

Symbol	Typ	Titel
E	Sektion	SECTION E — FIXED CONSTRUCTIONS
E02	Klasse	HYDRAULIC ENGINEERING; FOUNDATIONS; SOIL-SHIFTING
E02F	Unterklasse	DREDGING; SOIL-SHIFTING (winning peat E21C 49/00)
E02F 1/00	Hauptgruppe	General working methods with dredgers or soil-shifting machines (methods for making embankments E02D 17/18; methods for mining E21C)
E02F 3/00	Hauptgruppe	Dredgers; Soil-shifting machines (for special purposes E02F 5/00; other machines or apparatus for mining E21C; tunnelling E21D)
E02F 3/02	1-Punkt Untergruppe	. hand-operated
E02F 3/04	1-Punkt Untergruppe	. mechanically-driven
E02F 3/06	2-Punkt Untergruppe	. . with digging screws
E02F 3/08	2-Punkt Untergruppe	. . with digging elements on an endless chain (conveyers B65G)
E02F 3/10	3-Punkt Untergruppe	. . . with tools that only loosen the material
E02F 3/12	3-Punkt Untergruppe	. . . Component parts
E02F 3/14	4-Punkt Untergruppe	. . . . Buckets; Chains; Guides for buckets or chains; Drives for chains
E02F 3/16	4-Punkt Untergruppe	. . . . Safety or control devices (safety devices in general F16P; controlling in general G05)
E02F 3/18	2-Punkt Untergruppe	. . with digging wheels turning round an axis
E02F 3/20	3-Punkt Untergruppe	. . . with tools that only loosen the material
E02F 3/22	3-Punkt Untergruppe	. . . Component parts
E02F 3/24	4-Punkt Untergruppe	. . . . Digging wheels; Digging elements of wheels; Drives for wheels
E02F 3/26	4-Punkt Untergruppe	. . . . Safety or control devices (safety devices in general F16P; controlling in general G05)
E02F 3/28	2-Punkt Untergruppe	. . with digging tools mounted on a dipper- or bucket-arm, e.g. dippers, buckets [4]
E02F 3/30	3-Punkt Untergruppe	. . . with a dipper-arm pivoted on a cantilever beam
E02F 3/32	4-Punkt Untergruppe	. . . . working downwardly and towards the machine, e.g. with backhoes
E02F 3/34	3-Punkt Untergruppe	. . . with bucket-arms directly pivoted on the frames of tractors or self-propelled machines [4]
E02F 3/342	4-Punkt Untergruppe	. . . . Buckets emptying overhead (E02F 3/348-E02F 3/358 take precedence) [4]
E02F 3/345	4-Punkt Untergruppe	. . . . Buckets emptying side-ways (E02F 3/348-E02F 3/358 take precedence) [4]
E02F 3/348	4-Punkt Untergruppe	. . . . Buckets emptying into a collecting or conveying device [4]
E02F 3/352	4-Punkt Untergruppe	. . . . Buckets movable along a fixed guide [4]
E02F 3/355	4-Punkt Untergruppe	. . . . Buckets connected to the rear end of a tractor [4]
E02F 3/358	4-Punkt Untergruppe	. . . . Bucket-arms pivoted on a turntable being part of a tractor frame [4]
E02F 3/36	3-Punkt Untergruppe	. . . Component parts
E02F 3/38	4-Punkt Untergruppe Cantilever beams; Dipper-arms; Bucket-arms [4]
E02F 3/39	5-Punkt Untergruppe with telescopic arms [4]

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E02F 3/40	4-Punkt Untergruppe Dippers; Buckets [4]
E02F 3/407	5-Punkt Untergruppe with ejecting device [4]
E02F 3/413	5-Punkt Untergruppe	. . . . . with grabbing device (grab equipment for cranes B66C) [4]
E02F 3/42	4-Punkt Untergruppe	. . . . Drives for dippers, buckets, dipper-arms or bucket-arms [4]
E02F 3/43	5-Punkt Untergruppe	. . . . . Control of dipper or bucket position; Control of sequence of drive operations [4]
E02F 3/46	2-Punkt Untergruppe	. . with reciprocating digging or scraping elements moved by cables or hoisting ropes [4]
E02F 3/47	3-Punkt Untergruppe	. . . with grab buckets (grab equipment for cranes B66C) [4]
E02F 3/48	3-Punkt Untergruppe	. . . Drag-lines
E02F 3/50	3-Punkt Untergruppe	. . . with buckets or other digging elements moved along a rigid guideway
E02F 3/52	3-Punkt Untergruppe	. . . Cableway excavators (cable cranes B66C)
E02F 3/54	3-Punkt Untergruppe	. . . Cable scrapers
E02F 3/56	4-Punkt Untergruppe	. . . . with hand-controlled scraper or other digging elements
E02F 3/58	3-Punkt Untergruppe	. . . Component parts
E02F 3/60	4-Punkt Untergruppe	. . . . Buckets, scrapers, or other digging elements
E02F 3/627	2-Punkt Untergruppe	. . Devices to connect beams or arms to a tractor or similar self-propelled machine [4]
E02F 3/633	3-Punkt Untergruppe	. . . Drives therefor [4]
E02F 3/64	2-Punkt Untergruppe	. . Bucket cars, i.e. having scraper bowls [4]
E02F 3/65	3-Punkt Untergruppe	. . . Component parts, e.g. drives, control devices [4]
E02F 3/76	2-Punkt Untergruppe	. . Graders, bulldozers, or the like with scraper plates or ploughshare-like elements (soil working A01B); Levelling devices [4]
E02F 3/78	3-Punkt Untergruppe	. . . with rotating digging elements
E02F 3/80	3-Punkt Untergruppe	. . . Component parts
E02F 3/815	4-Punkt Untergruppe	. . . . Blades; Levelling tools [4]
E02F 3/84	4-Punkt Untergruppe	. . . . Drives or control devices therefor
E02F 3/85	5-Punkt Untergruppe	. . . . . Applications of hydraulic or pneumatic systems
E02F 3/88	2-Punkt Untergruppe	. . with arrangements acting by a sucking or forcing effect, e.g. suction dredgers (pumps in general F04)
E02F 3/90	3-Punkt Untergruppe	. . . Component parts, e.g. drives, control devices
E02F 3/92	4-Punkt Untergruppe	. . . . Digging elements, e.g. suction heads
E02F 3/94	4-Punkt Untergruppe	. . . . Apparatus for separating stones from the dredged material
E02F 3/96	2-Punkt Untergruppe	. . with arrangements for alternate use of different digging elements
E02F 5/00	Hauptgruppe	Dredgers or soil-shifting machines for special purposes
E02F 5/02	1-Punkt Untergruppe	. for digging trenches or ditches (agricultural ploughs for working ridges A01B 13/02)
E02F 5/04	2-Punkt Untergruppe	. . with digging screws

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E02F 5/06	2-Punkt Untergruppe	. . with digging elements mounted on an endless chain
E02F 5/08	2-Punkt Untergruppe	. . with digging wheels turning round an axis
E02F 5/10	2-Punkt Untergruppe	. . with arrangements for reinforcing trenches or ditches; with arrangements for making or assembling conduits or for laying conduits or cables (laying pipes <u>per se</u> F16L 1/00; making pipes <u>in situ</u> F16L 1/038; laying electric cables <u>per se</u> H02G 1/06) [6]
E02F 5/12	2-Punkt Untergruppe	. . with equipment for back-filling trenches or ditches (E02F 5/10 takes precedence) [3]
E02F 5/14	2-Punkt Untergruppe	. . Component parts for trench excavators, e.g. indicating devices
E02F 5/16	1-Punkt Untergruppe	. Machines for digging other holes in the soil (earth drilling E21)
E02F 5/18	2-Punkt Untergruppe	. . for horizontal holes
E02F 5/20	2-Punkt Untergruppe	. . for vertical holes
E02F 5/22	1-Punkt Untergruppe	. for making embankments; for back-filling (in combination with trench excavators E02F 5/12)
E02F 5/24	2-Punkt Untergruppe	. . Depositing dredged material in mounds
E02F 5/26	2-Punkt Untergruppe	. . Combined conveying-bridges and dredgers
E02F 5/28	1-Punkt Untergruppe	. for cleaning watercourses or other waters
E02F 5/30	1-Punkt Untergruppe	. Auxiliary apparatus, e.g. for thawing, cracking, blowing-up, or other preparatory treatment of the soil
E02F 5/32	2-Punkt Untergruppe	. . Rippers [4]
E02F 7/00	Hauptgruppe	Equipment for conveying or separating excavated material (barges adapted for carrying-away material from floating dredgers B63B 35/28)
E02F 7/02	1-Punkt Untergruppe	. Conveying equipment mounted on a dredger (conveyers in general B65G)
E02F 7/04	1-Punkt Untergruppe	. Loading devices mounted on a dredger (loading devices in general B65G)
E02F 7/06	1-Punkt Untergruppe	. Delivery chutes or screening plants mounted on a dredger (separating equipment in general B03; delivery chutes in general B65G)
E02F 7/10	1-Punkt Untergruppe	. Pipe-lines for conveying excavated materials (pipes in general F16L; pipe-line systems F17D)
E02F 9/00	Hauptgruppe	Component parts of dredgers or soil-shifting machines, not restricted to one of the kinds covered by groups E02F 3/00-E02F 7/00 (laying-out or take-up devices for trailing electric cables B66C) [3]
E02F 9/02	1-Punkt Untergruppe	. Travelling gear (for motor vehicles B60B, B60G; undercarriages for locomotives or railroad cars B61F; track-laying vehicles B62D; for cranes B66C)
E02F 9/04	2-Punkt Untergruppe	. . Walking gears moving the dredger forward step-by-step
E02F 9/06	1-Punkt Untergruppe	. Floating substructures as supports
E02F 9/08	1-Punkt Untergruppe	. Superstructures; Supports for superstructures
E02F 9/10	2-Punkt Untergruppe	. . Supports for movable superstructures mounted on travelling or walking gears or on other superstructures
E02F 9/12	3-Punkt Untergruppe	. . . Slewing or traversing gears (roller and ball bearings F16C)
E02F 9/14	1-Punkt Untergruppe	. Booms; Cable suspensions
E02F 9/16	1-Punkt Untergruppe	. Cabins, platforms, or the like for the driver (for cranes B66C 13/54)
E02F 9/18	1-Punkt Untergruppe	. Counterweights

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E02F 9/20	1-Punkt Untergruppe	. Drives; Control devices (gearing in general F16H; controlling in general G05; electric multi-motor drives H02K, H02P)
E02F 9/22	2-Punkt Untergruppe	. . Hydraulic or pneumatic drives
E02F 9/24	1-Punkt Untergruppe	. Safety devices
E02F 9/26	1-Punkt Untergruppe	. Indicating devices
E02F 9/28	1-Punkt Untergruppe	. Small metalwork for digging elements, e.g. teeth