Wire Rope General Information

Wire Rope Slings - General Information

CAUTIONS

When preparing the load, protect against:

- Twists and kinks in the sling
- Damage to sling from sharp edges and corners
- Trapping sling between or under loads
- Damage due to load turning in basket hitch
- Overloading sling and excessive sling leg angles
- Loading sling out of plain/side loading
- Point loading of hooks
- Exposure to excessive temperatures
- General abuse

SAFE OPERATING PRACTICES

- Know the working load limit of the equipment and tackle being used. Never exceed this limit
- Determine the load weight before rigging it
- Determine how the load is to be connected to the lifting hook, as well as how the sling will grip or be attached to the load
- Inspect the sling before using it and destroy defective components. Discarded equipment may be accidently used by someone not aware of the hazards and defects
- Never carry out any rigging or hoisting operation when the weather conditions are such that hazards to personnel, property or the public are created
- Stand clear of the lift
- Do not jerk the load

CARE, MAINTENANCE & INSPECTION

When placing the sling into storage, the following should be considered:

- Remove dirt and other foreign materials
- Examine for broken wires, wear, abrasion, distortion, heat damage, knots and kinks
- Discard cracked, bent, worn or broken end fittings
- Examine for excessive stretch
- Assess corrosion (pitting or binding of wires)
- Assess sleeve damage or pulled eyes
- Lubricate to forestall rust
- Hang in clean, dry area and avoid entanglement
- Keep an accurate written and dated record of all conditions
- Immediately dispose of slings that are deemed unfit for use
- Each day before being used, a competent person must inspect the sling and attachments for damage or defects

  Additional inspections shall be performed at regular intervals based on:

  1) Frequency of sling use
  2) Severity of service conditions
  3) Nature of lifts
  4) Prior experience based on service life of slings used in similar circumstances.

  Damaged or defective slings shall be immediately removed from service

  As per ANSI Std. B30.9 & OSHA

ORDERING SLINGS

When placing an order for slings, please specify the following:

- Diameter of the rope – inches
- Sling length – Feet (indicating whether measurements are bearing point to bearing point, overall length or centre to centre of pin)
- Type of sling required
- Mechanically spliced or hand spliced
- Wire rope construction
- Attachments required
- Grommet slings should be ordered according to the finished diameter of the wire rope and the inside circumference

EXAMPLES OF REJECTION

Wire Rope General Information

Wire Rope Sling Reference Chart

Working Load Limits (Lbs)							
Flemish Eye Splice	Vertical Lift	Choker Hitch	Basket Hitch	2 Part Bridle Sling		4 Part Bridle Sling	
	90°	90° 	90° 				
Size (Inch)				60° 	45° 	60° 	45° 
1/4	1300	960	2600	2200	1820	4400	3600
5/16	2000	1480	4000	3400	2800	7000	5600
3/8	2800	2200	5800	5000	4000	10000	8200
7/16	3800	2800	7800	6800	5400	13400	11000
1/2	5000	3800	10200	8800	7200	17600	14200
9/16	6400	4800	12800	11000	9000	22000	18000
5/8	7800	5800	15600	13600	11000	28000	22000
3/4	11200	8200	22000	19400	15800	38000	32000
7/8	15200	11200	30000	26000	22000	52000	42000
1	19600	14400	40000	34000	28000	68000	56000
1-1/8	24000	18200	48000	42000	34000	84000	68000
1-1/4	30000	22000	60000	52000	42000	102000	84000
1-3/8	36000	26000	72000	62000	50000	124000	100000
1-1/2	42000	32000	84000	74000	60000	146000	120000
1-3/4	56000	42000	114000	98000	80000	196000	160000
2	74000	56000	146000	126000	104000	254000	208000

The working load limits above are calculated on a 5:1 design factor
The above chart is in accordance with ASME B30.9-2010 specifications

Wire Rope Sling Features and Benefits

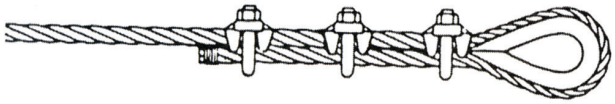
Wire Rope Slings

- MacMor wire rope slings are:
  - Flemish eye spliced (mechanically spliced)
  - Machine and die pressed with a domestic steel sleeve
  - Sleeves are painted to ensure slings have been inspected
  - Tagged using either steel or Etiflex™ synthetic sling tags
- Extra improved plow steel assures standards are met and/or exceeded
- Manufactured in accordance with ASME B30.9 2010 standards
- Quality components increase sling life
- Flexibility and strength with a high degree of abrasion resistance offers a good all-around lifting product
- Product sizes range from 1/4” to 1-1/2” wire rope slings

Wire Rope General Information

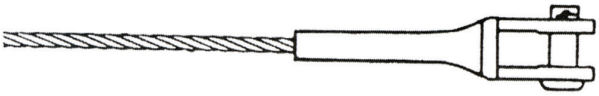
Wire Rope Configurations

U-BOLT CLIPS

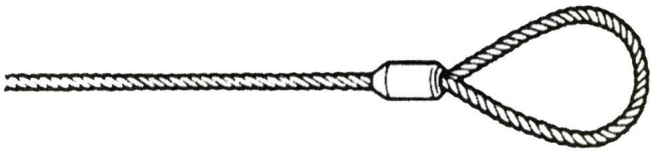


MECHANICALLY SPLICED THIMBLE

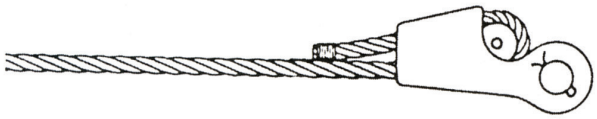
SWAGED SOCKET



MECHANICALLY SPLICED SOFT EYE

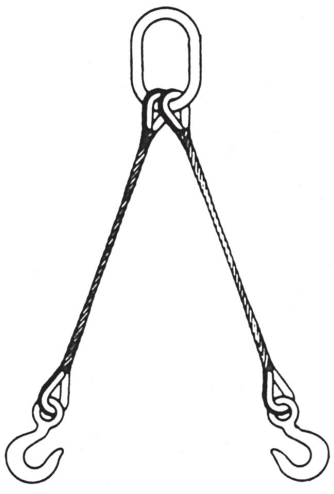


WEDGE SOCKET

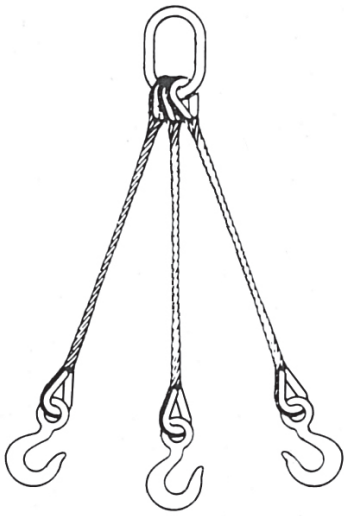


ZINC SPELTER SOCKET

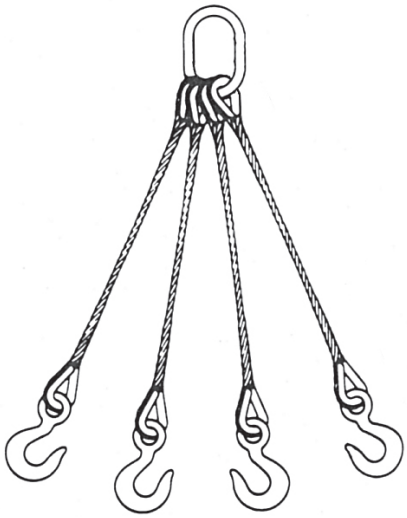
2 PART BRIDLE SLINGS



3 PART BRIDLE SLINGS



4 PART BRIDLE SLINGS



Custom Slings and Cable Assemblies Available Upon Request

All Sling Hooks Should be Equipped with a Latch Kit