

WEBBING SLINGS





Introduction

- For temporary work-construction, painting and marine operations.
- Best choice for expensive loads, highly finished parts, fragile parts and delicate equipment.
- Preferred cause they are pliant, grip the load and do not mar the surface of the load.
- Caution must be taken when using on loads with sharp edges. Do not expose to high temperatures or chemicals.
- Choice of rope type and size depend on application, weight to be lifted and sling angles.





Primary Safety Factors

Size, weight and center of gravity

 Center of gravity is considered to be where the entire weight of the load my be. The crane hook must be directly above the center of gravity of the load. Variations may cause tilting, stress on legs and potentially losing the load.

Number and angle of legs

- As the angle decreases, the rated capacity of the sling decreases.
- The smaller the angle, the greater the stress on the sling leg.
- Heavier loads can be safely moved if the weight of the load is distributed among more sling legs.

Rated capacity

- Rated capacity of sling depends on type and size of sling and type of hitch.
- Manufacturers charts give ratings for new slings. Old slings must be used with more caution.
- Never exceed sling rated capacity.

History, care and usage

- Mishandling and misuse are the leading cause of accidents.
- Protect from sharp bends and edges.
- Insure the load is properly secured.
- Accurately determine weight and balance.
- Do not allow load to drag on the ground.

- Position hook directly over the load.
- Seat sling squarely in hook bowl.
- Take up slack slowly to avoid jerking.
- Check tension raise slowly and check for balance.
- Keep all personnel clear from lifting area.
- Always use tag lines

Formula for stress on Sling Legs







What are the differences between polypropylene, polyester, and nylon?

| L Z | POLYPROPYLENE | POLYESTER | NYLON | | | |
|--------------|---|---|---|--|--|--|
| the breakdov | Does not absorb water | Absorbs some water | Absorbs the most water | | | |
| | Dries faster | Dries slower | Dries quickly | | | |
| | 266°F / 130°C* | Variable but likely around 500°F / 260°C* | 490°F / 254°C* | | | |
| | Less UV resistant | More UV resistant | Somewhat UV resistant | | | |
| | Moderately resistant to stretching and shrinking | Resistant to stretching and shrinking, resists pilling | Greater stretchability, shrink resistant | | | |
| | Mildew resistant | Mildew resistant | Mildew resistant | | | |
| | Floats | Does not float | Does not float | | | |

A few examples below:



Lifting



Round Sling



Flat Slings



Flat Slings





Chart for Flat slings





Chart for Round slings

| Stock NO | Color Code | WLL (t) | SWL WLL(t) M CC | | | | | Double Multi-set SWL (t) | | | | | |
|--------------|---------------|------------|-----------------|-------|--------------|---------------|----------------|--------------------------|----------------|--------------|----------------|--------|-------|
| | | | ĩ | 1 | <7° | a>7° a<45° | a>45° a<60° | a<45° | a>45° a<60° | a<45° | a>45° a<60° | a<45° | a<45° |
| | | | | O | U | Ľ | 27 | | | ッノ | 50 | シノ | 50 |
| | | | | 8 | \mathbb{U} | Ľ | å | | à | \mathbb{N} | d D | \sim | d to |
| | | | M=1.0 | M=0.8 | M=2.0 | M=1.4 | M=1.0 | M=0.7 | M=0.5 | M=1.4 | M=1.12 | M=1.0 | M=0.8 |
| RS010 | Violet | 1.0 | 1.0 | 0.8 | 2.0 | 1.4 | 1.0 | 0.7 | 0.5 | 1.4 | 1.1 | 1.0 | 0.8 |
| RS020 | Green | 2.0 | 2.0 | 1.6 | 4.0 | 2.8 | 2.0 | 1.4 | 1.0 | 2.8 | 2.2 | 2.0 | 1.6 |
| RS030 | Yellow | 3.0 | 3.0 | 2.4 | 6.0 | 4.2 | 3.0 | 2.1 | 1.5 | 4.2 | 3.4 | 3.0 | 2.4 |
| RS040 | Grey | 4.0 | 4.0 | 3.2 | 8.0 | 5.6 | 4.0 | 2.8 | 2.0 | 5.6 | 4.5 | 4.0 | 3.2 |
| RS050 | Red | 5.0 | 5.0 | 4.0 | 10.0 | 7.0 | 5.0 | 3.5 | 2.5 | 7.0 | 5.6 | 5.0 | 4.0 |
| RS060 | Brown | 6.0 | 6.0 | 4.8 | 12.0 | 8.4 | 6.0 | 4.2 | 3.0 | 8.4 | 6.7 | 6.0 | 4.8 |
| RS080 | Blue | 8.0 | 8.0 | 6.4 | 16.0 | 11.2 | 8.0 | 5.6 | 4.0 | 11.2 | 9.0 | 8.0 | 6.4 |
| RS100 | Orange | 10.0 | 10.0 | 8.0 | 20.0 | 14.0 | 10.0 | 7.0 | 5.0 | 14.0 | 11.2 | 10.0 | 8.0 |
| RS150 | Orange | 15.0 | 15.0 | 12.0 | 30.0 | 21.0 | 15.0 | 10.5 | 7.5 | 21.0 | 16.8 | 15.0 | 12.0 |
| RS200 | Orange | 20.0 | 20.0 | 16.0 | 40.0 | 28.0 | 20.0 | 14.0 | 10.0 | 28.0 | 22.4 | 20.0 | 16.0 |
| RS300 | Orange | 30.0 | 30.0 | 24.0 | 60.0 | 42.0 | 30.0 | 21.0 | 15.0 | 42.0 | 33.6 | 30.0 | 24.0 |
| RS500 | Orange | 50.0 | 50.0 | 40.0 | 100.0 | 70.0 | 50.0 | 35.0 | 25.0 | 70.0 | 56.0 | 50.0 | 40.0 |
| RS800 | Orange | 80.0 | 80.0 | 64.0 | 160.0 | 112.0 | 80.0 | 56.0 | 40.0 | 112.0 | 89.6 | 80.0 | 64.0 |
| RST10 | Orange | 100.0 | 100.0 | 80.0 | 200.0 | 140.0 | 100.0 | 70.0 | 50.0 | 140.0 | 112.0 | 100.0 | 80.0 |

Inspecting Fiber Ropes

- Always inspect before use.
- Look and also run your hand over the surface for dry, brittle, scorched or discoloured fibers.
- Check interior should be clean with no powder build up.
- Scratch the surface and if the fibers come a part, this is a clear indication that it's suffered damage and should not be used.

The End

Please contact me, should you have any queries regarding this product.



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