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Shipbuilding and marine structures — Deck machinery — Vocabulary and symbols

Construction navale et structures maritimes — Auxiliaires de pont — Vocabulaire et symboles

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Foreword

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ISO 3828 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 4, *Outfitting and deck machinery*.

This third edition cancels and replaces the second edition (ISO 3828:1984), which has been technically revised.

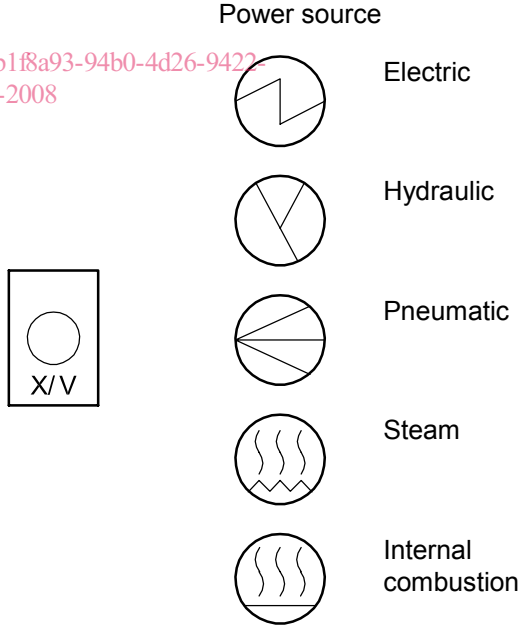
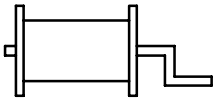
Shipbuilding and marine structures — Deck machinery — Vocabulary and symbols

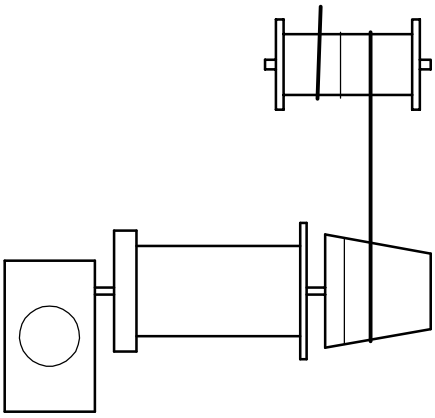
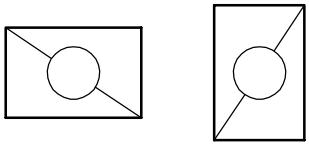
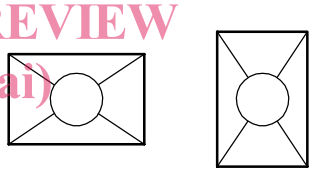
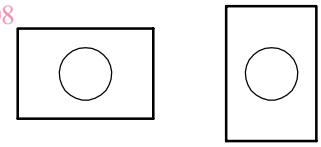
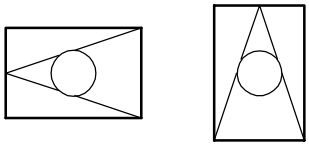
1 Scope

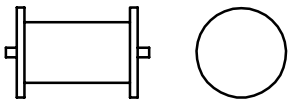
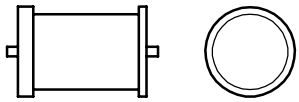
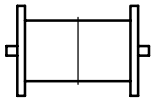
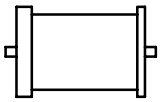
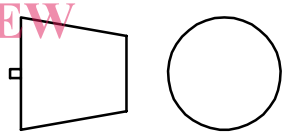
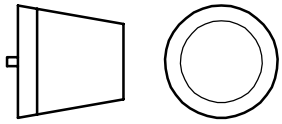
This International Standard establishes the vocabulary for the various terms in use relative to ship's deck machinery. It defines, in English, general terms used in connection with this subject, and includes specific terms associated with anchoring and mooring, cargo handling, towing, ancillary deck equipment and special deck machinery of working and oceanographic research ships.

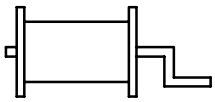
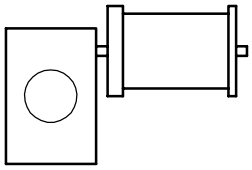
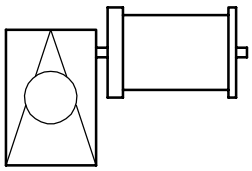
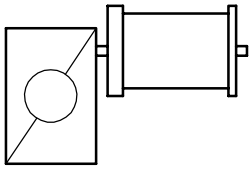
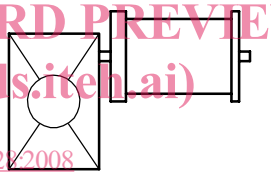
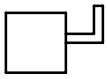
In the preparation of this vocabulary, care has been taken to standardize only suitable terms and definitions and not to perpetuate unsuitable terms because of their use in the past. The illustration given against the respective terms are purely diagrammatic and have been developed to provide for any series of combination of symbols, to represent the respective type of deck machinery.

2 General terms relating to deck machinery

Definition	Symbol
2.1 **prime mover** electric or hydraulic motor, steam engine or similar drive, acting directly on the deck machinery NOTE In a diesel electric drive, the electric motor is the prime mover.	 X: number of discrete speeds (1.2.3, etc.) or V: infinitely variable speed
2.2 **unpowered** without any means of powering, except for hand power	

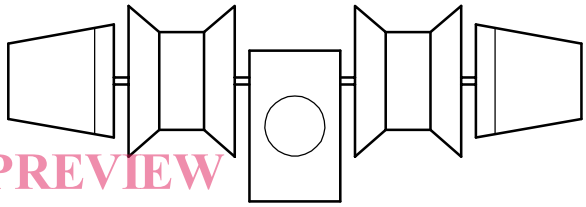
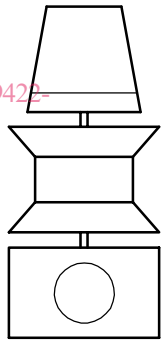
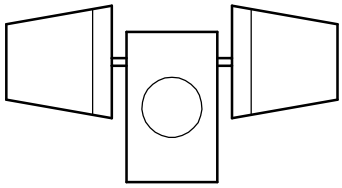
2.3 **externally powered** activated by means other than a directly connected prime mover	
2.4 **lightly powered** prime mover which is suitable only for operating the deck machinery in a light loaded condition EXAMPLE Reeling in of an untensioned rope, or topping an unloaded derrick.	Non-portable  Portable 
2.5 **fully powered** prime mover which is suitable for operating the deck machinery at its full designed load	
2.6 **non-automatic** controlled solely by hand	
2.7 **remote control** controlled from a position not integral with the machine NOTE This may be achieved by a radio-electric, electric, hydraulic, pneumatic or other link.	
2.8 **automatic** controlled without direct human intervention	

2.9 **drum** a cylinder normally flanged at both ends NOTE When used, the rope is fixed and stored on it.	Unpowered  Powered End view 
2.10 **split drum** drum normally split by a flange somewhere along its length NOTE The flange may or may not have a slot.	 Unpowered  Powered
2.11 **warping end** part similar to a drum but longitudinally concave shaped and fixed to the shaft end for hauling but not storing a rope	Unpowered  Powered 
2.12 **fleet angle** included angle between a rope and the vertical plane of the drum or warping end axial line, through the point at which the rope leaves the drum or warping end	

2.13 **winch** powered or unpowered machine, having one or more horizontally mounted drums and/or one or two warping end(s), on which a rope may be wound under load	 Unpowered  Fully powered  Fully powered  Lightly powered non-portable  Lightly powered portable
2.14 **controller** unit fitted with control levers, buttons, etc., as appropriate	
2.15 **nominal size** essential characteristic parameters of a machine's mechanical performance or an indication of its standing against some important technical index	
2.16 **drum load** maximum pull (kN) measured at the drum exit when the winch is hoisting or hauling in at the nominal speed with a rope wound on the drum in a single layer	
2.17 **holding load** maximum pull (kN) that can be maintained by a braking/locking system on a cable lifter or drum with a rope wound on it in a single layer	
2.18 **stalling load** maximum pull (kN) measured at the drum end when the drum ceases to rotate in the direction of applied driving torque, the prime mover being set for maximum torque and the rope being wound on the drum in a single layer	

2.19 **prototype test** test applied to the first machine of a new design	
2.20 **individual test** test applied to each machine produced by a manufacturer	
2.21 **type test** a test applied to one of a batch of machines of identical design from one manufacturer	

3 Terms relating to anchoring and mooring

Definition	Symbol
3.1 **windlass** machine designed to drop and hoist the anchor NOTE A windlass has one or more cable lifters mounted on a horizontal shaft, each being fitted with a brake. The cable lifters are capable of being declutched from the prime mover. One or two warping ends may also be fitted.	
3.2 **anchor capstan** power-driven cable lifter mounted on a vertical shaft NOTE The vertical shaft may be extended beyond the cable lifter to carry a warping end. The cable lifter is capable of being declutched from the prime mover, and in operation and use is similar to the windlass.	
3.3 **warping winch** winch used solely for warping, on which a rope may be wound under power but not stored	
3.4 **mooring winch** winch with the ability to hold and haul a tensioned mooring rope and having a capacity for rope storage, controlled solely by hand