We are contacting you in response to an inquiry that was directed to Lift-All regarding the cleaning of synthetic slings. We offer the following comments regarding the cleaning of synthetic slings:

**Cleaning Agents**

Slings must not be exposed to chemicals that are incompatible with the sling materials. Many of the material we utilize in the manufacture of our synthetic slings is substantially similar to the textiles used in making common clothing. The organic chemicals that are commonly used to clean clothing generally will be found to be compatible for use on Lift-All slings. Since clothes are often made from fabrics of polyester and nylon, these solvents have been specially developed to clean these materials without degrading them. Products of Aramid materials, including Technora® and Kevlar®, may also be cleaned using these solvents.

Regular laundry detergent is compatible with synthetic materials including nylon and polyester. For hard to clean stains, a carpet or upholstery cleaner like Resolve may be used if it is compatible with the materials such as polyester and nylon. [www.powerofresolve.com/products/carpet-products/stain-removers/upholstery-stain-remover/](http://www.powerofresolve.com/products/carpet-products/stain-removers/upholstery-stain-remover/)

Dry Cleaning solvents may also be used. Avoid the use of bleach - Nylon in particular, is negatively affected by most oxidizing agents. Chlorine, for example, will rapidly degrade nylon.

**Equipment and Processes**

The use of equipment or processes must be avoided if it disorients or mechanically damages any of the sling load bearing materials or exposes the sling to temperatures that exceed the noted limits.

**Cleaning Process**

- The light scrubbing of the webbing material is acceptable, as is the use of brushes, air hosing and vacuum cleaning to remove general gritty type dirt.
- To clean stains, using some form of brushing with the cleaning agent along with a water rinse should be suitable.
- Avoid using any equipment that tumbles a sling, as this disorients the yarn material.
- Avoid using high pressure water equipment on load bearing materials as suitable pressure limits have not been established.

**General Comments**

Regarding the use of high pressure washing equipment on synthetic slings; a pressure washer may be lightly used on non-load bearing materials (such as the covers of Roundslings), as long as the surface material does not start to exhibit any damage. The synthetic yarn materials did hold up well during sample exposure to pressure washing equipment that we performed. However, this method should be discontinued immediately if any form of fuzzing on the surface material becomes evident. Also, keep in mind that this method of cleaning can in some cases rapidly remove the color treatment dyes from the sling materials, and thus if color retention is important, you may wish to avoid use of this cleaning method. If a quick pass using a pressure washer does not remove the substance, then light scrubbing using a sponge application of warm detergent water may be your best bet.
General Comments (continued)

As multiple washings of webbing slings and roundslings has shown this practice to negatively impact product performance, users are now instructed to avoid using washing machines.

Drying Methods

- Hand drying is the preferred method to dry synthetic type slings.
- Roundslings should not be exposed to any drying process that would cause them to tumble during the drying process.
- TEMPERATURE LIMITS:
  - Nylon an polyester synthetic slings shall not be exposed to temperatures in excess of 200°F.
  - Aramid slings, including Keyflex Roundslings, shall not be exposed to temperatures in excess of 320°F.

We hope this information is helpful and fully addresses your quality-related inquiry. Please contact me if you have any further questions.

Sincerely,

Greg Babinchak
Manager of Technical Services