

# Vital Web Sling Information

SYNTHETIC LIFTING SLINGS WEB SLINGS - Use where light weight, cost effective slings are required and where load must be protected from damage.

# ALL ALL WAY WEB SLINGS

- Utilize Gold Standard Webbing.
- Contain Red Core Safety Yarns.
- Offer Heavy duty, hot branded leather tags.
- Include caution labels and printed warnings with care, inspection and removal criteria.
- Meet or exceed current A.N.S.I and stringent OSHA requirements.

# PERFORMANCE CHARACTERISTICS OF WEBBING

**NYLON** - The most widely used synthetic web, is unaffected by grease and oil. Good chemical resistance to aldehydes, ethers, and strong alkalies; but not suitable with acids and bleaching agents or at temperatures in excess of 194 degrees F (90° C). Stretch at rated capacity is approximately 8-10%.

**POLYESTER -** Used mainly where acid conditions are present or minimum stretch is desired, polyester is unaffected by common acids and hot bleaching agents. Not suitable for use with concentrated sulfuric acids, alkaline or at a temperature in excess of 194 degrees F (90° C). Stretch at rated capacity is approximately 3% (untreated).

• A SPECIAL WEB DESERVES SPECIAL MENTION - All Way's Polyester "MONSTER EDGE" (PME) is a patented, Hi-Performance web product that has it all! Bi-Component edge yarns offer superior cut and abrasion resistance with low stretch and acid resistance. Specially treated PME outperforms competitive edge products in both edge wear and abrasion test. Be on the Leading Edge with All Way's PME!



35°

30°

1.743

2.000

\*\* Degraded by strong alkalies at elevated temperatures. For specific temperature, concentration and time factors, please consult All Way Sling



# **Calculating Load Factors**

When you lift a load with a leg or legs of a sling at an angle, you can calculate the load per leg and the slings rated capacity by using the following formula example:

- 1. Total Load is 1,000 lbs., divided by 2 legs = 500 lbs. (load per leg)
- 2. Suppose sling angle is 60°
- 3. Multiply 500 lbs. x 1.154 (load factor from table) = 577 lbs. (actual load per leg)

You will need a sling rated at 1154 lbs. in basket capacity to safely lift this 1,000 lb. load.

### **Inspection Frequency**

Three important factors need to be reviewed to determine your sling inspection frequency:

- Sling Usage: The more frequency a sling is used, the more often it requires inspection.
- Use Environment: The harsher the working environment the sling is used in, the more often it requires inspection.
- Sling Service Life: Base your conclusions on your previous experience in using slings.

The individual handling your slings should visually inspect all slings before each lift. Additional inspections should be made at least once a year by a qualified individual and permanent records should be kept. OSHA mandates that "Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use, where service conditions warrant."

### Replacement Guidelines

If you see damage such as the following listed below, remove slings (including round slings) immediately from service. Return them to service only when approved by a qualified individual. Following are the removal criteria established by ANSI B30.9:

- 1. Acid or caustic burns.
- 2. Melting or charring of any part of the sling
- 3. Holes, tears, cuts or snags
- 4. Broken or worn stitching in load-bearing splices.
- 5. Excessive abrasive wear.
- 6. Knots in any part of the sling.
- 7. Excessive pitting or corrosion, or cracked, distorted or broken fittings.
- 8. Other visible damage that causes doubt as to the strength of the sling.

In addition, All Way Sling USA recommends four other important reasons to remove slings from service:

- 1. If you see our Red Core warning yarns.
- 2. Distortion of the sling.
- 3. The sling has an identification tag that is in any way unreadable.
- 4. Anytime a sling is loaded beyond its rated capacity, for any reason.

While these standards are quite specific regarding reasons for removal, others require your good judgement and common sense. Critical areas to watch are wear to the body of the sling, the selvage edge of the webbing, and the condition of the eyes.

