



7.0 - Mechanical Considerations

- 7.1 Determine the weight of the load. The weight of the load shall be within the rated capacity of the sling.
- 7.2 Select a sling having suitable characteristics for the type of load, hitch and environment.
- 7.3 Slings shall not be loaded in excess of the rated capacity. Consideration shall be given to angle of lift which may affect the lifting capacity. Diameters of pins and edges also may affect the capacity of the lifting sling.
- 7.4 Slings used in a choker shall not be forced to tighten around the load by pounding with hammers or other objects. Choker hitches are the least effective way to use a sling based on capacity. Two chokers should be used to balance the load. One choker in the center of the load may create an unbalanced situation which could lead to an accident.
- 7.5 Slings used in a basket hitch must have the load balanced to prevent slippage and accidents.
- 7.6 Slings used with fittings shall be compatible with the fittings used. The lifting capacity shall be rated at the lower of the fitting or sling. Fitting openings shall be of the proper shape and size to assure that the sling will seat properly.
- 7.7 Slings shall be protected from cutting and edges. All protrusions and abrasive surfaces will be kept from contact with the sling. Where unavoidable situations develop padding shall be placed between the sling and the load. **The pin area of a shackle can cause synthetic slings to cut and placing synthetic slings on the pin should be avoided.**
- 7.8 Slings shall not be dragged on the floor or drawn across other surfaces which may damage the sling.
- 7.9 Slings shall not be twisted or tied in knots to shorten.
- 7.10 Slings shall not be pulled from under loads resting on the sling.
- 7.11 Do not drop objects on slings or run over them with vehicles.
- 7.12 Slings which are damaged shall not be used.
- 7.13 Sling hitches must provide control of the load.



Twin-Path® Slings

- 7.14 Portions of the human body shall be kept from between the sling and the load and from between the sling and any attachment to lifting devices such as hooks.
- 7.15 Personnel shall stand clear of suspended loads.
- 7.16 Personnel shall not ride on the sling or suspended loads.
- 7.17 Avoid snatch or shock loading.
- 7.18 Twisting and kinking the legs of the sling shall be avoided.
- 7.19 Load applied to the hook should be centered in the bowl of the hooks. Do not point load the hook.
- 7.20 During lifting with or without the load all personnel shall be alert for possible snagging.
- 7.21 The slings should contain or support the load from the sides above the center of gravity so that the load will not tilt when the load is lifted.
- 7.22 Slings shall be of the proper length so that the angle of the sling to the load does not reduce the rated capacity of the sling for a given angle.
- 7.23 Only legibly marked or labeled slings should be used. If the tag is not legible, or missing, the sling should not be used.
- 7.24 Keep labels or tags away from the load, the hook and the angle of choke.
- 7.25 Synthetic slings should be inspected each time before each lift.