



**ASME.** American Society of Mechanical Engineers.

**ANSI.** American National Standards Institute.

**Brake.** A device used for retarding or stopping motion by friction or power means.

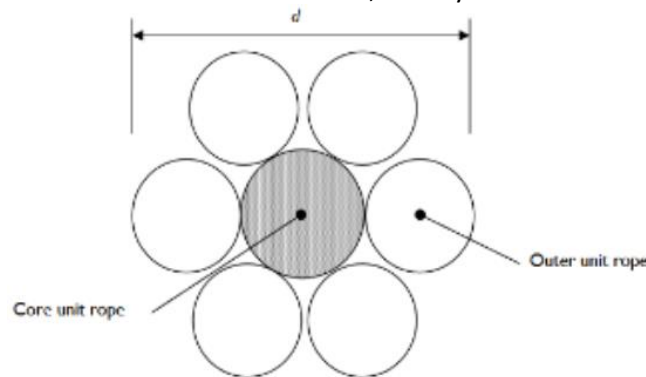
**Bridge.** The part of a crane consisting of girders, trucks, end ties, foot walks and drive mechanism which carries the trolley or trolleys.

**Bridge crane.** Crane with bridge mounted on tracks, which enables three-dimensional handling.

**Bridge travel.** Crane movement in a direction parallel to the crane runway.

**Bumper (buffer).** An energy-absorbing device for reducing impact when a moving crane or trolley reaches the end of its permitted travel; or when two moving cranes or trolleys come in contact.

**Cable Laid Sling.** Cable laid slings are formed from wire rope constructed of six unit ropes laid as outers over one core unit rope, with a termination at each end, usually in the form of a spliced eye, as shown.



**Cantilever Gantry Crane.** A gantry or semi-gantry crane in which the bridge girders or trusses extend transversely beyond the crane runway on one or both sides.

**Chain Sprocket or Drum Groove.** Grooved or notched wheel in which the hoist rope or chain is seated.

**Clearance.** The distance from any part of the crane to a point of the nearest obstruction.

**Competent Operators.** A person who has been selected and is qualified, by way of training, to operate or work with and around cranes, hoists and related equipment. This person is capable of identifying existing and potential hazards associated with the movement of equipment and material using a crane, hoist and related equipment. This person is also given the authorization to take prompt corrective measures to eliminate those hazards associated with the movement of equipment and material using a crane, hoist and/or related equipment.



**Crane.** A machine for lifting and lowering a load and moving it horizontally, with the hoisting mechanism an essential part of the machine. Cranes whether fixed or mobile are driven manually or by power.

**Crane Service.**

- **Normal Service.** Operating at less than 85 percent of rated load and not more than 10 lift cycles/hour except for isolated instances.
- **Heavy Service.** Operating at 85 to 100 percent of rated load or in excess of 10 lift cycles/hour as a regular specified procedure.
- **Severe Service.** Operating at normal or heavy service under abnormal operating conditions (i.e., extreme temperatures, corrosive atmospheres).

**Drum.** Cylindrical member around which rope/chains are wound for raising/lowering loads.

**Engineered Lift.** A test load that has been identified and evaluated for use in determining the lifting capacity of the hoisting equipment.

**Exposed.** Capable of being contacted inadvertently. Applied to hazardous objects not adequately guarded or isolated.

**Fail-Safe.** A provision designed to automatically stop or safely control any motion in which a malfunction occurs.

**Floor-operated Crane.** A crane which is pendant or nonconductive rope controlled by an operator on the floor or an independent platform.

**Gantry Crane.** Similar to an overhead crane, except that the bridge for carrying the trolley or trolleys is rigidly supported on two or more legs running on fixed rails or other runway.

**Hand-held hoist.** Lever operated roller chain hoist.

**Hoist.** Apparatus, which may be part of a crane, exerting a force for lifting or lowering.

**Hoist Chain.** The load bearing chain in a hoist.

**Limit Switch.** A switch which is operated by some part or motion of a power-driven machine or equipment to alter the electric circuit associated with the machine or equipment.

**Load.** The total superimposed weight on the load block or hook.

**Load Block.** The assembly of hook, shackle, swivel, bearing, sheaves, pins, and frame suspended by the hoisting rope and used to attach the load to the hoisting cable or chain.



**Main Line Disconnect.** The controller used to isolate power to the hoisting equipment.

**Mobile Crane.** A mobile crane is a cable-controlled crane mounted on crawlers or rubber-tired carriers or a hydraulic-powered crane with a telescoping boom mounted on truck-type carriers or as self-propelled models.

**Overhead Crane.** A crane with a movable bridge carrying a movable or fixed hoisting device that travels on an overhead fixed runway structure.

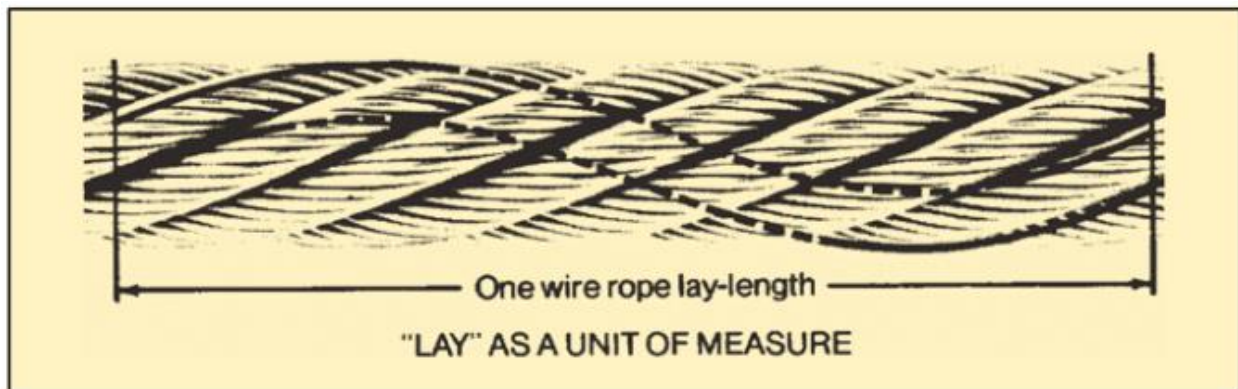
**Pendant.** Controls suspended from an electric hoist.

**Power-operated crane.** A crane whose mechanism is driven by electric, air, hydraulic or internal combustion.

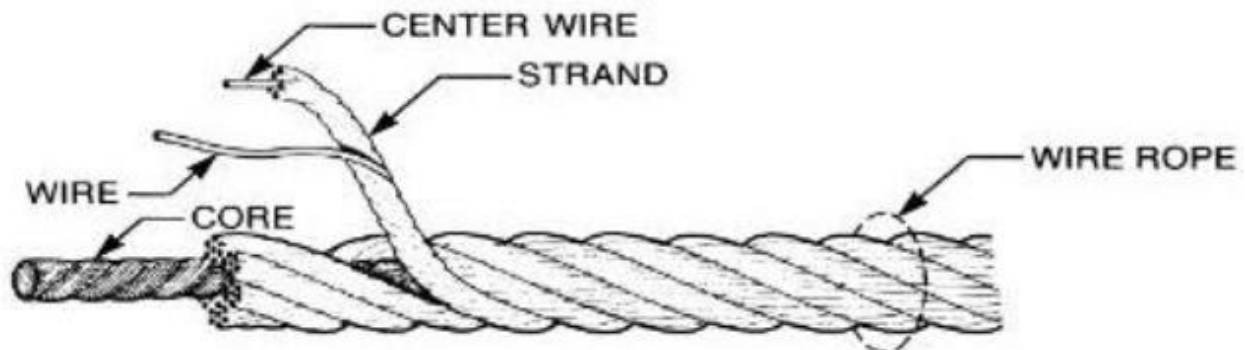
**Rated load.** The maximum load for which a crane or individual hoist is designed and built by the manufacturer and shown on the equipment nameplate(s).

**Rope.** Refers to wire rope, unless otherwise specified.

**Rope Lay.** Unit of measure for rope. A lay is the helix or spiral of the wires and strands in a rope.



**Rope Parts.**





**Rope Reeving.** A rope reeving system is a system in which wire rope travels around drums and sheaves, or pulleys, for the purpose of hoisting or hauling.

**Running Rope.** A rope that moves over sheaves or drums.

**Runway.** An assembly of rails, beams, girders, brackets, and framework on which the crane or trolley travels.

**Semi-gantry Crane.** A gantry crane with one end of the bridge rigidly supported on one or more legs that run along a fixed rail or runway, the other end of the bridge supported by a truck running on an elevated runway or rail.

**Side Pull.** That portion of the hoist pull acting horizontally when the hoist lines are not operated vertically.

**Sling.** Lifting devices such as chain, wire rope, metal mesh, fiber rope and synthetic web utilized to secure a load to be moved.

**Stop.** A device to limit travel of a trolley or crane bridge. The device normally is attached to a fixed structure and normally does not have energy absorbing ability.

**Tower Crane.** A vertical crane with a horizontal boom; The boom is balanced asymmetrically across the top of the tower. Its short arm carries a counterweight while the long arm carries the lifting gear.

**Trolley.** The unit which travels on the bridge rails and carries the hoisting mechanism.

**Trolley Travel.** The trolley movement at right angles to the crane runway.

**Truck.** The unit consisting of a frame, wheels, bearing and axels which supports the bridge girders or trolleys.

**Qualified Person.** Person who, by possession of a recognized degree, certificate or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his or her ability to solve or resolve problems relating to the subject matter, the work, or the project.

**Wall Crane.** A crane having a jib with or without trolley and supported from a sidewall or line of columns of a building. It is a traveling type and operates on a runway attached to the sidewall or columns.