

Universal Decimal Classification —

**Second English full edition —
FID publication no. 483 —**

UDC 623 Military engineering

UDC 025.45:623

Co-operating organizations

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This British Standard, having been approved by the Documentation Standards Committee, was published under the authority of the Executive Board on 29 March 1974

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First published as part of BS 1000[622/623], March 1955
Second edition March 1974

The following BSI references relate to the work on this standard:
Committee references OC/20/4, OC/20/4/18

ISBN 0 580 08495 7

Amendments issued since publication

Amd. No.	Date of issue	Comments
2764	January 1979	Indicated by a sideline in the margin

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Foreword

The English version of the Universal Decimal Classification (UDC) is being prepared and published as BS 1000 by the British Standards Institution (BSI) at the original joint request of the British Society for International Bibliography (BSIB) and the Association of Special Libraries and Information Bureaux (ASLIB), now amalgamated as Aslib. It has the approval of the Education Foundation, Lake Placid Club, New York, proprietors of the Dewey Decimal Classification, from which the UDC derives. The English Full Edition of the UDC is authorized by the Fédération Internationale de Documentation (FID), The Hague, Netherlands.

This section is part of the English Full Edition. It should be used in conjunction with the Abridged English Edition, BS 1000A, which refers to many other subjects of interest not listed in this schedule, and provides a conspectus of the whole scheme, together with an introduction to its use. For further practical information about the principles, application and utilization of the scheme, users should refer to BS 1000C.

This edition of UDC 623, which replaces the 1955 edition published as part of BS 1000[622/623], includes modifications authorized in “Extensions and Corrections to the UDC” up to and including Series 10, No. 1, dated June 1978. Subsequent issues of “Extensions and Corrections to the UDC” should be consulted to keep the schedules up to date. Further information about this and other UDC publications is given on page 38. British Standards related to this part of BS 1000 are listed on the inside back cover.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 38, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Scope

Under 623 is classed information about the design, manufacture and technical handling of weapons and fighting equipment used on land, at sea, in the air or in space, whether by the armed forces or by civilians (*e.g.* for police work, hunting, shooting and competition).

The operational, tactical and strategic use of this equipment and the organization of personnel etc come under 355/359.

Related subjects

- 355/359 Military art and science. National defence.
Armed forces
- 527 Nautical and aeronautical astronomy.
Navigation
- 528 Geodesy. Surveying. Photogrammetry.
Cartography
- 531.5 Gravity. Gravitation. Pendulums.
Ballistics
- 532.5 Liquid motion. Hydrodynamics
- 533.6 Aerodynamics
- 621 Mechanical engineering. Nuclear
technology. Electrical engineering.
Machinery
- 624 Civil and structural engineering
- 625 Railway engineering. Highway
engineering
- 627 Natural inland waters. River, port,
harbour and coast works. Dams. Water
power works
- 629 Transport vehicle engineering
- 639.1 Hunting
- 662 Explosives. Fuels
- 683.4 Armoury. Gunsmithing. Weapon-smithing
- 725.18 Military and police buildings.
- 739.7 Armoury — Art metalwork
- 799.3 Shooting. Target sports

Auxiliary signs and subdivisions

Full information about the common and special auxiliary signs and subdivisions (often abbreviated to “common and special auxiliaries”) will be found in BS 1000A and BS 1000C.

Colon sign of relation. For the classification of information for the public, as in abstracts and bibliographies, maximum use of colon combinations rather than of common or special auxiliaries is recommended. The use of the colon sign of relation is preferable for multiple entry systems, as it will help prevent the concealment of information. This usually results in longer notation, however, and for information for more restricted use, the application of auxiliaries, where available, may be simpler and more convenient provided that there is an adequate alphabetical subject index.

Common auxiliaries. The common auxiliaries of language = ..., form (0...), place (1/9), race and nationality (= ...), time “...”, point of view .00..., materials –03... and persons –05... are applicable throughout the UDC. However, they should be used mainly to express concepts not otherwise provided for in the schedules.

Special auxiliaries. The –1/–9 and .09 special auxiliary subdivisions given at the beginning of the schedule are applicable throughout 623. Whereas the .09 special auxiliaries are peculiar to 623, the –1/–9 special auxiliaries are applicable throughout UDC 62, where they are listed in full. The .0 special auxiliaries at 623.4 are applicable in that section.

Typographic presentation

Small type is used for cancelled numbers and text.

The arrow → means either “see” or “see also” according to the context.

The symbol $\cong$ “subdivide as” means that the number preceding it may be subdivided in the same way as, and with meanings analogous to the subdivisions of, the number which follows it.

SCHEDULE

623 Military engineering

Special auxiliary subdivisions for 623

623-04	External shape and form [<i>cancelled</i>] → 623-4	623-6	Characterization of machines according to the heat source (fuel)
623-1	General characteristics of machines 623-1 $\cong$ 62-1 →623.4.01 Design fundamentals. Characteristics and tests of weapons and military equipment		623-6 $\cong$ 62-6
-2	Fixed and movable components of machines 623-2 $\cong$ 62-2, <i>e.g.</i> 623.438.3-23 Tank transmission and drive mechanisms	-7	Care, maintenance and servicing of machines 623-7 $\cong$ 62-7, <i>e.g.</i> 623.442.47-71 Cooling arrangements for machine guns
-3	Regulation components. Regulation actuators 623-3 $\cong$ 62-3	-8	Characterization of machines according to the type of motive power 623-8 $\cong$ 62-8, <i>e.g.</i> 623.454.22-83 Electric igniters
-4	Material state. Surface condition. Shape and form 623-4 $\cong$ 62-4	-9/-94	Armouring and armament [<i>cancelled</i>] →623.093/.094
-5	Operation of machines. Regulation and control 623-5 $\cong$ 62-5, <i>e.g.</i> 623.438.3-57 Tank starting mechanisms .746-519 Pilotless aircraft	-9	Processes. Operating characteristics and conditions 623-9 $\cong$ 66-9, <i>except</i> -91 and -94
		.09	Special defence and assault equipment (of fortifications, vehicles, ships etc)
		.093	Armouring. Armoured equipment, vehicles etc
		.094	Armament. Armed vehicles, craft and vessels

Principal divisions

623.1/.3 Field engineering. Fortifications. Defence works

→623.415 Armament systems of fortifications and fortified lines

623.6 Field engineering equipment and operations. Lines of communication. Radar countermeasures. Military topography

623.1	FORTRESSES. PERMANENT FORTIFICATIONS. FORTIFIED LINES (AREAS)	623.127	Approach obstacles →623.133 Advance works and forts (strongpoints)
.11	Principles. Theory		623.38 Field obstacles and traps
.111	Vertical sections. Profiles. Contours	.2	Palisades and similar obstacles. Tank obstacles, <i>e.g.</i> dragons' teeth
.112	Plans. Layout		→623.382 Wire entanglements
.113	Flanking defences, outworks in general		623.383 Chevaux de frise
.114	Defilading	.3	Ditches, <i>e.g.</i> as tank traps →623.24 Trenches. Zig-zags, saps etc
.12	Details of fortresses and permanent fortifications. Cover from fire. Gun emplacement. Approach obstacles	.13	Fortified lines, strong points and communications <i>Major fortified lines, such as the Great Wall of China, Hadrian's Wall, the Maginot Line and the Siegfried Line are classed here</i>
.121	Masonry, walls etc	131	Central fort
.122	Earthworks	132	Citadels
.123	Cover from fire. Blindage. Screens	133	Advance works and forts (strongpoints) →623.127 Approach obstacles
.124	Armouring	134	Detached forts (strongpoints)
.125	Concreting	137	Communicating passages. Access tunnels etc <i>Tunnel works may be denoted by colon combination with the subdivisions of 624.19</i>
.126	Special defence constructions. Gun emplacements		
.2	Casemates		
.3	Bastions		
.4	Fixed turrets, cupolas		
.5	Gun mountings and turrets		
.52	Revolving		
.54	Disappearing		

623.138	Intercommunication, <i>e.g.</i> by line or wire	623.32	Measures against laying out of parallels [<i>cancelled</i>] →355.442
.15	Temporary fortifications and fieldworks in general	.33	Measures against attacks on batteries and covered lines [<i>cancelled</i>] →355.442
623.2	ASSAULT AND DEFENCE (SIEGE) WORKS. FIELD FORTIFICATIONS. TRENCH WORKS	.34	Defence of trenches [<i>cancelled</i>] →355.442
	<i>Only technical layout and construction problems are classed here</i>	.35	Defence of breaches [<i>cancelled</i>] →355.442
	→623.3 Land minefields. Field obstacles. Flooding	.36	Land minefields
	<i>Field and siege tactics may be denoted by colon combination with the subdivisions of 355.4</i>		<i>For types of mine</i> →623.454.3
.21	Investment. Preparations. Establishing camp	.363	Laying. Record and report. Tapes and markers. Lanes and paths
.22	Circumvallation and countervallation. Diagrams	.365	Breaking. Clearing
.23	Parallels and batteries. Plans. Layout		→623.454.38 Mine clearance by explosions
.24	Trenches. Zig-zags, saps etc	.368	Mine detection
	→623.127.3 Ditches, <i>e.g.</i> as tank traps		<i>Further particulars may be denoted by colon combination with the subdivisions of 53, 621.3 etc</i>
.241	Transportable elements of construction, <i>e.g.</i> concrete blocks, armour plating, sandbags	.2	Metallic mine detection
.242	Trenches for various purposes	.4	Non-metallic mine detection
.2	Advanced trenches	.37	Defence by demolition [<i>cancelled</i>] →623.685
.4	Supporting trenches	.38	Field obstacles and traps
.6	Communication trenches		→623.127 Approach obstacles
	→623.137 Communicating passages. Access tunnels etc		623.454.364 Booby-traps. Special mines
.243	Foxholes and similar simple excavations		623.672 Clearing (and making) of obstructions
.244	Special trench construction, <i>e.g.</i> gun-pits and emplacements, machine gun and observation posts. Breastworks		623.748 Devices for obstructing enemy aircraft. Barrages, cables, nets etc
.245	Cover. Dug-outs		<i>Further particulars may be denoted by common auxiliaries, e.g.</i>
.246	Covered approaches. Dips etc		623.38 (204.1) Underwater obstacles
.247	Approach trenches. Lines of access	.382	Wire entanglements
.249	Miscellaneous. Drainage of trenches		<i>For manufacture of wire</i> →621.778.5
.25	Breaches. Countermines	.383	Chevaux de frise
.27	Other means of demolition [<i>cancelled</i>] →623.68	.384	Nets
		.385	Mantraps and similar obstacles
623.3	LAND MINEFIELDS. FIELD OBSTACLES. FLOODING	.387	Pitfalls. Covered pits as traps
.31	Measures against enemy trench construction [<i>cancelled</i>] → 355.442	.388	Mobile tank obstacles and traps
		.389	Other obstacles and traps, <i>e.g.</i> felled trees
		.39	Flooding (as a means of defence)

623.4 Armaments. Arms. Weapons. Ordnance. Guns. Artillery. Ammunition. Armoured and other service vehicles. Armour and other protective equipment

→355.73 Artillery establishments. Manufacturing arsenals. Foundries, workshops and depots of materials and munitions

683.4 Armoury. Gunsmithing. Weapon-smithing

For manufacturing and chemical aspects of explosives →662.1/.4

Special auxiliary subdivisions for 623.4

623.4.01	DESIGN FUNDAMENTALS. CHARACTERISTICS AND TESTS OF WEAPONS AND MILITARY EQUIPMENT	623.4.011	Military characteristics
	→623-1 General characteristics of machines	.012	Geometric parameters. Choice of size
			→62-181 Characterization of machines according to dimensions

623.4.013	Weight characteristics →62-183 Characterization of machines according to weight	623.4.023.474	Sound ranging
.014	Mobility characteristics →62-182 Characterization of machines according to mobility and convertibility	.6	Target velocity determination
.2	Carriers	.024	Observation. Adjustment of fire
.3	Towed. Carried	.2	Fall of shot [<i>cancelled, superfluous</i>]
.4	Self-propelled →623.438.4 Self-propelled guns	.3	Range adjustment →623.4.023.4 Ranging
.7	Amphibious. Able to move in or under water →623.438.7 Amphibious tanks and armoured vehicles	.4	Line adjustment
.016	Performance. Range, speed, characteristics etc	.5	Fuse adjustment
.017	Operational reliability. Manoeuvrability etc	.025	Fire control →623.551 Fire power. Fire control
.018	Testing and examination of weapons and other military equipment	.026	Fire orders
		.027	Guiding of missiles <i>For guidance systems</i> →623.465
623.4.02	FIRE CONTROL. BALLISTIC PREPARATION AND TABLES <i>These .02 special auxiliaries are also applicable to 623.55</i> →623.5 Ballistics. Gunnery. Theoretical and experimental problems	.2	Initial guidance
.021	Target acquisition and detection. Interception	.4	Intermediate guidance
.2	Target acquisition. Target analysis	.6	Terminal guidance
.4	Target detection. Target identification	.028	Target marking →623.454.424 Target indicators
.6	Interception		
.022	Ballistic and topographical preparation. Artillery survey. Meteorological conditions	623.4.03	CARTRIDGE MAGAZINES. FEED MECHANISMS
.2	Ballistic preparation	.032	Box-type magazines
.3	Topographical preparation. Artillery survey →623.64 Topography. Cartography. Surveying	.033	Breech-type (rifle) magazines
.5	Meteorological conditions <i>Further particulars may be denoted by colon combination with the subdivisions of 551.5</i>	.035	Butt cylinder, shoulder magazines
.023	Predicting. Ranging. Target velocity determination →623.4.05 Sighting and sights. Laying mechanisms. Tracking studies	.036	Barrel magazines. Rod magazines
.2	Coordinate determination	.037	Drum magazines
.4	Ranging →623.4.024.3 Range adjustment	.038	Belts. Disintegrating links <i>For bandoliers</i> →623.457.52
.41	With optical range finders	623.4.04	BREECH BLOCK AND BREECH RING. MOVING BREECH. ANCILLARY PARTS
.43	With laser range finders	.041	Fixed parts. Breech block and ring
.45	With radar	.1	Screw-type (slotted, eccentric)
.47	Flash ranging. Sound ranging	.2	Sliding wedge-type
.472	Flash ranging	.22	Horizontal
		.23	Vertical
		.042	Moving parts of breech block 623.4.042 $\cong$ 623.4.041
		.044	Bolts
		.045	Subcalibre devices
		.047	Loading mechanisms
		.048	Breech and other safety devices
		623.4.05	SIGHTING AND SIGHTS. LAYING MECHANISMS. TRACKING STUDIES
		.051	Devices for calibrating and testing sights, e.g. by sighting through open bore (bore sights)
		.052	Fixed sights, adjustable and non-adjustable. Open (back and fore) sights. Optical sights
		.2	Back sights. Leaf (or flap) sights
		.23	Open (U-type or V-type)
		.26	Aperture type

623.4.052.3	Fore sights	623.4.07	VARIOUS ACCESSORIES CONNECTED WITH FIRING
.33	Blade or post type	.072	Aiming rests, support tripods etc, to prevent canting and to limit cones of fire
.36	Aperture type	.073	Firing loopholes. Embrasures. Gun ports
.5	Optical sights	.074	Cleaning devices. Rods, pullthroughs etc
.52	Telescopic	.077	Maintenance. Clearing stoppages
.54	Reflector	.078	Cases, boxes, chests, bags, muzzle caps etc
.56	Periscopic	.079	Other accessories not included elsewhere
.58	Prismatic		
.053	Predictor sights		
	→623.4.054.8 Computing devices for laying mechanisms. Directors. Predictors	623.4.08	PROJECTILE, ROCKET AND GUIDED MISSILE PARTS, FILLINGS AND ATTACHMENTS
.2	Lead computing sights		<i>For ammunition, projectiles, rockets etc</i> →623.45/.46
.5	Director sights		
.054	Laying. Laying mechanisms	.081	Body or case
.1	Traversing gear	.2	Heavy case. Kinetic energy projectiles
.2	Elevating gear	.23	Armour-piercing
.3	With air-level or spirit-level attachment, e.g. clinometers	.25	Hypervelocity armour-piercing
.4	With open sights, e.g. with special anti-aircraft sights	.26	Hypervelocity armour-piercing, discarding sabot
.5	With illuminating gear	.3	Medium case. Medium capacity
.6	With sound ranging device	.4	Light case. High capacity
.7	With range finders	.082	Warheads
.8	Computing devices for laying mechanisms. Directors. Predictors		<i>This number and its subdivisions are particularly applicable to 623.46</i>
	→623.4.053 Predictor sights	.2	Inert warheads. Exercise warheads
.9	Other laying and sighting apparatus	.3	Armour-piercing
.92	Laying for range, for several guns from a central post	.32	Capped
.93	Laying using radar	.34	Ballistic capped
.055	Base equipment for guiding missiles	.4	Ballistic capped [<i>cancelled</i>] →623.4.082.34
.056	Various accessory equipment	.5	Fragmentation. Rod. Continuous rod
.2	Protective covers for sights and laying mechanisms	.6	Blast. Hollow charge (shaped charge)
.4	Laying and range-estimating devices for training purposes	.083	Fillings
			<i>For manufacture and filling operations</i> →623.452
			<i>For manufacturing details of explosives</i> →662.1/.4
623.4.06	FIRING GEAR. TRIGGER MECHANISMS. EJECTORS. EXTRACTORS	.1	High explosive
.062	Firing gear. Lock	.13	High explosive anti-tank, hollow charge
.2	Cocking mechanisms	.14	High explosive incendiary
.4	Triggers	.17	High explosive plastic squash-head
.6	Striker pins	.2	Nuclear (fission). Thermonuclear (fusion)
.8	Safety catches	.22	Nuclear (fission). Atomic
.063	Mechanical and automatic firing gear	.25	Thermonuclear (fusion)
.066	Safety devices (for restricting direction of fire)	.3	Pyrotechnic
.067	Recoil mechanisms. Muzzle brakes	.31	Tracer
.068	Devices for reducing noise, flash etc	.32	Signalling and illuminating, e.g. star
.4	Noise dampers. Noise reducers	.33	Coloured marker
.6	Flash eliminators	.34	Incendiary
.069	Extractors. Ejectors		→623.4.083.14 High explosive incendiary fillings
		.37	Smoke-generating. Fog-generating
		.4	Gas

623.4.083.5	Chemical. Biological	623.413.4	Mountain guns
.8	Propaganda material, <i>e.g.</i> leaflets	.6	Heavy and medium-heavy field artillery
.084	On-board guidance equipment		
.2	Accelerometers	623.414	LANDING GUNS
.3	Gyro-inertial units. Gyroscopes. Gyroplatforms	623.415	ARMAMENT SYSTEM OF FORTIFICATIONS AND FORTIFIED LINES
.5	Autopilots	→623.3	Land minefields. Field obstacles. Flooding
.6	Programming devices		
	<i>For computer details →68.1.3</i>		
.7	Target coordinators	623.416	HEAVY (SIEGE AND COASTAL) ARTILLERY. LONG-RANGE GUNS
.8	Actuators. Power drives of control elements (rudders, steering engines etc)	.2	Position, siege and fortress artillery
.085	Driving bands. Sabots	.3	Heavy coastal guns
.2	Driving bands	.5	Railway guns
.4	Sabots	→623.438.5	Armoured trains
.086	Fins. Tails. Trajectory-controlling devices	.6	Long-range guns. Super-long-range guns
.2	Fins. Tails	623.417	NAVAL ARTILLERY
.4	Gliding devices		<i>For gun and gun turret installation on board →623.941</i>
.5	Parachutes		
.8	Accelerator rockets	623.418	ANTI-AIRCRAFT AND AIRCRAFT ARTILLERY
.087	Cluster devices. Bomb clusters	→623.434.7	Aircraft mountings
		.2	Anti-aircraft armament systems
Principal divisions (continued)		.22	Anti-aircraft artillery
623.41	WEAPON SYSTEMS. ARTILLERY WEAPONS. ROCKET WEAPONS	.4	Aircraft armament systems
	<i>Artillery according to purpose is classed here</i>	.42	Aircraft artillery
	<i>For artillery according to mode of action →623.42</i>	623.419	MISSILE, ROCKET ARMAMENT SYSTEMS
	<i>For self-propelled weapons and fighting vehicles →623.438</i>	→623.463.5	Aircraft rockets
	<i>Further particulars may be denoted by colon combination, <i>e.g.</i></i>	→621.455	Rocket engines
	623.41:355.46 Artillery for combined (naval and air) operations	623.428.2	Launching ramps
	:629.11.02 Wheeled artillery	623.428.83	Rocket launching or release gear
	:629.11.032 Tracked artillery	623.46	Guided missiles. Rockets etc
623.411	EARLY FORMS OF ARTILLERY, <i>e.g.</i> CULVERINS, FALCONETS, BOMBARDS	623.42	ORDNANCE. ARTILLERY ACCORDING TO MODE OF ACTION AND TYPE OF CONSTRUCTION
	<i>For ballistas, catapults etc →623.428.1</i>	623.421	TYPES OF GUN
623.412	ANTI-TANK AND TANK ARMAMENT SYSTEMS	→623.483	Ordnance factory plant and equipment
.2	Anti-tank armament systems. Anti-tank artillery	623.55	Gunnery. Firing
	→623.442.52 Anti-tank rifles	.2	Simple cannons, guns
	623.462.122 Anti-tank guided missiles	.3	Howitzers
	623.463.2 Anti-tank rockets	.4	Mortars. Grenade-throwers. Mine-throwers
.6	Tank armament systems. Tank artillery	.5	With barrel in one piece (monobloc)
	→623.442.472 Tank machine guns	.6	With built-up (assembled) barrel
		.7	Smooth-bore guns
623.413	FIELD ARTILLERY. MOUNTAIN ARTILLERY	.8	Recoilless guns
.2	Light field artillery	623.422	GUNS ACCORDING TO METHOD OF LOADING AND OPERATING
		.1	Muzzle-loading guns

623.422.2	Breech-loading guns	623.428.8	Aircraft release gear
.22	No cartridge case, obturation in the gun	→623.556	Firing in the air (from aircraft)
.24	Complete round, obturation in ammunition. Quickfiring guns	.81	Torpedo-launching gear
.3	Multi-barrel guns, <i>e.g.</i> mitrailleuses, revolving cannons	.82	Bomb-release gear. Racks etc
.4	Semi-automatic guns, hand-loading and ejection type	.821	Internal bomb racks
	<i>For repeating and semi-automatic small arms →623.442.3/.4</i>	.822	External bomb racks. Pylon carriers
.5	Automatic guns	.83	Rocket launching or release gear
	623.422.52/.54 $\cong$ 623.442.422/.424	→623.467	Launching of missiles and rockets
	<i>Further sources of power may be denoted by the –8 special auxiliaries listed at 62</i>	.84	Launching chutes
	<i>For automatic small arms →623.442.4</i>	623.43	GUN CARRIAGES AND MOUNTINGS. MILITARY VEHICLES
.55	Multi-barrel automatic guns, <i>e.g.</i> Vulcan		<i>Vehicle details may be denoted by colon combination with the subdivisions of 629, e.g.</i>
623.423	GUN TUBE AND BARREL CONSTRUCTION		623.43:629.11.032 Tracked vehicles
.1	General outline		<i>Further particulars may be denoted by special auxiliaries, e.g.</i>
.2	External form		623.43.01 Design, mobility, performance etc
.22	With trunnions		
.24	Without trunnions	623.431	AMMUNITION WAGONS. AMMUNITION LIMBERS
.3	Internal form. Bore		<i>The type of gun may be denoted by colon combination with other subdivisions of 623.4</i>
.32	Smooth	.4	Ammunition limbers (gun and limber)
.34	Tapered	.5	Ammunition boxes, cases, pack-barrels, powder chests etc
.36	Rifled. Rifling	.6	Battery wagons (tenders)
.4	Hooped. Tubed. Lined	623.432	MOBILE MOUNTINGS
.41	Hooped or banded. Hooping		<i>For installation on warships →623.941.4</i>
.42	Tubed. Tubing	.1	For guns proper
.43	Lined. Lining	.2	For howitzers
.46	Wire wound	.3	For mortars
.5	Autofrettage	.4	Siege carriers (tenders)
.7	Chamber	.5	Machine-gun and other small arms mountings
623.427	GUNS AND MOUNTINGS ADAPTED FOR TRAINING ETC	.6	Anti-aircraft mountings
	→623.59 Ranges. Firing practice equipment	623.433	GROUND MOUNTINGS
	623.942 Shipboard training. Practice firing. Training equipment	.1	Fixed mountings. Casemate mountings
.7	For indoor use (miniature ranges), including dummy-barrels	.2	Pedestal mountings. Parapet mountings
.8	For outdoor exercises	.21	Wheel-type
623.428	GUNS OR PROJECTORS WITHOUT EXPLOSIVE PROPELLANTS	.22	Chassis-type (cradle-type)
	<i>Further particulars may be denoted by special auxiliaries, e.g.</i>	.23	Hydraulic recoil-type (buffers)
	623.428–8 Hydraulic, pneumatic, electric, mechanical operation	.3	Disappearing mountings
.1	Primitive forms, <i>e.g.</i> ballistas, catapults	.4	Turret mountings
.2	Launching ramps	.6	Mountings for long-range and heavy siege guns
	<i>For rocket armament systems →623.419</i>	623.434	VEHICLE, SHIP AND AIRCRAFT MOUNTINGS
	<i>For guided missiles and rockets →623.451.8</i>	.5	Ship and deck mountings (other than on warships)
			<i>For warship turrets etc →623.941</i>

623.434.7	Aircraft mountings	623.437	<i>Instead of the 623.437.1/1.5 subdivisions, particulars of draught, traction and propulsion etc may be denoted by colon combination with the subdivisions of 625 or 629, e.g.</i>
.71	Fixed mountings		
.72	Pedestal mountings		
.75	Turret mountings		
.77	Synchronized devices for firing between rotating airscrew blades		623.437:625.2 Railway rolling stock
.8	Vehicle mountings (other than railway mountings)		:629.112 Horse-drawn vehicles. Vehicles drawn by other animals
	623.434.8 $\cong$ 623.434.7		:629.113.078 Amphibious motor vehicles
.9	Railway mountings		:629.114 Motor vehicles according to purpose
	623.434.9 $\cong$ 623.434.7		:629.118.6 Motor cycles
623.435	COMPONENTS OF GUN-CARRIAGES AND MOUNTINGS. PLATFORMS. PEDESTALS. RECOIL GEAR		<i>Methods of propulsion may also be denoted by the -8 special auxiliaries listed at 62</i>
	<i>For general studies on recoil →623.57</i>		<i>Design, mobility, performance etc may be denoted by the .01 special auxiliaries</i>
.1	Cheeks. Transomes (cross-pieces)	623.437.1	Bicycles
.2	Cradles. Recoil slides	.2	Motor cycles (solo or combination)
.3	Movable parts, particularly for taking up firing positions. Carriage wheels. Truck wheels. Limber-bolsters etc	.3	Animal-drawn vehicles
.32	Of non-recoil mountings		<i>The type of animal may be denoted by the -872.8 special auxiliaries listed at 62</i>
.33	Of wheel mountings	.38	Animal-borne equipment
.34	Of sliding mountings	.4	Motor vehicles
.35	Of disappearing mountings		→623.438 Armoured vehicles
.5	Recoil gear. Testing, breeching, vent-plugs etc	.41	General purpose vehicles. Jeeps etc
.6	Buffers. Recoil absorbers. Anchoring devices	.42	Tractors
.65	Trail spades	.422	Wheeled
.66	Anchoring devices, e.g. platforms, brakes	.424	Semi-tracked
.67	Other buffers or recoil absorbing devices	.425	Tracked
.7	Recuperators	.44	Trucks (for carrying equipment etc, not personnel). Recovery vehicles. Launching vehicles
.8	Types of recoil		
.82	Long. Short	.442	Freight trucks
.84	Variable	.444	Tankers, e.g. for petrol, oil
.85	Soft	.446	Recovery vehicles. Wreckers
			→623.438.36 Armoured recovery vehicles
623.436	MANHANDLING TACKLE. MANOEUVRING APPLIANCES	.448	Launching vehicles. Mobile launchers
.1	Levers. Handspikes. Roller levers		<i>For vehicle launching of missiles</i>
.2	Breeching tackle. Pulleys etc		→623.467.72
.3	Ammunition carriers, e.g. barrows, trays	.46	Troop carrier vehicles. Personnel carriers
.36	Bomb trolleys. Torpedo trolleys		623.437.46 $\cong$ 623.437.42
.4	Ammunition hoists	.5	Towed vehicles. Trailers
.46	Bomb hoists	.51	General purpose
.47	Torpedo hoists	.53	Vehicle transporters, e.g. for tanks
		.54	Missile transporters
623.437	SERVICE, TRANSPORT AND SUPPLY VEHICLES	.57	Radio and other special service vehicles
	→355.69 Military transportation. Supply. Evacuation — Military administration	.575	Radio and other special service vehicles [cancelled] →623.437.57
	623.438 Armoured vehicles	623.438	ARMOURED VEHICLES
			→notes under 623.437
		.1	Armoured infantry or personnel carriers
		.12	Without armament
		.14	With armament, wheeled
		.15	With armament, fully tracked

623.438.2	Wheeled (or semi-tracked) with armament	623.441	EARLY AND PRIMITIVE FIREARMS, <i>e.g.</i> BLUNDERBUSSES, HARQUEBUSSES (ARQUEBUSSES, HACKBUTS, HOOK-GUNS)
.22	With heavy or medium armament. Armoured cars		<i>For other primitive weapons</i> →623.446
.24	With light armament. Scout cars		
.25	With anti-aircraft weapons	623.442	MUSKETS. CARBINES. RIFLES. MACHINE GUNS. SPECIAL PURPOSE FIREARMS
.29	With other special weapons or equipment		
.3	Fully tracked, with armament. Tanks of all types, but not self-propelled guns	.1	Muzzle-loading firearms
	→623.438.4 Self-propelled guns	.2	Non-automatic firearms (breech-loading)
.32	With heavy armament. Heavy tanks. Medium tanks (cruiser or infantry type)	.21	Single-loading
.322	Heavy tanks	.22	With (tray) magazine under the stock
.324	Medium tanks	.23	With magazines under the breech
.33	With light armament. Light tanks	.24	With cocking levers
.332	With guns	.25	With spring triggers (including pistols)
.334	With guided missiles	.28	Recoilless
.34	With machine guns only, <i>e.g.</i> Bren carriers	.3	Repeating firearms
.35	With mine-detecting (and/or clearing) equipment, <i>e.g.</i> flails	.4	Automatic and semi-automatic firearms. Machine guns
.36	Armoured recovery vehicles		<i>For automatic and semi-automatic ordnance</i> →623.422.4/.5
	→623.437.446 Recovery vehicles. Wreckers	.42	<i>For automatic pistols</i> →623.443.35
.37	With flame-throwing equipment	.422	Mode of operation
	→623.454.71 Flame-throwers	.423	Blowback. Recoil loaders with fixed barrels
.39	With other special equipment	.424	Recoil loaders with sliding barrels
	<i>Further particulars may be denoted by colon combination, e.g.</i>	.424	Gas-operated loaders with pierced barrels
	623.438.39:624.21 Bridge-laying tanks	.45	Automatic and semi-automatic firearms
.4	Self-propelled guns	.46	623.442.45 ≅ 623.442.42
.42	Self-propelled field artillery	.46	Light machine guns
.43	Self-propelled anti-tank guns		<i>For submachine guns</i> →623.443.37
.45	Self-propelled anti-aircraft guns	.47	Heavy and medium machine guns
.5	Armoured trains	.472	Tank machine guns
	→623.416.5 Railway guns	.5	Special purpose firearms
.7	Amphibious tanks and armoured vehicles	.52	Anti-tank rifles
		.53	Snipers' rifles
		.54	Spotting rifles
		.56	Rifle grenade-launchers
623.44	HAND WEAPONS. SMALL ARMS. SIDE ARMS. PROTECTIVE EQUIPMENT	.58	Match rifles (for shooting matches)
	→623.555 Infantry firing	.6	Smooth-bore firearms. Shot guns
	639.1 Hunting	.61	Single-barrelled
	739.7 Artistic armoury, gunsmithing, weaponsmithing	.62	Double-barrelled. Multi-barrelled
	799.3 Shooting. Target sports	.66	Converting or adapting mechanisms for sporting guns
	<i>Kinds of propulsion (other than explosive) may be denoted by the -8 special auxiliaries listed at 62, e.g.</i>	.7	Firearms of special construction
	623.44-85 Gas (air) guns	.72	Collapsible types
	-86 Mechanical, <i>e.g.</i> spring guns	.73	Concealable or disguisable types, <i>e.g.</i> walking-stick guns
		.75	Rifles for rocket bullets
		.76	Noiseless (silenced) firearms
		.77	Firearms loaded without case
		.9	Stock. Butt. Wooden parts

623.443	PISTOLS. REVOLVERS →623.447.5 Blank-charge guns. Cap pistols etc	623.445	623.454.86 Protection against nuclear weapons and their aftermath radiation <i>For anti-gas protection and decontamination</i> →623.459.6/.8 <i>For art aspects</i> →739.71
.1	Early forms of pistol, <i>e.g.</i> single-shoot (rotating) multi-barrel		
.2	Repeating pistols. Revolvers	.1	Body armour. Cuirasses. Armoured clothing and other light protection, <i>e.g.</i> (chain-) mail shirts or coats of mail, hauberks, bullet-proof (bullet-resistant) clothing <i>For accoutrements</i> →685.2 <i>Further particulars may be denoted by colon combination, e.g.</i>
.22	Repeating pistols		623.445.1:355.683.1 Armour, for horses :394.7 Jousting armour (for tournaments or lists) :394.8 Duelling armour
.24	Revolvers (with rotating magazine chamber)	.2	Armoured headgear. Steel helmets. Casques. Sallets (salades). Morions. Burgonets
.3	Self-loading pistols (recoil or gas-operated). Automatic pistols. Machine pistols	.3	Accessory protection (carried but not worn)
.35	Automatic pistols	.35	Shields. Bucklers. Targes. Pavis (body shields). Arm shields. Hand shields →929.62 Heraldry. Blazonry. Armorial bearings. Coats of arms
.37	Machine pistols. Submachine guns, <i>e.g.</i> Thompson (Tommy) guns →623.442.46 Light machine guns		
.5	Special purpose pistols 623.443.5 ≅ 623.442.5, <i>e.g.</i> 623.443.54 Spotting pistols .58 Match pistols	623.446	PRIMITIVE WEAPONS. HAND WEAPONS, BLOWPIPES, BOWS ETC →623.441 Early and primitive firearms 623.444.1 Early and primitive side arms, shafted weapons
.6	Signal pistols. Flare pistols	.1	Hitting, bruising and crushing weapons. Flails. Clubs. Maces. Cudgels. Bludgeons. Truncheons (batons). Life-preservers, knobkerries and other loaded sticks. Knuckledusters etc
623.444	SIDE ARMS (OTHER THAN SMALL ARMS). SHAFTED WEAPONS. COLD STEEL WEAPONS <i>For art and antique weapons</i> →739.72	.3	Blowpipes and blowtubes, <i>e.g.</i> sumpitans (Malaya)
.1	Early and primitive types, <i>e.g.</i> halberds, partisans, battle-axes, tomahawks <i>For other primitive weapons</i> →623.446	.4	Bows. Long-bows (and arrows). Cross-bows (and bolts)
.2	Swords. Sabres. Broadwords	.5	Throwing or hurling weapons, <i>e.g.</i> javelins, darts →623.444.4 Shafted weapons
.22	Long broadswords. Sabres etc	.7	Boomerangs (Australia). Parkans (Madras)
.24	Short broadswords, <i>e.g.</i> cutlasses	.8	Slings, catapults and similar primitive ballistic devices
.25	Straight swords, <i>e.g.</i> rapiers, foils, duelling swords	623.447	STAGE WEAPONS. TOY WEAPONS. HARMLESS BLANK-CHARGE DEVICES →623.456 Training and practice ammunition. Blanks 688.742 Theatre accessories
.27	Small swords. Ceremonial swords →623.447.4 Stage swords. Toy swords	.4	Stage swords. Toy swords →623.444.27 Small swords. Ceremonial swords
.3	Bayonets	.5	Blank-charge guns. Cap pistols etc →623.443.6 Signal pistols. Flare pistols <i>Further particulars may be denoted by colon combination, e.g.</i> 623.447.5:688.742 Stage pistols
.38	Attachments (for fixing and unfixing bayonets)		
.4	Shafted weapons, <i>e.g.</i> lances, spears, pikes →623.446.5 Throwing or hurling weapons		
.6	Daggers. Dirks. Poniards. Stilettos etc. Hunting knives. Bowie knives. Spring-loaded knife-blades		
.7	Forks, pitchforks and similar implements used as thrusting and piercing weapons		
.8	Scythes, sickles, slash-hooks and similar implements used as cutting and slashing weapons		
.92	Handles. Hilts. Hafts. Guards etc		
.95	Sheaths. Scabbards		
623.445	PROTECTIVE EQUIPMENT. ARMOUR. HELMETS ETC →623.454.76 Protection against flames and incendiaries. Fireproof protective clothing etc		