or attachments.
- Discoloration from excessive temperature.
- Chain links and attachments won't hinge freely with adjacent links.
- Visible distortion or deformation of fitting.
- 15% reduction of original cross-sectional area of metal at any point of either end fitting.
- Cracked end fitting.

### Environmental Considerations

- Rated capacities of chain mesh are reduced at temperatures above 400°F.
- Store in clean, dry area to avoid corrosive action.

## HOW TO ORDER CHAIN MESH SLINGS

**Example Order Code:**

**732 1 3 MX 10**

- **732** — Chain diameter in inches
- **1** = Type 1 (Triangle/Choker); **2** = Type 2 (Triangle/Triangle)
- **3** — Number of parts of chain. See chart below for availability
- **MX** — 'MX'
- **10** — Sling length in feet. Use pull to pull length

| Chain Size (in.) | Parts of Chain | Sling Width (in.) | Rated Capacity (lbs.)* | | |
|---|---|---|---|---|---|
| | | | Vertical | Choker | Basket |
| 7/32 | 3 | 1-1/2 | 5,000 | 5,000 | 10,000 |
| | 4 | 2 | 6,700 | 6,700 | 13,400 |
| | 5 | 2-1/2 | 8,400 | 8,400 | 16,800 |
| | 6 | 3 | 10,000 | 10,000 | 20,000 |
| 9/32 | 3 | 2-1/8 | 8,400 | 8,400 | 16,800 |
| | 4 | 2-3/4 | 11,000 | 11,000 | 22,000 |
| | 5 | 3-3/8 | 14,000 | 14,000 | 28,000 |
| | 6 | 4 | 16,800 | 16,800 | 33,600 |
| 3/8 | 3 | 3-1/4 | 17,000 | - | 34,000 |
| | 4 | 4-3/8 | 22,700 | - | 45,400 |
| | 5 | 5-3/8 | 28,400 | - | 56,800 |
| | 6 | 6-1/2 | 34,000 | - | 68,000 |
| 1/2 | 2 | 3 | 19,200 | - | 38,400 |
| | 3 | 4-1/2 | 28,800 | - | 57,600 |
| | 4 | 6 | 38,400 | - | 76,800 |

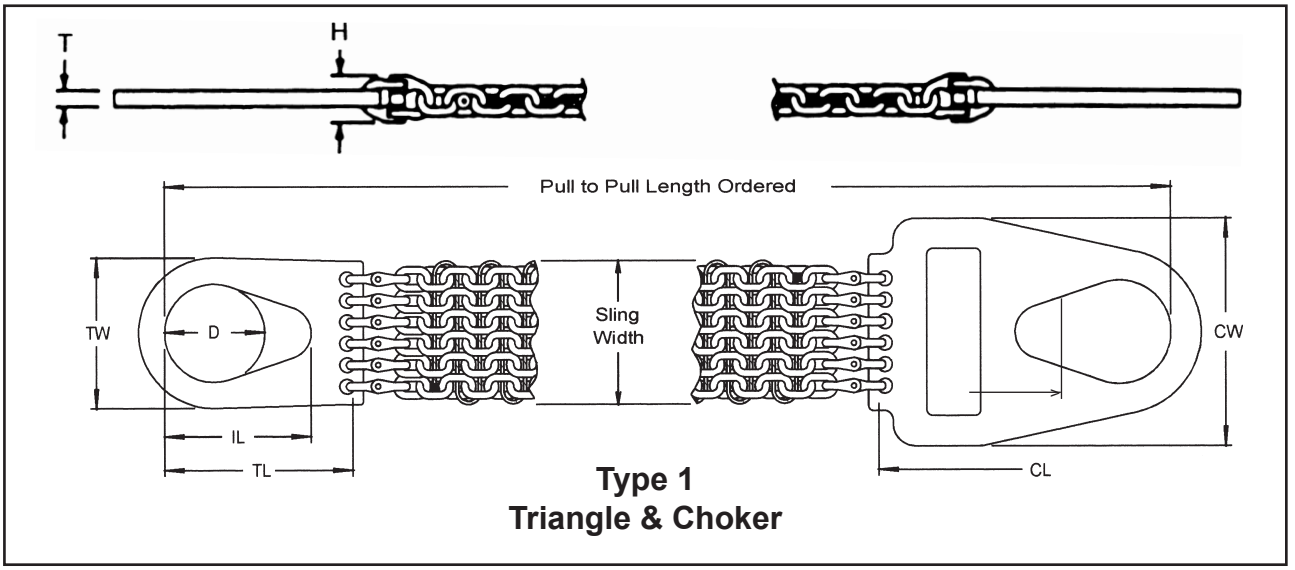
For more details, see inspection criteria at the end of the Chain section of this catalog.

+All sling users must read and understand the safety bulletin provided with each sling.

* **⚠ WARNING** Do not exceed rated capacities. Sling capacity decreases as the angle from horizontal decreases. Slings should not be used at angles of less than 30°. Refer to Effect of Angle chart in General Information section of this catalog.

# CHAIN MESH SLINGS





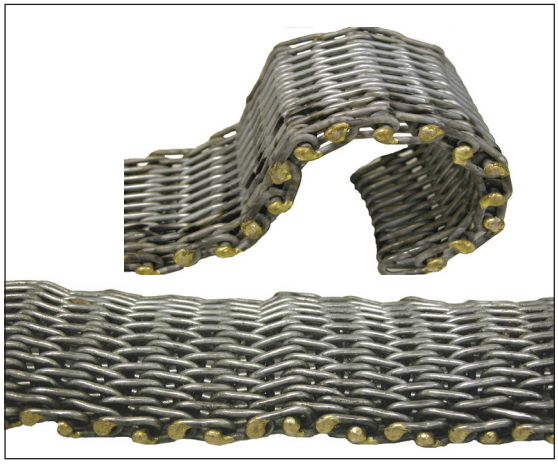

**Type 1**
**Triangle & Choker**

| Chain Size (in.) | Parts of Chain | Sling Width (in.) | Terminal Dimensions (in.) | | | | | | | | 5-ft. Type 2 Weight (lbs.) | Weight per ft. (lbs.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | D | IL | TL | TW | CL | CW | T | H | | |
| 7/32 | 3 | 1-1/2 | 2.75 | 4.13 | 6.75 | 4.75 | 9.00 | 7.13 | 0.38 | 1.25 | 10 | 1.3 |
| | 4 | 2.00 | 3.00 | 4.50 | 7.13 | 5.00 | 9.38 | 7.13 | 0.38 | 1.25 | 12 | 1.8 |
| | 5 | 2-1/2 | 3.50 | 5.25 | 8.00 | 5.50 | 10.13 | 7.75 | 0.38 | 1.25 | 14 | 2.2 |
| | 6 | 3.00 | 3.75 | 5.63 | 8.25 | 5.75 | 10.63 | 8.25 | 0.38 | 1.25 | 17 | 2.7 |
| 9/32 | 3 | 2-1/8 | 2.75 | 4.13 | 6.75 | 4.75 | 9.00 | 7.13 | 0.50 | 1.75 | 14 | 2.2 |
| | 4 | 2-3/4 | 3.00 | 4.50 | 7.13 | 5.00 | 9.38 | 7.25 | 0.50 | 1.75 | 18 | 3.0 |
| | 5 | 3-3/8 | 3.50 | 5.25 | 8.0 | 5.50 | 10.13 | 7.75 | 0.50 | 1.75 | 22 | 3.7 |
| | 6 | 4.00 | 3.75 | 5.63 | 8.25 | 5.75 | 10.63 | 8.25 | 0.50 | 1.75 | 26 | 4.5 |
| 3/8 | 3 | 3-1/4 | 3.50 | 5.25 | 6.88 | 5.00 | – | – | 0.75 | 2.25 | 30 | 4.4 |
| | 4 | 4-3/8 | 4.38 | 6.50 | 8.13 | 6.38 | – | – | 0.75 | 2.25 | 41 | 5.8 |
| | 5 | 5-3/8 | 4.38 | 6.50 | 8.38 | 7.38 | – | – | 0.75 | 2.25 | 55 | 7.3 |
| | 6 | 6-1/2 | 5.25 | 7.88 | 9.75 | 8.25 | – | – | 0.75 | 2.25 | 59 | 8.8 |
| 1/2 | 2 | 3.00 | 3.50 | 5.25 | 6.88 | 5.00 | – | – | 1.0 | 3.13 | 33 | 5.2 |
| | 3 | 4-1/2 | 4.38 | 6.50 | 8.38 | 6.38 | – | – | 1.0 | 3.13 | 50 | 7.7 |
| | 4 | 6.00 | 5.25 | 7.88 | 9.75 | 7.75 | – | – | 1.0 | 3.13 | 62 | 10 |

**Note:** Length tolerance ± 2 chain links so plane is maintained.

# INSPECTION CRITERIA FOR WIRE MESH SLINGS

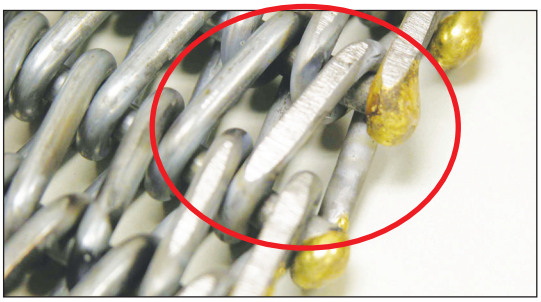
The following photos illustrate typical damage that occurs, indicating that the sling must be removed from service. Please review the Safety Bulletin provided with each sling. For inspection frequency requirements, see the General Information section of this catalog.



## OVERLOAD / UNEVEN LOADING

**WHAT TO LOOK FOR:** Mesh does not lie flat, appears distorted and/or will not bend easily.

**TO PREVENT:** Do not load in excess of rated capacity. Load edges must be straight, flat, and in contact with full width of mesh at bearing points.



## WEAR

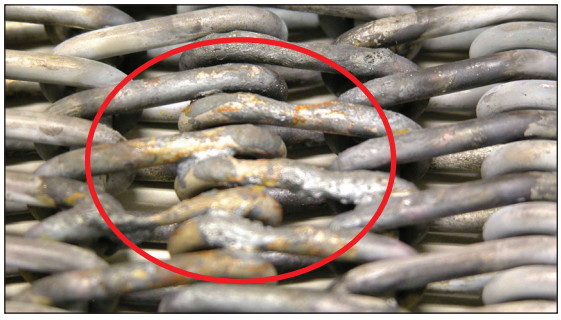
**WHAT TO LOOK FOR:** Flat areas on the individual wires. When wires have lost 25% or more of their original diameter, the sling must be taken out of service.

**TO PREVENT:** Do not drag sling on the ground and do not drag loads over slings. Protect high wear areas.

## CORROSION / HEAT DAMAGE

**WHAT TO LOOK FOR:** Areas of discoloration. Remove slings with wire diameter reduction of 15% or more. Slings exposed to temperatures of 550°F or more must be removed from service.

**TO PREVENT:** Hang slings for storage away from moisture. Do not use mesh slings above 550°F. Consider using stainless steel mesh.



## BROKEN WELD OR BRAISED JOINT

**WHAT TO LOOK FOR:** A crack or separation of the wire at the edge or in the body of the mesh.

**TO PREVENT:** Do not side load mesh. Tension on sling must be distributed evenly across the entire width of the mesh.

## DISTORTION OR WEAR OF END FITTINGS

**WHAT TO LOOK FOR:** Fittings that do not lie flat or have obvious areas of wear.

**TO PREVENT:** Never lift with fitting against a load edge or set load directly onto sling. Reduce wear by keeping loads within the rated capacity of the sling.