

**Title:** Synthetic Sling Use/Protection of Gear

**Target Audience:** All personnel who use synthetic slings

Rigging operations involving the **improper use of synthetic slings is a recurring problem that creates unnecessary risk** during weight handling operations. In the past two years, approximately **25 weight handling accidents** have been reported **where improper, inadequate, or no chafing material was used**. Recently, a contractor was performing an in-hull rigging evolution when a synthetic sling was likely cut on a sharp edge of the component being lifted/rigged. The event resulted in a dropped load and serious injury to a contractor employee. Synthetic slings are very susceptible to damage and can be easily cut if used improperly.

Listed to the right are several synthetic sling use requirements and considerations:



- Use synthetic slings **per** the **OEM** and **ASME B30.9** requirements.
- **Chafing protection must be used** where there is a possibility of slings being cut or otherwise damaged due to **sharp edges**, or configurations that could cause damage. Chafing protection material **shall be** of **sufficient thickness and strength** to prevent sling damage.
- Ensure the **rigging configuration is stable** and **SLINGS CANNOT SLIDE OFF THE CHAFING** protection material.
- Ensure sling **capacities are adequate** in the configuration used and consider the effects of sling angle stress when slings are used at angles other than vertical.
- **Recognize** that the edge need not be "razor" sharp to damage and cut the slings. **Compression** and **tension**, combined with a "moderate" edge and the **sling skipping** across the load edge, **can result in sling damage**.

- Remember, **SYNTHETIC SLINGS ARE UNFORGIVING IF USED IMPROPERLY!** Follow OEM requirements, and always use adequate chafing material to protect the rigging and load when rigging gear is subjected to hazards. Rigging gear wear protection devices should be selected for the specific conditions of the lift! And always **AVOID WORKING UNDER A SUSPENDED LOAD!**

**SAFETY**