

## SECTION E — FIXED CONSTRUCTIONS

### E02 HYDRAULIC ENGINEERING; FOUNDATIONS; SOIL-SHIFTING

#### E02B HYDRAULIC ENGINEERING (ship-lifting E02C; dredging E02F)

##### Subclass index

METHODS AND EQUIPMENT IN GENERAL.....	1/00, 3/00
ARTIFICIAL WATER CANALS.....	5/00
BARRAGES OR WEIRS.....	7/00, 8/00
WATER-POWER PLANTS.....	9/00
DRAINAGE; IRRIGATION; CLEANING OF SURFACE OF OPEN WATER.....	11/00, 13/00, 15/00
ARTIFICIAL ISLANDS MOUNTED ON PILES OR LIKE SUPPORTS.....	17/00

<b>1/00 Equipment or apparatus for, or methods of, general hydraulic engineering</b>	5/06 • • Operating equipment in connection with canals (ship-lifting devices E02C)
1/02 • Hydraulic models	5/08 • Details, e.g. gates, screens
<b>3/00 Engineering work in connection with control or use of streams, rivers, coasts, or other marine sites (barrages or weirs E02B 7/00); Sealings or joints for engineering work in general</b>	<b>7/00 Barrages or weirs; Layout, construction, methods of, or devices for, making same</b> (for protecting banks, coasts, or harbours E02B 3/04; sealings or joints E02B 3/16; handling building or like materials for hydraulic engineering E02D 15/00; foundations in general E02D 27/00)
3/02 • Stream regulation, e.g. breaking up subaqueous rock, cleaning the beds of waterways, directing the water flow (dredging or scraping devices E02F)	7/02 • Fixed barrages
3/04 • Structures or apparatus for, or methods of, protecting banks, coasts, or harbours (sealings or joints E02B 3/16)	7/04 • • Dams across valleys
3/06 • • Moles; Piers; Quays; Quay walls; Groynes; Breakwaters	7/06 • • • Earth-fill dams; Rock-fill dams
3/08 • • • Structures of loose stones with or without piles (piles E02D 5/00)	7/08 • • • Wall dams
3/10 • • Dams; Dykes; Sluice ways or other structures for dykes, dams, or the like (making embankments or dams in general E02D 17/18)	7/10 • • • • Gravity dams, i.e. those in which the weight of the structure prevents overturning
3/12 • • Revetment of banks, dams, watercourses, or the like (of slopes in general E02D 17/20)	7/12 • • • • Arch dams
3/14 • • • Preformed blocks; Arrangements thereof	7/14 • • • • Buttress dams
3/16 • Sealings or joints (joints for foundation structures E02D 29/16; sealing joints not restricted to hydraulic engineering work E04B 1/68)	7/16 • Fixed weirs; Superstructures or flash-boards therefor
3/18 • Reclamation of land from water (drainage of soil E02B 11/00)	7/18 • • Siphon weirs
3/20 • Equipment for shipping on coasts, in harbours or on other fixed marine structures, e.g. bollards (tying-up, anchoring B63B 21/00, e.g. bollards for shipping B63B 21/06; buoys B63B 22/00) [5]	7/20 • Movable barrages; Lock gates
3/24 • • Mooring posts [5]	7/22 • • Stop log dams; Emergency gates
3/26 • • Fenders (fenders integral with waterborne vessels or specially adapted therefor B63B 59/02) [5]	7/24 • • Needle weirs
3/28 • • Fender piles [5]	7/26 • • Vertical-lift gates
<b>5/00 Artificial water canals</b> (for water-power plants E02B 9/02; irrigation of soil E02B 13/00)	7/28 • • • with sliding gates
5/02 • Making or lining canals	7/30 • • • with guide wheels or rollers for the gates
5/04 • Navigable canals	7/32 • • • Cylindrical or tubular gates
	7/34 • • • Flash-boards for vertical-lift gates
	7/36 • • • Elevating mechanisms for vertical-lift gates
	7/38 • • Rolling gates
	7/40 • • Swinging or turning gates
	7/42 • • • Gates of segmental or sector-like shape with horizontal axis
	7/44 • • • Hinged-leaf gates
	7/46 • • • Gates turning round a horizontal axis arranged midway of the flap
	7/48 • • • Roof or double shutter gates
	7/50 • • Floating gates
	7/52 • • Equipment preventing vibration of gates
	7/54 • • Sealings for gates

## E02B

- 8/00 Details of barrages or weirs** (cleaning or keeping clear the surface of open water E02B 15/00)
- 8/02 • Sediment base gates; Sand sluices; Structures for arresting waterborne material
- 8/04 • Valves, slides, or the like; Submerged sluice gates
- 8/06 • Spillways; Devices for dissipation of energy, e.g. for reducing eddies
- 8/08 • Fish passes; Passages for rafts or boats
- 9/00 Water-power plants; Layout, construction or equipment, methods of, or apparatus for, making same** (hydraulic motors F03B)
- 9/02 • Water-ways
- 9/04 • • Free-flow canals or flumes; Intakes (gratings or screens therefor E02B 5/08)
- 9/06 • • Pressure galleries or pressure conduits; Galleries specially adapted to house pressure conduits; Means specially adapted for use therewith, e.g. housings, valves, gates (driving inclined galleries E21D 9/02; valves in general F16K; conduits in general F16L) [6]
- 9/08 • Tide or wave power plants (water-pressure machines, tide or wave motors F03B)
- 11/00 Drainage of soil, e.g. for agricultural purposes**
- 11/02 • Drainage-device-laying apparatus, e.g. drainage ploughs
- 13/00 Irrigation ditches, i.e. gravity flow, open channel water distribution systems** (other distribution systems for watering or spraying gardens, fields, sports grounds, or the like A01G 25/00) [2]
- 13/02 • Closures for irrigation conduits

- 15/00 Cleaning or keeping clear the surface of open water; Apparatus therefor** (construction of ships or other waterborne vessels B63B, e.g. vessels specially adapted for collecting pollution from open water B63B 35/32; in swimming or splash baths or pools E04H 4/16) [5]
- 15/02 • from ice [5]
- 15/04 • Devices for cleaning or keeping clear the surface of open water from oil or like floating materials by separating or removing these materials (other treatment of water, waste water or sewage C02F; materials for treating liquid pollutants, e.g. oil, gasoline, fat, C09K 3/32)
- 15/06 • • Barriers therefor (E02B 15/08 takes precedence) [5]
- 15/08 • • Devices for reducing the polluted area without removing the material [5]
- 15/10 • • Devices for removing the material from the surface [5]
- 17/00 Artificial islands mounted on piles or like supports, e.g. platforms on raisable legs; Construction methods therefor** (fenders E02B 3/26; anchoring floating platforms B63B 21/00; floating platforms, e.g. anchored, B63B 35/44; independent underwater structures E02D 29/00) [5]
- 17/02 • placed by lowering the supporting construction to the bottom, e.g. with subsequent fixing thereto
- 17/04 • Equipment specially adapted for raising, lowering, or immobilising the working platform relative to the supporting construction (platform lifts in general B66F 7/00)
- 17/06 • • for immobilising, e.g. using wedges or clamping rings
- 17/08 • • for raising or lowering