E	Sektion	SECTION E — FIXED CONSTRUCTIONS
E01	Untersektion	BUILDING
E01	Klasse	CONSTRUCTION OF ROADS, RAILWAYS, OR BRIDGES (of tunnels E21D)
E01C	Unterklasse	CONSTRUCTION OF, OR SURFACES FOR, ROADS, SPORTS GROUNDS, OR THE LIKE; MACHINES OR AUXILIARY TOOLS FOR CONSTRUCTION OR REPAIR (forming road or like surfaces by compacting or grading snow or ice E01H)
E01C 1/00	Hauptgruppe	Design or layout of roads, e.g. for noise abatement, for gas absorption (design or layout of sports grounds A63C 19/00; design or layout of airfields $B64F$ )
E01C 1/02	1-Punkt Untergruppe	. Crossings, junctions, or interconnections between roads on the same level
E01C 1/04	1-Punkt Untergruppe	. Road crossings on different levels; Interconnections between roads on different levels
		Structure of roads, playgrounds, sports grounds, airfields
E01C 3/00	Hauptgruppe	Foundations for pavings (specially adapted for playgrounds or sports grounds E01C 13/02; foundations in general E02D)
E01C 3/02	1-Punkt Untergruppe	. Concrete base for bituminous paving
E01C 3/04	1-Punkt Untergruppe	. Foundations produced by soil stabilisation
E01C 3/06	1-Punkt Untergruppe	. Methods or arrangements for protecting foundations from destructive influences of moisture, frost or vibration
E01C 5/00	Hauptgruppe	Pavings made of prefabricated single units (specially adapted for playgrounds or sports grounds E01C 13/04, for footpaths, sidewalks or cycle tracks E01C 15/00; making artificial stones C04B; building stones E04C; flooring E04F)
E01C 5/02	1-Punkt Untergruppe	. made of natural stones, e.g. sett stones
E01C 5/04	1-Punkt Untergruppe	. made of bricks
E01C 5/06	1-Punkt Untergruppe	. made of units with cement or like binders
E01C 5/08	2-Punkt Untergruppe	Reinforced units
E01C 5/10	3-Punkt Untergruppe	Prestressed reinforced units
E01C 5/12	1-Punkt Untergruppe	. made of units with bituminous binders
E01C 5/14	1-Punkt Untergruppe	. made of wooden units
E01C 5/16	1-Punkt Untergruppe	. made of metallic units (steel gratings E01C 9/10)
E01C 5/18	1-Punkt Untergruppe	. made of rubber units
E01C 5/20	1-Punkt Untergruppe	. made of units of plastics (E01C 5/18 takes precedence)
E01C 5/22	1-Punkt Untergruppe	. made of units composed of a mixture of materials covered by two or more of groups E01C 5/02-E01C 5/20
E01C 7/00	Hauptgruppe	Coherent pavings made in situ (specially adapted for playgrounds or sports grounds E01C 13/06,
		for footpaths, sidewalks or cycle tracks E01C 15/00)
E01C 7/02	1-Punkt Untergruppe	. made of road-metal without binders
E01C 7/04	2-Punkt Untergruppe	of broken stones, gravel, or like materials
E01C 7/06	2-Punkt Untergruppe	by melting, burning, or vitrifying road-metal <u>in situ</u>
E01C 7/08	1-Punkt Untergruppe	. made of road-metal and binders

Symbol	Тур	Titel
E01C 7/10	2-Punkt Untergruppe	of road-metal and cement or like binders (cement or like binders, composition of mortars C04B)
E01C 7/12	3-Punkt Untergruppe	Mortar-bound paving
E01C 7/14	3-Punkt Untergruppe	Concrete paving
E01C 7/16	4-Punkt Untergruppe	Prestressed concrete paving
E01C 7/18	2-Punkt Untergruppe	of road-metal and bituminous binders
E01C 7/20	3-Punkt Untergruppe	Binder incorporated in cold state, e.g. natural asphalt
E01C 7/22	3-Punkt Untergruppe	Binder incorporated in hot state, e.g. heated bitumen
E01C 7/24	3-Punkt Untergruppe	Binder incorporated as an emulsion or solution (making dispersions or emulsions for road building C04B)
E01C 7/26	3-Punkt Untergruppe	mixed with other materials, e.g. cement, rubber, leather, fibre
E01C 7/30	2-Punkt Untergruppe	of road-metal and other binders, e.g. synthetic material
E01C 7/32	2-Punkt Untergruppe	of courses of different kind made <u>in situ</u>
E01C 7/34	3-Punkt Untergruppe	made of several courses which are not bound to each other
E01C 7/35	2-Punkt Untergruppe	Topping or surface dressings; Methods of mixing, impregnating, or spreading them
E01C 7/36	1-Punkt Untergruppe	. by subjecting soil to stabilisation
E01C 9/00	Hauptgruppe	Special pavings (specially adapted for playgrounds or sports grounds E01C 13/00, for footpaths, sidewalks or cycle tracks E01C 15/00); Pavings for special parts of roads or airfields (pavement lights E01C 17/00; manholes or like covers or frames E02D 29/14)
E01C 9/02	1-Punkt Untergruppe	. Wheel tracks (rail tracks for guiding vehicles E01B 25/28)
E01C 9/04	1-Punkt Untergruppe	. Pavings for railroad level-crossings
E01C 9/06	1-Punkt Untergruppe	. Pavings adjacent tramways rails
E01C 9/08	1-Punkt Untergruppe	. Temporary pavings (steel gratings E01C 9/10)
E01C 9/10	1-Punkt Untergruppe	. Steel gratings (gully gratings E03F 5/06; as building elements in general E04C)
E01C 11/00	Hauptgruppe	Details of pavings
E01C 11/02	1-Punkt Untergruppe	. Arrangement or construction of joints; Methods of making joints; Packing for joints (sealing joints not restricted to road or airfield paving E04B 1/68)
E01C 11/04	2-Punkt Untergruppe	for cement concrete paving
E01C 11/06	3-Punkt Untergruppe	Methods of making joints
E01C 11/08	3-Punkt Untergruppe	Packing of metal
E01C 11/10	3-Punkt Untergruppe	Packing of plastic or elastic materials
E01C 11/12	3-Punkt Untergruppe	Packing of metal and plastic or elastic materials
E01C 11/14	3-Punkt Untergruppe	Dowel assembly
E01C 11/16	1-Punkt Untergruppe	. Reinforcements (for building in general E04C)
E01C 11/18	2-Punkt Untergruppe	for cement concrete pavings
E01C 11/20	3-Punkt Untergruppe	for prestressed concrete pavings

Symbol	Тур	Titel
E01C 11/22	1-Punkt Untergruppe	. Gutters; Kerbs (kerbs specially adapted for informing road users E01F 9/053)
E01C 11/24	1-Punkt Untergruppe	. Methods or arrangements for preventing slipperiness or protecting against influences of the weather
E01C 11/26	2-Punkt Untergruppe	Permanently-installed heating or blowing devices
E01C 13/00	Hauptgruppe	Pavings or foundations specially adapted for playgrounds or sports grounds (general layout A63C 19/00)
E01C 13/02	1-Punkt Untergruppe	. Foundations, e.g. with drainage or heating arrangements [6]
E01C 13/04	1-Punkt Untergruppe	. Pavings made of prefabricated single units (E01C 13/08, E01C 13/10 take precedence) [6]
E01C 13/06	1-Punkt Untergruppe	. Pavings made in situ (E01C 13/08, E01C 13/10 take precedence) [6]
E01C 13/08	1-Punkt Untergruppe	. Surfaces simulating grass [6]
E01C 13/10	1-Punkt Untergruppe	. Artificial surfaces for outdoor or indoor practice of snow or ice sports (E01C 13/08 takes precedence) [6]
E01C 13/12	2-Punkt Untergruppe	for snow sports [6]
E01C 15/00	Hauptgruppe	Pavings specially adapted for footpaths, sidewalks, or cycle tracks
E01C 17/00	Hauptgruppe	Pavement lights, i.e. translucent constructions forming part of the surface (blocks specially designed for marking roads E01F 9/04)
		Machines, tools, or auxiliary devices for constructing or repairing the surfacing of roads or like structures (constructing the road bed E02D, E02F)
E01C 19/00	Hauptgruppe	Machines, tools, or auxiliary devices for preparing or distributing paving materials, for working the placed materials, or for forming, consolidating, or finishing the paving (surface stabilisation E01C 21/00; apparatus specially adapted for reconditioning or repairing paving E01C 23/00)
E01C 19/02	1-Punkt Untergruppe	. for preparing the materials
E01C 19/05	2-Punkt Untergruppe	Crushing, pulverising, or disintegrating apparatus (in general B02C); Aggregate screening, cleaning, or heating apparatus
E01C 19/08	2-Punkt Untergruppe	Apparatus for transporting and melting asphalt, bitumen, tar, or the like (stationarily-arranged melting boilers for tar, asphalt, or the like, in general C10C 3/12)
E01C 19/10	2-Punkt Untergruppe	Apparatus or plants for premixing or precoating aggregate or fillers with non-hydraulic binders, e.g. with bitumen, with resins; Apparatus for premixing non-hydraulic mixtures prior to placing or for reconditioning salvaged non-hydraulic compositions
E01C 19/12	1-Punkt Untergruppe	. for distributing granular or liquid materials (E01C 23/07 takes precedence; for filling joints or grooves E01C 23/02, E01C 23/09)
E01C 19/15	2-Punkt Untergruppe	for laying-down uncoated stone or similar materials, or for striking-off or spreading same without compacting, e.g. for crushed rock base courses, sand cushions for paving (E01C 19/52 takes precedence; distributing E01C 19/20)
E01C 19/16	2-Punkt Untergruppe	for applying or spreading liquid materials, e.g. bitumen slurries (E01C 19/45, E01C 23/02, E01C 23/03, E01C 23/16 take precedence; spraying or spreading liquids or other fluent materials to surfaces in general B05)
E01C 19/17	3-Punkt Untergruppe	Application by spraying
E01C 19/18	2-Punkt Untergruppe	Devices for distributing road-metals mixed with binders, e.g. cement, bitumen, without consolidating or ironing effect (E01C 19/20, E01C 19/47 take precedence; conveying installations for concrete or the like B65G)
E01C 19/20	2-Punkt Untergruppe	Apparatus for distributing, e.g. spreading, granular or pulverulent materials, e.g. sand, gravel, salt, dry binders (fertiliser distributors A01C 15/00)
E01C 19/21	2-Punkt Untergruppe	for simultaneously but separately applying liquid material and granular or pulverulent material, e.g. bitumen and grit, with or without spreading

Symbol	Тур	Titel
E01C 19/22	1-Punkt Untergruppe	. for consolidating or finishing laid-down unset materials (E01C 23/02 takes precedence; apparatus for generating vibrations in general B06B)
E01C 19/23	2-Punkt Untergruppe	Rollers therefor; Such rollers usable also for compacting soil (E01C 19/43 takes precedence; specially adapted for agricultural purposes A01B 29/00; garden rollers A01G 1/12; making or maintaining surfaces of snow or ice E01H 4/00; solely for soil compaction E02D 3/026)
E01C 19/24	3-Punkt Untergruppe	hand propelled (E01C 19/27-E01C 19/29 take precedence)
E01C 19/25	3-Punkt Untergruppe	propelled by animals or vehicles (E01C 19/26-E01C 19/29 take precedence)
E01C 19/26	3-Punkt Untergruppe	self-propelled or fitted to road vehicles (E01C 19/27-E01C 19/29 take precedence)
E01C 19/27	3-Punkt Untergruppe	with elastically-deformable rolling elements, e.g. pneumatic tyres (vibrating or impacting E01C 19/28)
E01C 19/28	3-Punkt Untergruppe	Vibrated rollers or rollers subjected to impacts, e.g. hammering blows (E01C 19/29 takes precedence)
E01C 19/29	3-Punkt Untergruppe	Rolling apparatus adapted to apply a rolling pressure less than its weight, e.g. roller finishers travelling on formrails
E01C 19/30	2-Punkt Untergruppe	Tamping or vibrating apparatus other than rollers (E01C 23/02, E01C 23/04 take precedence; vibrated depositing devices E01C 19/12; tamping or vibrating rollers E01C 19/28; portable percussion tools in general B25D; tamping or vibrating soil in general E02D 3/046)
E01C 19/32	3-Punkt Untergruppe	Hand-held hand-actuated rammers or tampers
E01C 19/34	3-Punkt Untergruppe	Power-driven rammers or tampers
E01C 19/35	4-Punkt Untergruppe	Hand-held or hand-guided tools (E01C 19/36-E01C 19/40 take precedence)
E01C 19/36	4-Punkt Untergruppe	with direct-acting explosion chambers
E01C 19/38	4-Punkt Untergruppe	with means specifically for generating vibrations
E01C 19/40	4-Punkt Untergruppe	adapted to impart a smooth finish to the paving, e.g. tamping or vibrating finishers
E01C 19/41	2-Punkt Untergruppe	Apparatus having both rolling tools and ramming, tamping, or vibrating tools
E01C 19/42	2-Punkt Untergruppe	Machines for imparting a smooth finish to freshly-laid paving courses other than by rolling, tamping, or vibrating (for distributing only E01C 19/12)
E01C 19/43	2-Punkt Untergruppe	Machines or arrangements for roughening or patterning freshly-laid paving courses, e.g. indenting rollers
E01C 19/44	2-Punkt Untergruppe	Hand-actuated tools other than rollers, dampers, or vibrators, specially adapted for imparting a required surface finish to freshly-laid paving courses (E01C 19/43 takes precedence)
E01C 19/45	1-Punkt Untergruppe	. Portable apparatus for preparing, or for preparing and applying to the road, compound liquid binders, e.g. emulsified bitumen, fluxed asphalt (applying only E01C 19/16)
E01C 19/46	1-Punkt Untergruppe	. for preparing and placing the materials (E01C 19/45 takes precedence; making surfaces by mixing borrowed aggregate with binders E01C 21/00) $$
E01C 19/47	2-Punkt Untergruppe	Hydraulic cement concrete mixers combined with distributing means specially adapted for road building ( concrete mixers per seB28C)
E01C 10/49	1 Dunkt Untergrups	. for laying-down the materials and consolidating them, or finishing the surface
E01C 19/48	1-Punkt Untergruppe	
E01C 19/50	1-Punkt Untergruppe	. Removable forms or shutterings for road-building purposes (E01C 23/02, E01C 23/04 take precedence; permanent forms E01C 3/00-E01C 7/00; slip forms E01C 19/48); Devices or arrangements for forming
		individual paving elements, e.g. kerbs, <u>in situ</u>

Symbol	Тур	Titel
E01C 19/52	1-Punkt Untergruppe	. Apparatus for laying individual preformed surface elements, e.g. kerbs (preforming and placing continuous strip E01C 19/46; forming paving elements <u>in situ</u> E01C 19/50)
E01C 21/00	Hauptgruppe	Apparatus or processes for surface stabilisation for road building or like purposes, e.g. mixing borrowed aggregate with binder (stabilising soil under existing surfacing E01C 23/10; soil-conditioning or soil-stabilising materials C09K 17/00; soil-consolidation in general E02D 3/12)
E01C 21/02	1-Punkt Untergruppe	. Fusing, calcining, or burning soil <u>in situ</u>
E01C 23/00	Hauptgruppe	Auxiliary devices or arrangements for constructing, repairing, reconditioning, or taking-up road or like surfaces (apparatus for reconditioning of salvaged non-hydraulic compositions E01C 19/10)
E01C 23/01	1-Punkt Untergruppe	. Devices or auxiliary means for setting-out or checking the configuration of new surfacing, e.g. templates, screed supports (form rails E01C 19/50); Applications of apparatus for measuring, indicating, or recording the surface configuration of existing surfacing, e.g. profilographs (E01C 23/07 takes precedence; measuring roughness or irregularity in general G01B)
E01C 23/02	1-Punkt Untergruppe	. Devices for making, treating, or filling grooves or like channels in not-yet-hardened paving, e.g. for joints or markings (surface patterning E01C 19/43); Removable forms therefor (non-removable forms E01C 11/02); Devices for introducing inserts or removable insert-supports in not-yet-hardened paving (E01C 23/04 takes precedence; non-removable insert supports E01C 11/02)
E01C 23/03	1-Punkt Untergruppe	. Arrangements for curing paving; Devices for applying curing means; Devices for laying prefabricated underlay, e.g. sheets, membranes (reinforcing elements E01C 23/04); Protecting paving under construction or while curing, e.g. use of tents (road barriers E01F 13/00)
E01C 23/04	1-Punkt Untergruppe	. Devices for laying reinforcing elements or dowel bars; Removable supports for reinforcing elements (non-removable supports therefor E01C 11/16; side forms adapted to supporting reinforcement E01C 19/50); Devices, e.g. removable forms, for making essentially horizontal ducts in paving, e.g. for prestressed reinforcement
E01C 23/05	1-Punkt Untergruppe	. Devices for installing or removing forms
E01C 23/06	1-Punkt Untergruppe	. Devices or arrangements for working the finished surface (working freshly-laid paving E01C 19/42-E01C 19/44, E01C 23/02; mining picks E21C 35/18); Devices for repairing the surface of damaged paving [6]
E01C 23/07	2-Punkt Untergruppe	Apparatus combining measurement of the surface configuration of paving with application of material in proportion to the measured irregularities (measuring means only E01C 23/01)
E01C 23/08	2-Punkt Untergruppe	for roughening or patterning; for removing high spots or material bonded to the surface, e.g. markings ( removing matter not bonded to the surface E01H 1/00; roughening or detaching ice E01H 5/12)
E01C 23/082	3-Punkt Untergruppe	using non-powered tools [6]
E01C 23/085	3-Punkt Untergruppe	using power-driven tools, e.g. vibratory tools [6]
E01C 23/088	4-Punkt Untergruppe	Rotary tools, e.g. milling drums [6]
E01C 23/09	2-Punkt Untergruppe	for forming cuts, grooves, or recesses, e.g. for making joints or channels for markings, for cutting-out sections to be removed; for cleaning, treating, or filling cuts, grooves, recesses, or fissures; for trimming paving edges
E01C 23/10	2-Punkt Untergruppe	for raising or levelling sunken paving; for filling voids under paving; for introducing material into substructure (consolidating soil in general E02D 3/12)
E01C 23/12	2-Punkt Untergruppe	for taking-up, tearing-up, or breaking-up paving (adapted to both placing and removing paving E01C 19/52)
E01C 23/14	1-Punkt Untergruppe	. for heating or drying foundation, paving, or materials thereon, e.g. paint (E01C 23/03 takes precedence; heating or drying devices incorporated in the paving E01C 11/26; surface stabilisation by fusing, calcining, or burning soil in situE01C 21/02; for street cleaning E01H 1/08; melting snow or ice on surfacing E01H 5/10)

## E01C 7/18

Symbol	Тур	Titel
E01C 23/16	1-Punkt Untergruppe	. Devices for marking-out, applying, or forming traffic or like markings on finished paving (E01C 23/14 takes precedence; inserting or forming in not-yet-hardened paving E01C 23/02, in recesses formed in fully-set paving E01C 23/09; marking-out playing courts or playgrounds A63C 19/06; applying liquids or other fluent
		materials to surfaces in general B05; road surface markings per seE01F 9/04); Protecting fresh markings
E01C 23/18	2-Punkt Untergruppe	for applying prefabricated markings [6]
E01C 23/20	2-Punkt Untergruppe	for forming markings <u>in situ</u> [6]
E01C 23/22	3-Punkt Untergruppe	by spraying [6]
E01C 23/24	3-Punkt Untergruppe	by pouring [6]