

## SECTION B — PERFORMING OPERATIONS; TRANSPORTING

### B66 HOISTING; LIFTING; HAULING

**B66D CAPSTANS; WINCHES; TACKLES, e.g. PULLEY BLOCKS; HOISTS** (winding or unwinding ropes or cables for feeding or storage purposes B65H; rope or cable-winding or unwinding mechanisms for lifts B66B; hoisting devices specially adapted for suspended scaffolds E04G 3/32)

#### Note(s)

This subclass covers:

- rope, cable, or chain winding or unwinding mechanisms for moving all loads except lift cages, e.g. winches for dredges;
- braking or detent devices characterised by their application for retarding, or preventing, rotary movement of a winding drum or barrel.

<b>1/00</b>	<b>Rope, cable, or chain winding mechanisms; Capstans</b> (portable or mobile lifting or hauling appliances B66D 3/00) <b>[1, 2006.01]</b>	1/48	• • • automatic <b>[1, 2006.01]</b>
1/02	• Driving gear <b>[1, 2006.01]</b>	1/50	• • • • for maintaining predetermined rope, cable, or chain tension, e.g. in ropes or cables for towing craft, in chains for anchors; Warping or mooring winch-cable tension control <b>[1, 2006.01]</b>
1/04	• • manually operated <b>[1, 2006.01]</b>		
1/06	• • • Safety cranks for preventing unwanted crank rotation and subsequent lowering of the loads <b>[1, 2006.01]</b>	1/52	• • • • for varying rope or cable tension, e.g. when recovering craft from water <b>[1, 2006.01]</b>
1/08	• • incorporating fluid motors <b>[1, 2006.01]</b>	1/54	• Safety gear <b>[1, 2006.01]</b>
1/10	• • • Steam driving gear <b>[1, 2006.01]</b>	1/56	• • Adaptations of limit switches <b>[1, 2006.01]</b>
1/12	• • incorporating electric motors <b>[1, 2006.01]</b>	1/58	• • responsive to excess of load <b>[1, 2006.01]</b>
1/14	• • Power transmissions between power sources and drums or barrels <b>[1, 2006.01]</b>	1/60	• adapted for special purposes <b>[1, 2006.01]</b>
1/16	• • • the drums or barrels being freely rotatable (B66D 1/24 takes precedence) <b>[1, 2006.01]</b>	1/62	• • for actuating grab buckets (electrical control in cranes B66C 13/32) <b>[1, 2006.01]</b>
1/18	• • • • and the power being transmitted from a continuously-operating and irreversible prime mover <b>[1, 2006.01]</b>	1/64	• • • by means of a single rope or chain <b>[1, 2006.01]</b>
1/20	• • • Chain, belt, or friction drives, e.g. incorporating sheaves <b>[1, 2006.01]</b>	1/66	• • • driven by a single motor <b>[1, 2006.01]</b>
1/22	• • • Planetary or differential gearings (for actuating grab buckets B66D 1/70) <b>[1, 2006.01]</b>	1/68	• • • driven by two motors <b>[1, 2006.01]</b>
1/24	• • • for varying speed, or reversing direction of rotation, of drums or barrels <b>[1, 2006.01]</b>	1/70	• • • driven through planetary or differential gearings <b>[1, 2006.01]</b>
1/26	• having several drums or barrels <b>[1, 2006.01]</b>	1/72	• • Anchor-chain sprockets; Anchor capstans <b>[1, 2006.01]</b>
1/28	• Other constructional details <b>[1, 2006.01]</b>	1/74	• • Capstans <b>[1, 2006.01]</b>
1/30	• • Rope, cable, or chain drums or barrels <b>[1, 2006.01]</b>	1/76	• • • having auxiliary drums or barrels for storing the ropes or cables <b>[1, 2006.01]</b>
1/34	• • • Attachment of ropes or cables to drums or barrels <b>[1, 2006.01]</b>	1/78	• • • for shunting, e.g. in marshalling yards <b>[1, 2006.01]</b>
1/36	• • Guiding, or otherwise ensuring winding in an orderly manner, of ropes, cables, or chains <b>[1, 2006.01]</b>	1/80	• • for scrapers <b>[1, 2006.01]</b>
1/38	• • • by means of guides movable relative to drum or barrel (B66D 1/395 takes precedence) <b>[1, 3, 2006.01]</b>	1/82	• • for slewing and hoisting by means of derricks <b>[1, 2006.01]</b>
1/39	• • • by means of axially-movable drums or barrels (B66D 1/395 takes precedence) <b>[1, 3, 2006.01]</b>	<b>3/00</b>	<b>Portable or mobile lifting or hauling appliances [1, 2006.01]</b>
1/395	• • • by means effecting both guiding and tensioning of ropes, cables or chains <b>[3, 2006.01]</b>	3/02	• Manually-operated, e.g. lever-actuated, devices operating on ropes, cables, or chains for hauling in a mainly horizontal direction (B66D 3/04, B66D 3/12 take precedence) <b>[1, 2006.01]</b>
1/40	• • Control devices <b>[1, 2006.01]</b>	3/04	• Pulley blocks or like devices in which force is applied to a rope, cable or chain, which passes over one or more pulleys, e.g. to obtain mechanical advantage (sheaves, chain wheels, pulleys F16H 55/00) <b>[1, 4, 2006.01]</b>
1/42	• • • non-automatic <b>[1, 2006.01]</b>	3/06	• • with more than one pulley <b>[1, 2006.01]</b>
1/44	• • • • pneumatic or hydraulic <b>[1, 2006.01]</b>	3/08	• • • Arrangements of sheaves <b>[1, 2006.01]</b>
1/46	• • • • electric <b>[1, 2006.01]</b>		

## B66D

- 3/10
  - • • Applications of braking or detent devices [1, 2006.01]
- 3/12
  - Chain or like hand-operated tackles with or without power-transmission gearing between operating member and lifting rope, chain, or cable [1, 2006.01]
- 3/14
  - • lever-operated [1, 2006.01]
- 3/16
  - • operated by an endless chain passing over a pulley or a sprocket [1, 2006.01]
- 3/18
  - Power-operated hoists [1, 2006.01]
- 3/20
  - • with driving motor, e.g. electric motor, and drum or barrel contained in a common housing [1, 2006.01]
- 3/22
  - • • with variable-speed gearing between driving motor and drum or barrel [1, 2006.01]
- 3/24
  - • Applications of limit switches [1, 2006.01]
- 3/26
  - • Other details, e.g. housings [1, 2006.01]
- 5/00 **Braking or detent devices characterised by their application to lifting or hoisting gear, e.g. for controlling the lowering of loads** (for pulley blocks B66D 3/10) [1, 2006.01]
- 5/02
  - Crane, lift, hoist, or winch brakes operating on drums, barrels, or ropes [1, 2006.01]
- 5/04
  - • actuated by centrifugal force [1, 2006.01]
- 5/06
  - • with radial effect (B66D 5/20 takes precedence) [1, 2006.01]
- 5/08
  - • • embodying blocks or shoes [1, 2006.01]
- 5/10
  - • • embodying bands [1, 2006.01]
- 5/12
  - • with axial effect (B66D 5/22 takes precedence) [1, 2006.01]
- 5/14
  - • • embodying discs [1, 2006.01]
- 5/16
  - • for action on ropes or cables [1, 2006.01]
- 5/18
  - • for generating braking forces which are proportional to the loads suspended; Load-actuated brakes [1, 2006.01]
- 5/20
  - • • with radial effect [1, 2006.01]
- 5/22
  - • • with axial effect [1, 2006.01]
- 5/24
  - • Operating devices [1, 2006.01]
- 5/26
  - • • pneumatic or hydraulic [1, 2006.01]
- 5/28
  - • • specially adapted for winding gear, e.g. in mining hoists [1, 2006.01]
- 5/30
  - • • electrical [1, 2006.01]
- 5/32
  - Detent devices [1, 2006.01]
- 5/34
  - • having latches [1, 2006.01]