

Rope and Tackle Block Safety



1. Ropes used for lifelines must not be smaller than ½ inch in diameter. All ropes shall be cared for in such manner that its strength will be adequate should emergency arise.
2. No load shall be placed on any rope that approaches the breaking point of the rope. Providing a safety factor of 5 is recommended for all occasions where rope is used.
3. Rope must be selected of size, strength, and condition that will meet the requirements of each job.
4. A rope shall not be pulled over rough or sharp objects.
5. Ropes shall be kept free of acid, oil, soil, or grease.
6. Strain shall not be placed on a kinked rope.
7. When rope is used to raise or support a load, any sharp corners or edges shall be padded or protected.
8. In-service rope shall be inspected every 30 days if used under ordinary conditions and more often if used to support scaffolding. Inspection consists of an inch by inch examination for wear, abrasion, powdered fiber between strands, discoloration, and rotting. To inspect inner fibers, the rope should be untwisted in several places to see if the inner yarns are bright, clear, and unspotted.
9. No metal clamps or wires shall be used in making a loop or splice in a rope.
10. A knot can weaken a rope by 50% or more, depending on the kind of knot. This factor must be kept in mind when using rope or tackle.
11. The strength of tackle blocks is governed by the hooks with which they are equipped.
12. The hooks will usually start to open when 70% of the maximum designed load of the blocks is supplied.
13. Hooks that show signs of being over-stressed shall not be used, and no attempt shall be made to repair them by hammering them back into their original position. They shall be replaced with new hooks designed for that size block.
14. A load shall never be placed on the point of any hook.
15. A rope or fall line shall never be attached to a movable object, such as a truck, when its purpose is merely to hold a load or strain while other work is in progress.
16. An employee shall never stand or pass under a load suspended or being raised by rope, tackle, chain, or cable.