



## General Industry Terms

**Working Load Limit** - The maximum load in pounds (kilograms, etc.) , in straight tension, at which the product can safely be used.

**Proof Test** - designates the minimum tensile force which has been applied to the product under a constantly increasing force in direct tension.

**Minimum Break Force** - (Ultimate Load) - the minimum force at which the product during manufacture has been found by testing to break, by representative sampling, when a constantly increasing force is applied in direct tension.

**Overhead Lifting** - That process of lifting that would elevate a freely suspended load to such a position that dropping the load would present a possibility of bodily injury or property damage.

**Overload** - Any static or dynamic load in excess of the "Working Load Limit."

**Competent Person** - A designated person, qualified by knowledge and practical experience, and with the necessary instructions to enable the required examinations to be carried out.

**Elongation** - The amount (%) of stretch a product exhibits from the proof test to the breaking point, determined by representative sampling.

**Calibration** - A form of proof testing that insures the same measurement over a predetermined number of links in a running length of chain.

**Heat Treatment** - (Through Hardening) - Subjecting the product to a predetermined temperature for a predetermined period of time, and then quenching to at strength & hardness to the steel.

**Case Hardening** - A process of heat treating in an atmosphere of carbon which adds this carbon to the surface of the steel. The result is a product with a hard surface for improved wear.

**Hallmarking** - (Embossing) - The method of placing an identification mark on the product which identifies the grade and manufacturer.

**Design Factor** - The ratio of the Minimum Break Force to the Working Load Limit.

**Initial Inspection** - The inspection of a new product prior to being placed into service for the first time.

**Frequent Inspection** - The inspection of a product prior to each time it is being used.

**Periodic Inspection** - OSHA requires a written report of the inspection of slings and other products at least once every 12 months. Severe working conditions may require that these periodic inspections be performed more often.

**Smooth Faced Drum** - A drum with a plain, ungrooved surface.

**Grooved Drum** - A drum with a grooved surface.

**Drum** - A cylindrical flanged barrel (either of uniform or tapered diameter) on which rope is wound either for operation or storage. Its surface may be smooth or grooved.

**Reel** - The flanged spool on which wire rope or strand is wound for storage or shipment.

**Reeving** - A system in which a rope or chain travels around drums, sheaves or sprockets.

**Throat Opening** - The dimension describing the maximum hook opening to accept the load.

**Headroom** - The distance between the bottom of the beam flange and the lower hook or the distance between the bearing surfaces of the upper and lower hooks at the high hook position.

**Duty Cycle** - Expresses a powered device's capability, determined by load, rate and number of motor activations. Through heat generation, these factors limit the operating capability of the device.

**End Truck** - An assembly consisting of the frame and wheels which support a crane girder and allow movement along a runway - used in pairs.

**Load Chain** - The load bearing chain in a hoist.

**Hand Chain** - The hoist chain grasped by a person to apply the force required for the lifting or lowering of a load; also used to apply the operating force to move geared trolleys along a beam.

**Hoist** - A suspended machinery unit that is used for lifting and lowering a freely suspended (unguided) load; can be powered by hand, air or electricity; lifting medium either chain, wire rope or roller chain.

**Overhaul** - In the operation of a hand chain hoist, the length of hand chain moved through the hoist to lift the load on foot (ft).

**Chain Container** - A vessel attached to the hoist to store load chain not being used to support the load.

**Lever Operated Hoist** - Hand-operated hoist used to pull, lift, drag or stretch loads. Features easy, one-hand operating and control.