

## **Sling Angle Information**

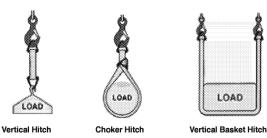
Sling Angle is the angle measured between the horizontal plane and the sling leg or body. When selecting a sling to carry a given load, it is important to consider the angle at which the sling is going to be used. The angle is very important and can have a dramatic effect on the rated capacity of the sling, due to the increase of tension caused by the angle.

As an example, one sling in a basket hitch or two slings attached to one crane hook are different applications involving different sling angles. The degree of the angle will determine how much the capacity will be reduced. To determine if a particular sling will have the capacity required, take the angle between the sling leg and the horizontal, then multiply the sling's rating by the factor provided in the accompanying table.

In the example below, how will see how the 1,000lb. Capacity of a sling used in a vertical basket hitch is reduced taking these factors into consideration.

LOAD

## 3 Basic Hitches:

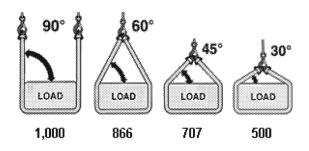


Angles in Degree	Sling Reduction Factor
90	1
85	.996
80	.985
75	.966
70	.940
65	.906
60	.866
55	.819
50	.766
45	.707
40	.643

.574

.500

## **Effects of Sling Angles:**



<b>Choker Hitch Angles:</b>	
	02
	135 deg 889
,	deg de9
	Load

Angle of Choke, deg	Rated Capacity, % [Note (1)]
Over 120	100
90-120	87
60-189	74
30-59	62
0-29	49

35

30

Rated loads for angles of choke less than 120 deg shall be determined by using the values above, the sling manufacturer, or a qualified person.

NOTE: (1) Percent of sling rated capacity in a choker hitch.