**GUIDANCE ON SAFE POLYESTER WEB SLING USE**

**Inspection:**

Designate a qualified person to inspect slings each day before use for damage or defects.

This qualified person also performs additional periodic inspections where service conditions warrant, as determined on the basis of:

- Frequency of sling use,
- Severity of service conditions,
- Nature of lifts being made, and
- Experience gained during the service life of slings used in similar circumstances.

Make periodic inspections of synthetic web slings at intervals no greater than 12 months. A good guide to follow includes:

- Yearly for normal service use,
- Monthly to quarterly for severe service use, and
- As recommended by a qualified person for special and infrequent service use.

Make a thorough inspection of slings and attachments. Items to look for include:

- Missing or illegible sling identification,
- Acid or caustic burns,
- Melting or charring of any part of the sling,
- Holes, tears, cuts, or snags,
- Broken or worn stitching in load bearing splices,
- Excessive abrasive wear,
- Knots in any part of the sling,
- Discoloration and brittle or stiff areas on any part of the sling,
  Pitted, corroded, cracked, bent, twisted, gouged, or broken fittings, and
- Other conditions that cause doubt as to continued use of a sling.

Where any such damage or deterioration is present, remove the sling or attachment from service immediately.

**Repairing/Reconditioning:**

Do not use worn or damaged slings or attachments. Discard them.
- Do not repair cracked, broken, melted, or damaged webbing material,
- Do not repair load-bearing splices,
- Do not make any temporary repairs of synthetic webbings or fittings

**Operating practices:**

Do not use synthetic web slings with loads in excess of the rated load capacities described in the appropriate tables. Ensure that synthetic web slings have suitable characteristics for the type of load, hitch, and environment in which they will be used and that they are not used with loads in excess of the rated load capacities described in the appropriate tables. Consult the sling manufacturer or a qualified person for synthetic web slings not included in the tables. Follow other safe operating practices, including:

**Sling Selection**

For multiple-leg slings used with nonsymmetrical loads, ensure that an analysis by a qualified person is performed to prevent overloading of any leg,

Ensure that multiple-leg slings are selected according to specific angles given in the instructions. Ensure that operations at other angles are limited to rated loads of the next lower angle given in the table or calculated by a qualified person, and Ensure that the fitting is the proper shape and size to ensure that it is seated properly in the hook or lifting device.

**Cautions to Personnel**

Ensure that all portions of the human body are kept away from the areas between the sling and the load and between the sling and the crane or hoist hook,

Ensure that personnel never stand in line with or next to the legs of a sling that is under tension,

Ensure that personnel do not stand or pass under a suspended load,

Ensure that personnel do not ride the sling or the load, unless the load is specifically designed and tested for carrying personnel, and

Do not use synthetic webbing slings as bridles on suspended personnel platforms.

**Effects of Environment**

Store slings in an area where they will not be subjected to mechanical, chemical, or ultraviolet damage, or to extreme temperatures,

When slings are exposed to extreme temperatures, follow the guidance provided by the sling manufacturer or qualified person.

Consult the sling manufacturer for recommended inspection procedures when polyester webbing slings are extensively exposed to sunlight or ultraviolet light.

**Rigging Practices**

Ensure that slings are hitched in a manner providing control of the load.

Ensure that sharp edges in contact with slings are padded with material of sufficient strength to protect the sling,

Ensure that slings are shortened or adjusted only by methods approved by the sling manufacturer or a qualified person,

Ensure that, during lifting with or without a load, personnel are alert for possible snagging,

Ensure that, in a basket hitch, the load is balanced to prevent slippage,

When using a basket hitch, ensure that the legs of the sling contain or support the load from the sides, above the center of gravity, so that the load remains under control,

Do not drag slings on the floor or over abrasive surfaces,

Ensure that, in a choker hitch, the choke point is only on the sling body, never on a splice or fitting,

Ensure that, in a choker hitch, an angle of choke less than 120 degrees is not used without reducing the rated load,

Ensure that slings are not constricted, bunched, or pinched by the load, hook, or any fitting,

Ensure that the load applied to the hook is centered in the base (bowl) of the hook to prevent point loading on the hook, unless the hook is designed for point loading.

Ensure that an object in the eye of a sling is not wider than one-third the length of the eye,

Do not shorten or lengthen a sling by knotting or twisting.

Do not rest loads on the sling.

Do not pull a sling from under a load when the load is resting on the sling.

Do not allow shock loading, and

Avoid twisting and kinking.

**Proof testing:**

Before initial use, ensure that all synthetic webbing slings incorporating previously used or welded fittings and all repaired slings are proof tested by the manufacturer or a qualified person.

Other new synthetic webbing slings and fittings need not to be proof tested, although the employer may require proof testing in purchasing specifications.

**Environmental effects:**

Temperature

Do not allow polyester slings to be used in contact with objects or at temperatures in excess of 90 degrees C, or below minus 40 degrees C.

Sunlight & Ultraviolet

Long-term exposure to sunlight or ultraviolet radiation can affect the strength of synthetic webbing slings. Consult the sling manufacturer for proper retirement criteria for synthetic webbing slings subjected to long-term storage or use in sunlight.

Chemical

The strength of synthetic webbing slings can be degraded by chemically active environments. This includes exposure to chemicals in the form of solids, liquids, vapors or fumes.

Consult the sling manufacturer before using slings in chemically active environments.