

Symbol	Typ	Titel
B	Sektion	PERFORMING OPERATIONS; TRANSPORTING
B66	Klasse	HOISTING; LIFTING; HAULING
B66C	Unterklasse	CRANES; LOAD-ENGAGING ELEMENTS OR DEVICES FOR CRANES, CAPSTANS, WINCHES, OR TACKLES (rope, cable, or chain winding mechanisms, braking or detent devices therefor B66D; specially adapted for nuclear reactors G21) <u>Load-engaging elements or devices attached to lifting, lowering, or hauling gear of cranes or adapted for connection therewith</u>
B66C 1/00	Hauptgruppe	Load-engaging elements or devices attached to lifting, lowering, or hauling gear of cranes, or adapted for connection therewith for transmitting forces to articles or groups of articles (fastening to cables or ropes F16G 11/00)
B66C 1/02	1-Punkt Untergruppe	. by suction means
B66C 1/04	1-Punkt Untergruppe	. by magnetic means
B66C 1/06	2-Punkt Untergruppe	. . electromagnetic
B66C 1/08	3-Punkt Untergruppe	. . . Circuits therefor (for electromagnets in general H01F 7/18)
B66C 1/10	1-Punkt Untergruppe	. by mechanical means
B66C 1/12	2-Punkt Untergruppe	. . Slings comprising chains, wires, ropes, or bands; Nets (article side grippers suspended by ropes or chains from crane hooks B66C 1/42)
B66C 1/14	3-Punkt Untergruppe	. . . Slings with hooks
B66C 1/16	3-Punkt Untergruppe	. . . Slings with load-engaging platforms or frameworks
B66C 1/18	3-Punkt Untergruppe	. . . Band-type slings
B66C 1/20	3-Punkt Untergruppe	. . . specially adapted for handling vehicles
B66C 1/22	2-Punkt Untergruppe	. . Rigid members, e.g. L-shaped members, with parts engaging the under surface of the loads; Crane hooks
B66C 1/24	3-Punkt Untergruppe	. . . Single members engaging the loads from one side only
B66C 1/26	4-Punkt Untergruppe	. . . . with means for releasing the loads
B66C 1/28	3-Punkt Untergruppe	. . . Duplicate, e.g. pivoted, members engaging the loads from two sides
B66C 1/30	4-Punkt Untergruppe	. . . . and also arranged to grip the sides of the loads
B66C 1/32	5-Punkt Untergruppe	. . . . . of piled or stacked articles
B66C 1/34	3-Punkt Untergruppe	. . . Crane hooks
B66C 1/36	4-Punkt Untergruppe	. . . . with means, e.g. spring-biased detents, for preventing inadvertent disengagement of loads
B66C 1/38	4-Punkt Untergruppe	. . . . adapted for automatic disengagement from loads on release of cable tensions (for parachutes B64D)
B66C 1/40	4-Punkt Untergruppe	. . . . formed or fitted with load-measuring or indicating devices
B66C 1/42	2-Punkt Untergruppe	. . Gripping members engaging only the external or internal surface of the articles (for handling or stripping castings or ingots during manufacture B22D 29/00)
B66C 1/44	3-Punkt Untergruppe	. . . and applying frictional forces
B66C 1/46	4-Punkt Untergruppe	. . . . by inflatable elements

Symbol	Typ	Titel
B66C 1/48	4-Punkt Untergruppe	. . . . to vertical edge portions of sheets, tubes, or like thin or thin-walled articles (internally-expanding grippers B66C 1/54)
B66C 1/54	4-Punkt Untergruppe	. . . . Internally-expanding grippers for handling hollow articles (B66C 1/46 takes precedence) [2]
B66C 1/56	5-Punkt Untergruppe	. . . . . for handling tubes
B66C 1/58	3-Punkt Untergruppe	. . . and deforming the articles, e.g. by using gripping members such as tongs or grapples
B66C 1/59	4-Punkt Untergruppe	. . . . Tongs for sacks [3]
B66C 1/62	2-Punkt Untergruppe	. . comprising article-engaging members of a shape complementary to that of the articles to be handled
B66C 1/64	3-Punkt Untergruppe	. . . for T- or I-section beams or girders
B66C 1/66	3-Punkt Untergruppe	. . . for engaging holes, recesses, or abutments on articles specially provided for facilitating handling thereof
B66C 1/68	1-Punkt Untergruppe	. mounted on, or guided by, jibs (jibs B66C 23/64)
B66C 3/00	Hauptgruppe	Load-engaging elements or devices attached to lifting or lowering gear of cranes or adapted for connection therewith and intended primarily for transmitting lifting forces to loose materials; Grabs (buckets or other containers B65D , e.g. pallets B65D 19/00; dredges equipped with grabs E02F)
B66C 3/02	1-Punkt Untergruppe	. Bucket grabs
B66C 3/04	1-Punkt Untergruppe	. Tine grabs
B66C 3/06	1-Punkt Untergruppe	. Grabs actuated by a single rope or chain
B66C 3/08	2-Punkt Untergruppe	. . and having tipping rings
B66C 3/10	2-Punkt Untergruppe	. . and having buckets opening automatically upon the grab being lowered on to the dump of material
B66C 3/12	1-Punkt Untergruppe	. Grabs actuated by two or more ropes
B66C 3/14	1-Punkt Untergruppe	. Grabs opened or closed by driving motors thereon
B66C 3/16	2-Punkt Untergruppe	. . by fluid motors
B66C 3/18	2-Punkt Untergruppe	. . by electric motors
B66C 3/20	1-Punkt Untergruppe	. mounted on, or guided by, jibs (jibs B66C 23/64)
		<u>Other common features; Details</u>
B66C 5/00	Hauptgruppe	Base-supporting structures with legs
B66C 5/02	1-Punkt Untergruppe	. Fixed or travelling bridges or gantries, i.e. elongated structures of inverted-L- or of inverted-U-shape
B66C 5/04	2-Punkt Untergruppe	. . with runways or tracks supported for movements relative to bridge or gantry
B66C 5/06	2-Punkt Untergruppe	. . with runways or tracks supported for lateral swinging movements
B66C 5/08	2-Punkt Untergruppe	. . with vertically-inclinable runways or tracks
B66C 5/10	1-Punkt Untergruppe	. Portals, i.e. essentially circular or square platforms with three or more legs specially adapted for supporting slewing jib cranes
B66C 6/00	Hauptgruppe	Girders, or track-supporting structures, specially adapted for cranes (base-supporting structures with legs B66C 5/00; girders in general E04C 3/02)
B66C 7/00	Hauptgruppe	Runways, tracks, or trackways for trolleys or cranes
B66C 7/02	1-Punkt Untergruppe	. for underhung trolleys or cranes
B66C 7/04	2-Punkt Untergruppe	. . Trackway suspension

Symbol	Typ	Titel
B66C 7/06	3-Punkt Untergruppe	. . . on supports constructed for easy erection, e.g. transportable
B66C 7/08	1-Punkt Untergruppe	. Constructional features of runway rails or rail mountings (of general application E01B)
B66C 7/10	1-Punkt Untergruppe	. Arrangements or devices for extending runways or tracks
B66C 7/12	1-Punkt Untergruppe	. Devices for changing direction of travel or for transferring from one runway to another; Crossings; Combinations of tracks of different gauges (transfer devices of general application E01B)
B66C 7/14	2-Punkt Untergruppe	. . Runway interlocking devices
B66C 7/16	1-Punkt Untergruppe	. Devices specially adapted for limiting trolley or crane travel; Arrangements of buffer-stops (buffer-stops of interest apart from this application B61K 7/18; limit-switch arrangements, limit circuits B66D 1/56)
B66C 9/00	Hauptgruppe	Travelling gear incorporated in, or fitted to, trolleys or cranes (for dredgers E02F)
B66C 9/02	1-Punkt Untergruppe	. for underhung trolleys or cranes
B66C 9/04	1-Punkt Untergruppe	. to facilitate negotiation of curves
B66C 9/06	1-Punkt Untergruppe	. for more than one rail gauge
B66C 9/08	1-Punkt Untergruppe	. Runners; Runner bearings (wheels for railbound vehicles B60B)
B66C 9/10	1-Punkt Untergruppe	. Undercarriages or bogies, e.g. end carriages, end bogies
B66C 9/12	2-Punkt Untergruppe	. . with load-distributing means for equalising wheel pressure
B66C 9/14	1-Punkt Untergruppe	. Trolley or crane travel drives (rope, cable, or chain drives for loads or trolleys B66C 11/16; control B66C 13/18)
B66C 9/16	1-Punkt Untergruppe	. with means for maintaining alignment between wheels and track
B66C 9/18	1-Punkt Untergruppe	. with means for locking trolleys or cranes to runways or tracks to prevent inadvertent movements
B66C 11/00	Hauptgruppe	Trolleys or crabs, e.g. operating above runways (runways, tracks, or trackways therefor B66C 7/00; winch mechanisms B66D)
B66C 11/02	1-Punkt Untergruppe	. with operating gear or operator's cabin suspended, or laterally offset, from runway or track
B66C 11/04	2-Punkt Untergruppe	. . Underhung trolleys (power-operated hoists with driving motor and drum or barrel contained in a common housing B66D 3/20)
B66C 11/06	3-Punkt Untergruppe	. . . running on monorails (overhead railway systems B61B)
B66C 11/08	1-Punkt Untergruppe	. with turntables
B66C 11/10	2-Punkt Untergruppe	. . equipped with jibs (jib cranes B66C 23/00)
B66C 11/12	1-Punkt Untergruppe	. having hoisting gear adapted to special load-engaging elements and not otherwise provided for
B66C 11/14	1-Punkt Untergruppe	. adapted to operate on crane or bridge structure of particular configuration, e.g. on reinforced concrete girders of rectangular cross-section
B66C 11/16	1-Punkt Untergruppe	. Rope, cable, or chain drives for trolleys; Combinations of such drives with hoisting gear
B66C 11/18	2-Punkt Untergruppe	. . comprising endless ropes or cables
B66C 11/20	2-Punkt Untergruppe	. . Arrangements, e.g. comprising differential gears, enabling simultaneous or selective operation of travelling and hoisting gear; Arrangements using the same rope or cable for both travelling and hoisting, e.g. in Temperley cranes (power transmissions between driving motors and winch drums B66D 1/14)
B66C 11/22	2-Punkt Untergruppe	. . actuated pneumatically or hydraulically
B66C 11/24	2-Punkt Untergruppe	. . with means for locating or sustaining the loads or trolleys in predetermined positions; Hay hoists

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B66C 11/26	3-Punkt Untergruppe	. . . Abutments; Stop blocks; End stops
B66C 13/00	Hauptgruppe	Other constructional features or details
B66C 13/02	1-Punkt Untergruppe	. Devices for facilitating retrieval of floating objects, e.g. for recovering craft from water (equipment for handling lifeboats or the like B63B 23/00; loading or unloading floating cargo using ship-based equipment B63B 27/36; salvaging, or hauling-out on slipways, waterborne vessels B63C; winding mechanism controls B66D 1/52)
B66C 13/04	1-Punkt Untergruppe	. Auxiliary devices for controlling movements of suspended loads, or for preventing cable slack
B66C 13/06	2-Punkt Untergruppe	. . for minimising or preventing longitudinal or transverse swinging of loads
B66C 13/08	2-Punkt Untergruppe	. . for depositing loads in desired attitudes or positions
B66C 13/10	2-Punkt Untergruppe	. . for preventing cable slack (control devices for rope, cable, or chain winding mechanisms, e.g. for controlling tension, B66D 1/40)
B66C 13/12	1-Punkt Untergruppe	. Arrangements of means for transmitting pneumatic, hydraulic, or electric power to movable parts or devices (devices of general interest specially adapted or mounted for storing and repeatedly paying-out and re-storing lengths of material B65H 75/34)
B66C 13/14	2-Punkt Untergruppe	. . to load-engaging elements or motors associated therewith
B66C 13/16	1-Punkt Untergruppe	. Applications of indicating, registering, or weighing devices (in crane hooks B66C 1/40; in safety gear B66C 15/00; weighing-apparatus G01G; remote indicating in general G08)
B66C 13/18	1-Punkt Untergruppe	. Control systems or devices (exclusively for rope, cable, or chain winding mechanisms B66D 1/40)
B66C 13/20	2-Punkt Untergruppe	. . for non-electric drives (transmitting control pulses B66C 13/40)
B66C 13/22	2-Punkt Untergruppe	. . for electric drives (transmitting control pulses B66C 13/40; systems or devices of general application H02P)
B66C 13/23	3-Punkt Untergruppe	. . . Circuits for controlling the lowering of the load
B66C 13/24	4-Punkt Untergruppe	. . . . by dc motors
B66C 13/26	4-Punkt Untergruppe	. . . . by ac motors
B66C 13/28	5-Punkt Untergruppe	. . . . . utilising regenerative braking for controlling descent of heavy loads and having means for preventing rotation of motor in the hoisting direction when load is released
B66C 13/30	3-Punkt Untergruppe	. . . Circuits for braking, traversing, or slewing motors
B66C 13/32	3-Punkt Untergruppe	. . . for operating grab-bucket hoists by means of one or more electric motors used both for hoisting and lowering the loads and for opening and closing the bucket jaws (other aspects of rope, cable, or chain winding mechanisms specially adapted for actuating grab buckets B66D 1/62)
B66C 13/34	4-Punkt Untergruppe	. . . . through differential or planetary gearing
B66C 13/36	4-Punkt Untergruppe	. . . . Single-motor-drive control systems
B66C 13/38	4-Punkt Untergruppe	. . . . Systems controlling independent motors
B66C 13/40	2-Punkt Untergruppe	. . Applications of devices for transmitting control pulses; Applications of remote control devices (control in general G05)
B66C 13/42	3-Punkt Untergruppe	. . . Hydraulic transmitters
B66C 13/44	3-Punkt Untergruppe	. . . Electrical transmitters
B66C 13/46	2-Punkt Untergruppe	. . Position indicators for suspended loads or for crane elements
B66C 13/48	2-Punkt Untergruppe	. . Automatic control of crane drives for producing a single or repeated working cycle; Programme control

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B66C 13/50	2-Punkt Untergruppe	. . Applications of limit circuits or of limit-switch arrangements (for winding mechanisms B66D 1/56)
B66C 13/52	1-Punkt Untergruppe	. Details of compartments for driving engines or motors or of operator's stands or cabins
B66C 13/54	2-Punkt Untergruppe	. . Operator's stands or cabins
B66C 13/56	3-Punkt Untergruppe	. . . Arrangements of handles or pedals
B66C 15/00	Hauptgruppe	Safety gear (for rope, cable, or chain winding mechanisms B66D 1/54)
B66C 15/02	1-Punkt Untergruppe	. for retaining load-engaging elements in the event of rope or cable breakage
B66C 15/04	1-Punkt Untergruppe	. for preventing collisions, e.g. between cranes or trolleys operating on the same track
B66C 15/06	1-Punkt Untergruppe	. Arrangements or use of warning devices [2]
		<u>Kinds or types of cranes (adaptations of girders or of track-supporting structures B66C 6/00) [2]</u>
B66C 17/00	Hauptgruppe	Overhead travelling cranes comprising one or more substantially-horizontal girders the ends of which are directly supported by wheels or rollers running on tracks carried by spaced supports
B66C 17/04	1-Punkt Untergruppe	. with lifting beams, e.g. slewable beams, carrying load-engaging elements, e.g. magnets, hooks (constructions of load-engaging elements B66C 1/00 , B66C 3/00)
B66C 17/06	1-Punkt Untergruppe	. specially adapted for particular purposes, e.g. in foundries, forges; combined with auxiliary apparatus serving particular purposes (B66C 17/04 takes precedence)
B66C 17/08	2-Punkt Untergruppe	. . for charging treatment chambers, e.g. furnaces, kilns, ovens (charging furnaces in general F27D 3/00)
B66C 17/10	2-Punkt Untergruppe	. . for transporting ladles
B66C 17/12	2-Punkt Untergruppe	. . for handling workpieces, e.g. ingots, which require to be supported temporarily within, or withdrawn from, a treatment chamber, e.g. tong cranes, soaking-pit cranes, stripper cranes (for manipulating ingots during forging B66C 17/18; grippers for handling or stripping castings or ingots during manufacture B22D 29/00)
B66C 17/14	3-Punkt Untergruppe	. . . Tong cranes with means for moving article-pushers relative to the tongs
B66C 17/16	3-Punkt Untergruppe	. . . Tong cranes with means for turning the tongs about a vertical axis
B66C 17/18	2-Punkt Untergruppe	. . for manipulating workpieces during forging operations (workpiece manipulators in forging machines B21J 13/10)
B66C 17/20	2-Punkt Untergruppe	. . for hoisting or lowering heavy load carriers, e.g. freight containers, railway wagons
B66C 17/22	2-Punkt Untergruppe	. . for hoisting or lowering locomotives
B66C 17/24	2-Punkt Untergruppe	. . for building ships on slipways
B66C 17/26	2-Punkt Untergruppe	. . combined with auxiliary apparatus, e.g. log saws, pushers for unloading vehicles, means for shunting railway vehicles
B66C 19/00	Hauptgruppe	Cranes comprising trolleys or crabs running on fixed or movable bridges or gantries (B66C 17/00 takes precedence; base-supporting structures with legs B66C 5/00; jib cranes B66C 23/00)
B66C 19/02	1-Punkt Untergruppe	. collapsible
B66C 21/00	Hauptgruppe	Cable cranes, i.e. comprising hoisting devices running on aerial cable-ways (rope or cable drives for trolleys, combinations of such drives with hoisting gear B66C 11/16; railway systems B61B; rope or cable winding mechanisms B66D 1/00)
B66C 21/02	1-Punkt Untergruppe	. with cable-ways supported on framework swingably connected to ground-engaging elements
B66C 21/04	1-Punkt Untergruppe	. with cable-ways supported at one end or both ends on bodily-movable framework, e.g. framework mounted on rail track
B66C 21/06	2-Punkt Untergruppe	. . with one end supported on a framework movable in a curved, e.g. circular, path and the other end by a column rotatable around a vertical axis

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B66C 21/08	1-Punkt Untergruppe	. Sag carriers or rope trolleys, suspended or not, e.g. fixed but offering clearance for travelling gear
B66C 21/10	2-Punkt Untergruppe	. . travelling
B66C 23/00	Hauptgruppe	Cranes comprising essentially a beam, boom, or triangular structure acting as a cantilever and mounted for translatory or swinging movements in vertical or horizontal planes or a combination of such movements, e.g. jib cranes, derricks, tower cranes (base-supporting structures with legs B66C 5/00)
B66C 23/02	1-Punkt Untergruppe	. with non-adjustable and non-inclinable jibs mounted solely for slewing movements
B66C 23/04	1-Punkt Untergruppe	. with jibs the effective length of which is variable in operation, e.g. longitudinally displaceable, extensible
B66C 23/06	1-Punkt Untergruppe	. with jibs mounted for jibbing or luffing movements
B66C 23/08	2-Punkt Untergruppe	. . and adapted to move the loads in predetermined paths
B66C 23/10	3-Punkt Untergruppe	. . . the paths being substantially horizontal; Level-luffing jib cranes
B66C 23/12	4-Punkt Untergruppe	. . . . with means for automatically varying the effective length of the hoisting rope or cable
B66C 23/14	4-Punkt Untergruppe	. . . . with means, e.g. pantograph arrangements, for varying jib configuration
B66C 23/16	1-Punkt Untergruppe	. with jibs supported by columns, e.g. towers having their lower end mounted for slewing movements
B66C 23/18	1-Punkt Untergruppe	. specially adapted for use in particular locations or for particular purposes (B66C 23/02 to B66C 23/16 , B66C 23/58 to B66C 23/88 take precedence) [5]
B66C 23/20	2-Punkt Untergruppe	. . with supporting couples provided by walls of buildings or like structures
B66C 23/22	3-Punkt Untergruppe	. . . Window cranes, i.e. adapted to be supported in window openings
B66C 23/24	3-Punkt Untergruppe	. . . Mobile wall cranes
B66C 23/26	2-Punkt Untergruppe	. . for use on building sites; constructed, e.g. with separable parts, to facilitate rapid assembly or dismantling, for operation at successively higher levels, for transport by road or rail (with supporting couples provided by walls or buildings B66C 23/20; mounted on vehicles B66C 23/36) [5]
B66C 23/28	3-Punkt Untergruppe	. . . constructed to operate at successively higher levels
B66C 23/30	4-Punkt Untergruppe	. . . . with frameworks composed of telescopic elements
B66C 23/32	4-Punkt Untergruppe	. . . . Self-hoisting cranes
B66C 23/34	3-Punkt Untergruppe	. . . Self-erecting cranes, i.e. with hoisting gear adapted for crane erection purposes
B66C 23/36	2-Punkt Untergruppe	. . mounted on road or rail vehicles; Manually-movable jib cranes for use in workshops; Floating cranes (vehicle or ship aspects B60 to B63)
B66C 23/38	3-Punkt Untergruppe	. . . with separate prime movers for crane and vehicle
B66C 23/40	3-Punkt Untergruppe	. . . with a single prime mover for both crane and vehicle
B66C 23/42	3-Punkt Untergruppe	. . . with jibs of adjustable configuration, e.g. foldable
B66C 23/44	3-Punkt Untergruppe	. . . Jib cranes adapted for attachment to standard vehicles, e.g. agricultural tractors
B66C 23/46	3-Punkt Untergruppe	. . . Mobile jib cranes with non-sleuable jibs
B66C 23/48	3-Punkt Untergruppe	. . . Manually-movable jib cranes for use in workshops
B66C 23/50	3-Punkt Untergruppe	. . . mounted on railway vehicles, e.g. breakdown cranes
B66C 23/52	3-Punkt Untergruppe	. . . Floating cranes (floating dredgers E02F)

Symbol	Typ	Titel
B66C 23/53	4-Punkt Untergruppe	. . . . including counterweight or means to compensate for list, trim, or skew of the vessel or platform (counterweights or supports for balancing lifting couples B66C 23/72; equipment to decrease unwanted vessel movements B63B 39/00) [4]
B66C 23/58	1-Punkt Untergruppe	. arranged to carry-out a desired sequence of operations automatically, e.g. hoisting followed by luffing and slewing
B66C 23/60	1-Punkt Untergruppe	. Derricks [3]
B66C 23/61	2-Punkt Untergruppe	. . with slewing force exerted at pivoted end [3]
B66C 23/62	1-Punkt Untergruppe	. Constructional features or details (of dredgers E02F)
B66C 23/64	2-Punkt Untergruppe	. . Jibs
B66C 23/66	3-Punkt Untergruppe	. . . Outer or upper end constructions
B66C 23/68	3-Punkt Untergruppe	. . . foldable or otherwise adjustable in configuration (B66C 23/687 , B66C 23/70 take precedence) [5]
B66C 23/683	4-Punkt Untergruppe	. . . . while in use [5]
B66C 23/687	3-Punkt Untergruppe	. . . telescopic [5]
B66C 23/69	4-Punkt Untergruppe	. . . . while in use [5]
B66C 23/693	5-Punkt Untergruppe	. . . . . extensible by fluid pressure [5]
B66C 23/697	4-Punkt Untergruppe	. . . . providing bearing means between sections [5]
B66C 23/70	3-Punkt Untergruppe	. . . assembled from separate sections to form jibs of various discrete lengths
B66C 23/72	2-Punkt Untergruppe	. . Counterweights or supports for balancing lifting couples
B66C 23/74	3-Punkt Untergruppe	. . . separate from jib
B66C 23/76	4-Punkt Untergruppe	. . . . and movable to take account of variations of load or of variations of length of jib
B66C 23/78	3-Punkt Untergruppe	. . . Supports, e.g. outriggers, for mobile cranes
B66C 23/80	4-Punkt Untergruppe	. . . . hydraulically actuated
B66C 23/82	2-Punkt Untergruppe	. . Luffing gear
B66C 23/84	2-Punkt Untergruppe	. . Slewing gear (anti-friction bearings F16C)
B66C 23/86	3-Punkt Untergruppe	. . . hydraulically actuated
B66C 23/88	1-Punkt Untergruppe	. Safety gear (for cranes in general B66C 15/00; for rope, cable, or chain winding mechanisms B66D 1/54)
B66C 23/90	2-Punkt Untergruppe	. . Devices for indicating or limiting lifting movement
B66C 23/92	2-Punkt Untergruppe	. . Snubbers or dash-pots for preventing backwards-swinging of jibs, e.g. in the event of cable or tackle breakage
B66C 23/94	2-Punkt Untergruppe	. . for limiting slewing movements