
International Classification for Standards

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Introduction

1 Purpose of the ICS

1.1 The ICS (International Classification for Standards) is intended to serve as a structure for catalogues of international, regional and national standards and other normative documents, and as a basis for standing-order systems for international, regional and national standards. It may also be used for classifying standards and normative documents in databases, libraries, etc.

1.2 The ICS should facilitate the harmonization of information and ordering tools such as catalogues, selective lists, bibliographies, and databases on magnetic and optical media, thus promoting the world-wide dissemination of international, regional and national standards and other normative documents.

2 Description of the ICS

2.1 For the purposes of this document, the general term "standard" is applied to all international, regional and national normative documents, such as standards, technical reports, standardized profiles, technical specifications, technical regulations, guides, codes of practice, technology trends assessments, etc. and the drafts of such documents.

2.2 The ICS is a hierarchical classification which consists of three levels.

2.3 Level 1 covers 40 fields of activity in standardization, e.g. road vehicle engineering, agriculture, metallurgy. Each field has a two-digit notation, e.g.

43 *ROAD VEHICLE ENGINEERING*

2.4 The fields are subdivided into 391 groups (level 2). The notation of a group consists of the field notation and a three-digit group number, separated by a point, e.g.

43.040 *Road vehicle systems*

2.5 134 of the 391 groups are further divided into 895 sub-groups (level 3). The notation of a sub-group consists of the group notation and a two-digit number, separated by a point, e.g.

43.040.20 *Lighting, signalling and warning devices*

2.6 A number of group and sub-group titles are followed by scope notes and/or reference notes, indicated by asterisks and printed in italics in the ICS. A scope note, as a rule, lists subjects covered by a given group/sub-group or defines the subject of a given group/sub-group. A reference note refers to a subject, related to a given group/sub-group, which is covered by another group/sub-group.

2.7 All groups divided into sub-groups contain, with a few exceptions, a sub-group which covers the complete subject of the respective group. Such general subject sub-groups have notations terminating with ".01". For example, the group

07.100 *Microbiology*

contains as a first sub-group

07.100.01 *Microbiology in general*

which shall include standards covering the subject of microbiology in general, e.g. the standard

ISO 4831:1991, *Microbiology – General guidance for the enumeration of coliforms – Most probable number technique*

while standards covering medical microbiology, microbiology of water or food microbiology shall be included respectively in other specific sub-groups: 07.100.10, 07.100.20 or 07.100.30.

2.8 Most of the groups divided into sub-groups contain a sub-group having the notation terminating with ".99". Such sub-groups include standards on subjects which do not correspond either to the subjects of the general sub-groups or to the subjects of the specific sub-groups of the respective groups. For example, the subject of the standard

ISO 10945:1994, *Hydraulic fluid power – Gas-loaded accumulators – Dimensions of gas ports*

does not correspond either to the subject of the sub-group

23.100.01 *Fluid power systems in general*

or to the specific subjects of the sub-groups

23.100.10 *Pumps and motors*
23.100.20 *Cylinders*
23.100.40 *Piping and couplings*

In this case, it shall be included in the sub-group

23.100.99 *Other fluid power system components*

The above rule does not apply in the ICS if all standards related to a group can be included either in the general sub-group or in the specific sub-groups.

For example, the group

21.100 *Bearings*

contains the general subject sub-group

21.100.01 *Bearings in general*

and specific sub-groups

21.100.10 *Plain bearings*

21.100.20 *Rolling bearings*

The group does not contain a sub-group

21.100.99 *Other bearings*

since all bearings belong only to two types of bearings: plain bearings and rolling bearings.

3 Rules for the use of the ICS

3.1 The latest edition of the ICS with the subsequent issues of the ICS Update should be used for indexing standards and other normative documents and their drafts. Before indexing standards for the first time, the indexer should first carefully study the present rules and the ICS structure.

3.2 Standards should be classified according to their subjects. The indexer should first identify the appropriate field for a given subject, then allocate the appropriate group notation, and, further, the sub-group's notation if the group is subdivided. For example, the standard

ISO 3412:1992, *Road vehicles – Screened and waterproof spark-plugs and their connections – Types 1A and 1B*

belongs to the field

43 *Road vehicle engineering*

The appropriate group within the field is

43.060 *Internal combustion engines for road vehicles*

and the appropriate sub-group within the group is

43.060.50 *Electrical equipment. Control systems*

If the field of application of a standard is not clear from its content, indexers may take into account the scopes of the relevant technical committee, subcommittee and working group responsible for the development of the standard.

3.3 The alphabetical index of the ICS may be used as a supplementary tool for identifying the appropriate field, group, sub-group, but the notations found in the index shall be carefully verified against the systematic table. The reason is that only the systematic table contains the full information relating to a group notation, such as its title, the field to which it belongs, the subdivision into sub-groups, sometimes the scope note, and the reference note(s) showing its relationship with other group(s) or sub-group(s). Otherwise errors in indexing may occur.

3.4 It is recommended to use all levels available for classifying a given standard. For example, the standards

ISO 5358:1992, *Anaesthetic machines for use with humans*

ISO 7864:1993, *Sterile hypodermic needles for single use*

ISO 7740:1985, *Instruments for surgery – Scalpels with detachable blades – Fitting dimensions*

should be classified respectively in sub-groups 11.040.10, 11.040.20 and 11.040.30 (level 3); it is not recommended to allocate notation 11.040 (level 2) to the above standards since it may create difficulties in the exchange of ICS data between databases and will impede application of the ICS in multinational information systems.

3.5 Standards classified according to this classification may be included in more than one group or sub-group; e.g. the standard

ISO 3477:1981, *Polypropylene (PP) pipes and fittings – Density – Determination and specification*

shall be included in the two sub-groups

23.040.20 *Plastics pipes*
23.040.45 *Plastics fittings*

while the standard

ISO 8159:1987, *Textiles – Morphology of fibres and yarns – Vocabulary*

shall be included in the three sub-groups

01.040.59 *Textile and leather technology (Vocabularies)*
59.060.01 *Textile fibres in general*
59.080.20 *Yarns*

However, it is recommended to avoid the allocation of more than four notations to one document.

3.6 Standards included in the groups

01.040 *Vocabularies*
01.060 *Quantities and units*
01.070 *Colour coding*
01.075 *Character symbols*

and the sub-groups

01.080.20 *Graphical symbols for use on specific equipment*
01.080.30 *Graphical symbols for use on mechanical engineering and construction drawings, diagrams, plans, maps and in other technical product documentation*
01.080.40 *Graphical symbols for use on electrical and electronics engineering drawings, diagrams, charts and in relevant technical product documentation*
01.080.50 *Graphical symbols for use on information technology and telecommunications technical drawings and in relevant technical product documentation*

shall also be included in other groups and/or sub-groups according to their subjects; e.g. the standard

ISO 1942-4:1989, *Dental vocabulary – Part 4: Dental equipment*

shall be included in the two sub-groups

01.040.11 *Health care technology (Vocabularies)*
11.060.20 *Dental equipment*

while the standard

ISO 6405-1:1991, *Earth-moving machinery – Symbols for operator controls and other displays – Part 1: Common symbols*

shall be included both in the sub-group

01.080.20 *Graphical symbols for use on specific equipment*

and in the group

53.100 *Earth-moving machinery*

3.7 A standard containing definitions which apply only for the purpose of that standard shall not be classified into the group

01.040 *Vocabularies*

3.8 Amendments, addenda and technical corrigenda to a standard shall have the same notations as the standard itself.

3.9 Standards for systems, components, spare parts and materials used for specific equipment, machines and installations should be classified in the respective groups and sub-groups containing standards for the equipment, machines and installations if the ICS does not contain groups or sub-groups specially designated for classifying the relevant systems, components, spare parts and materials. For example, standard

ISO 5696:1984, *Trailed agricultural vehicles – Brakes and braking devices – Laboratory test method*

should be included in the sub-group

65.060.10 *Agricultural tractors and trailed vehicles*

since the ICS does not contain a group/sub-group for braking systems of agricultural machinery, while the standard

ISO 4251-1:1998, *Tyres (ply rating marked series) and rims for agricultural tractors and machines – Part 1: Tyre designation and dimensions, and approved rim contours*

should be included in the sub-group

83.160.30 *Tyres for agricultural machinery*

3.10 Where a group is further subdivided into sub-groups, only the notations of the sub-groups shall be allocated to standards, e.g. the standard

ISO 4254-1:1989, *Tractors and machinery for agriculture and forestry – Technical means for ensuring safety – Part 1: General*

shall be classified under the title of the sub-group

65.060.01 *Agricultural machines and equipment in general*

and not under the title of the group

65.060 *Agricultural machines, implements and equipment*

3.11 If the subject of a standard covers two or more sub-groups within a group which contains only these sub-groups plus sub-groups with notations terminating with ".01" and/or ".99", i.e. the subject covers all of the specific

sub-groups, that standard shall be classified under the sub-group which has the notation terminating with ".01", e.g. the standard

ISO 4829-1:1986, *Steel and cast iron – Determination of total silicon content – Reduced molybdosilicate spectrophotometric method – Part 1: Silicon contents between 0.05 and 1.0%*

shall be classified under the title of the sub-group

77.080.01 *Ferrous metals in general*

and not under the titles of the sub-groups

77.080.10 *Irons*
77.080.20 *Steels*

since irons and steels completely cover the ferrous metals subject.

Similarly, the standard

ISO 6632:1981 *Fruits, vegetables and derived products – Determination of volatile acidity*

shall be classified under the title of the sub-group

67.080.01 *Fruits, vegetables and derived products in general*

and not under the title of the sub-groups

67.080.10 *Fruits and derived products*
67.080.20 *Vegetables and derived products*

since

67.080 *Fruits. Vegetables*

contains only

67.080.01 *Fruits, vegetables and derived products in general*
67.080.10 *Fruits and derived products*
67.080.20 *Vegetables and derived products*

3.12 A sub-group, or a group which does not have sub-groups, may be further subdivided by the user into respectively either several units (level 4) or new sub-groups (level 3). For the purpose of distinguishing subdivisions (units or new sub-groups) from those given in the classification, new notations shall be created using a hyphen as a separator, followed by a two-digit number; e.g. the group:

53.100 *Earth-moving machinery*

may be subdivided into the following new sub-groups

53.100-01 *Earth-moving machinery in general*
53.100-10 *Tractors*
53.100-20 *Excavators*
53.100-30 *Loaders*
53.100-40 *Graders*
53.100-99 *Other earth-moving machinery*

However, such subdivisions should be used very restrictively and avoided wherever possible. The preferred solution should be to address the question to the ISO Central Secretariat which is responsible for the maintenance and development of the ICS.

3.13 A semicolon should be used for separating notations in printed documents. To provide consistency in the presentation of notations, they should be sorted in ascending numerical order, e.g. ICS notations for ISO 8159:1987 should be indicated as follows: ICS 01.040.59; 59.060.01; 59.080.20.

For data exchange, the rules set up in the second edition (1998) of the *ISONET Manual* should be used.

3.14 Fields

- 21 *MECHANICAL SYSTEMS AND COMPONENTS FOR GENERAL USE*
- 23 *FLUID SYSTEMS AND COMPONENTS FOR GENERAL USE*

and also the fields and the groups for which the scopes contain an indication that this field or group includes standards for general use, e.g.

- 13.110 *Safety of machinery*
**This group includes standards only for general use*

shall contain only standards for general use which may be applied by different industries. For example, the standard

- ISO 10317:1992, *Rolling bearings – Metric tapered roller bearings – Designation system*

which may be applied by different industries, shall be included in the sub-group

- 21.100.20 *Rolling bearings*

while standards

- ISO 6045:1987, *Shipbuilding and marine structures – Bearings for derrick goosenecks – Assemblies and components*

and

- ISO 14204:1998, *Aerospace – Airframe ball bearings, double-row, rigid, diameter series 0 – – Metric series*

which are designated for application by specific industries, shall be included respectively in the sub-groups related to those industries, namely

- 47.020.40 *Lifting and cargo handling equipment*

and

- 49.035 *Components for aerospace construction*

The standard

- ISO 1167:1996, *Thermoplastic pipes for the conveyance of fluids – Resistance to internal pressure – Test method*

which is applied for general purposes and may be used by different industries, shall be included in the sub-group

- 23.040.20 *Plastic pipes*

while the standard

ISO 4437:1997, *Buried polyethylene (PE) pipes for the supply of gaseous fuels – Metric series – Specification*

which is designated for specific purposes of natural gas handling, shall be included respectively in the group related to those specific purposes (from the point of view of using the product) and in the sub-group related to the relevant type of product (from the point of view of manufacturing the product), namely

75.200 *Petroleum products and natural gas handling equipment*

and

83.140.30 *Plastic pipes, fittings and valves*

The standard

ISO/TR 12100-2:1992, *Safety of machinery – Basic concepts, general principles for design – Part 2: Technical principles and specifications*

shall be included in the group

13.110 *Safety of machinery*

while the standard

ISO 4254-1:1989, *Tractors and machinery for agriculture and forestry – Technical means for ensuring safety – Part 1: General*

shall not be included in the above group since it is designated for use by only one industry, the agricultural machinery engineering sector; the standard shall be included in the sub-group

65.060.01 *Agricultural machines and equipment in general*

3.15 If a group/sub-group has a reference note to another group/sub-group, the standards related to the subject indicated in the relevant reference note shall be classified in the referenced group/sub-group. For example, the sub-group

81.060.20 *Ceramic products*

contains the reference note

**Sanitary ceramic products, see 91.140.70*

therefore, standards for sanitary ceramic products shall be classified into the sub-group

91.140.70 *Sanitary installations*

and not into the sub-group

81.060.20 *Ceramic products*

3.16 If an international standard is adopted as a regional and/or national standard, the regional and/or national standard shall have the notation(s) allocated to the international standard. Similarly, if a regional standard is adopted as a national standard, the latter shall have the notation(s) allocated to the regional standard.

3.17 In general, to provide worldwide consistency in indexing, indexers should be guided by the practices of allocation of ICS notations applied for international standards (in the first place) and regional standards.

3.18 Identified errors in indexing due to misallocation of ICS notations, transposing of figures in ICS notations, typographical errors, etc. should be notified to the organization concerned.

4 Updating of the ICS

4.1 The classification is updated according to needs. Any user may submit proposals for modifications and/or additions to the ICS. Such proposals should be sent to the ISO Central Secretariat at the following address:

1, rue de Varembé	Tel.	+ 41 22 749 01 11
Case postale 56	Fax	+ 41 22 749 01 55
CH-1211 GENEVE 20	E-mail:	mbinfo@iso.ch

4.2 All proposals received will be considered and their authors will be informed on any follow-up action.

5 How to use the ICS index

5.1 The ICS index is presented in a KWIC (key-word-in-context) form. The titles of all fields/groups/sub-groups, scope notes and reference notes (when they do not repeat the titles of corresponding fields/groups/sub-groups) appear under all words (keywords) which they contain with the exception of stop-words. These are words which are not significant for search purposes. They include prepositions and such words as "and", "some", "other", "any", "device", "standard", "designation", "sampling" and so on.

5.2 The keywords (printed in bold characters) are arranged in alphabetical order in a single column down the page.

5.3 Keywords are separated from their titles by a bullet symbol (●)

5.4 Notations of fields/groups/sub-groups are given at the left hand column. According to their numbers, corresponding fields/groups/sub-groups are easily identified in the systematic table of fields, groups and sub-groups.

6 List of the ICS fields

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97 DOMESTIC AND COMMERCIAL EQUIPMENT. ENTERTAINMENT. SPORTS....	59
99 (No title)	61

Systematic table
of fields, groups
and sub-groups

01 GENERALITIES. TERMINOLOGY. STANDARDIZATION. DOCUMENTATION

01.020 Terminology (principles and coordination)

**Including terminography*

01.040 Vocabularies

**Standards included in this group shall also be included in other groups and/or sub-groups according to their subjects*

- 01.040.01 Generalities. Terminology. Standardization. Documentation (Vocabularies)
- 01.040.03 Sociology. Services. Company organization and management. Administration. Transport (Vocabularies)
- 01.040.07 Mathematics. Natural sciences (Vocabularies)
- 01.040.11 Health care technology (Vocabularies)
- 01.040.13 Environment and health protection. Safety (Vocabularies)
- 01.040.17 Metrology and measurement. Physical phenomena (Vocabularies)
- 01.040.19 Testing (Vocabularies)
- 01.040.21 Mechanical systems and components for general use (Vocabularies)
- 01.040.23 Fluid systems and components for general use (Vocabularies)
- 01.040.25 Manufacturing engineering (Vocabularies)
- 01.040.27 Energy and heat transfer engineering (Vocabularies)
- 01.040.29 Electrical engineering (Vocabularies)
- 01.040.31 Electronics (Vocabularies)
- 01.040.33 Telecommunications. Audio and video engineering (Vocabularies)
- 01.040.35 Information technology. Office machines (Vocabularies)
- 01.040.37 Image technology (Vocabularies)
- 01.040.39 Precision mechanics. Jewellery (Vocabularies)
- 01.040.43 Road vehicle engineering (Vocabularies)
- 01.040.45 Railway engineering (Vocabularies)
- 01.040.47 Shipbuilding and marine structures (Vocabularies)
- 01.040.49 Aircraft and space vehicle engineering (Vocabularies)
- 01.040.53 Materials handling equipment (Vocabularies)
- 01.040.55 Packaging and distribution of goods (Vocabularies)
- 01.040.59 Textile and leather technology (Vocabularies)
- 01.040.61 Clothing industry (Vocabularies)
- 01.040.65 Agriculture (Vocabularies)
- 01.040.67 Food technology (Vocabularies)
- 01.040.71 Chemical technology (Vocabularies)
- 01.040.73 Mining and minerals (Vocabularies)
- 01.040.75 Petroleum and related technologies (Vocabularies)
- 01.040.77 Metallurgy (Vocabularies)
- 01.040.79 Wood technology (Vocabularies)
- 01.040.81 Glass and ceramics industries (Vocabularies)
- 01.040.83 Rubber and plastics industries (Vocabularies)
- 01.040.85 Paper technology (Vocabularies)
- 01.040.87 Paint and colour industries (Vocabularies)
- 01.040.91 Construction materials and building (Vocabularies)
- 01.040.93 Civil engineering (Vocabularies)
- 01.040.95 Military engineering (Vocabularies)
- 01.040.97 Domestic and commercial equipment. Entertainment. Sports (Vocabularies)

- 01.060 Quantities and units**
**Standards included in this group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.070 Colour coding**
**Standards included in this group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.075 Character symbols**
**Standards included in this group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.080 Graphical symbols**
- 01.080.01 Graphical symbols in general
- 01.080.10 Public information symbols
- 01.080.20 Graphical symbols for use on specific equipment
**Standards included in this sub-group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.080.30 Graphical symbols for use on mechanical engineering and construction drawings, diagrams, plans, maps and in relevant technical product documentation
**Standards included in this sub-group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.080.40 Graphical symbols for use on electrical and electronics engineering drawings, diagrams, charts and in relevant technical product documentation
**Standards included in this sub-group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.080.50 Graphical symbols for use on information technology and telecommunications technical drawings and in relevant technical product documentation
**Standards included in this sub-group shall also be included in other groups and/or sub-groups according to their subjects*
- 01.080.99 Other graphical symbols
- 01.100 Technical drawings**
**Graphical symbols for use on technical drawings, see 01.080.30*
**Computer-aided design, see 35.240.10*
- 01.100.01 Technical drawings in general
- 01.100.20 Mechanical engineering drawings
- 01.100.25 Electrical and electronics engineering drawings
**Including electrical diagrams and charts*
- 01.100.27 Technical drawings for telecommunications and information technology fields
- 01.100.30 Construction drawings
**Including civil engineering drawings*
- 01.100.40 Drawing equipment
- 01.100.99 Other standards related to technical drawings
- 01.110 Technical product documentation**
**Including rules for preparation of user guides, manuals, product specifications, etc.*
- 01.120 Standardization. General rules**
- 01.140 Information sciences. Publishing**
**Information technology applications in information, documentation and publishing, see 35.240.30*
- 01.140.10 Writing and transliteration
**Coded character sets for bibliographic information interchange, see 35.040*
- 01.140.20 Information sciences
**Including documentation, librarianship and archive systems*

- 01.140.30 Documents in administration, commerce and industry
**Technical product documentation, see 01.110*
**Banking documents, see 03.060*
**Electronic data interchange (EDI), see 35.240.60*
- 01.140.40 Publishing
**Electronic publishing, see 35.240.30*

03 SOCIOLOGY. SERVICES. COMPANY ORGANIZATION AND MANAGEMENT. ADMINISTRATION. TRANSPORT

03.020 Sociology. Demography

03.040 Labour. Employment

**Working environment, see 13.040.30 and 13.180*

03.060 Finances. Banking. Monetary systems. Insurance

**Information technology applications in banking, see 35.240.40*

03.080 Services

**Transport, see 03.220*

**Postal services, see 03.240*

03.080.01 Services in general

03.080.10 Industrial services

**Including maintenance, cleaning, etc.*

03.080.20 Services for companies

**Including publicity, advertising, etc.*

**Staff training and staff certification, see 03.100.30*

03.080.30 Services for consumers

**Including hotels, restaurants, washing, cleaning, removals, funerals, etc.*

**Transport services, see 03.220*

**Consumer information, see 97.020*

03.080.99 Other services

03.100 Company organization and management

03.100.01 Company organization and management in general

**Including legal aspects and risk management*

03.100.10 Purchasing. Procurement. Logistics

03.100.20 Trade. Commercial function. Marketing

03.100.30 Management of human resources

**Including staff training, and staff qualifications and certification*

**Welders' qualifications, see 25.160.01*

03.100.40 Research and development

**Including project management, value analysis, etc.*

03.100.50 Production. Production management

03.100.60 Accountancy

03.100.99 Other standards related to company organization and management

03.120 Quality

03.120.01 Quality in general

**Including general aspects related to reliability and maintainability*

03.120.10 Quality management and quality assurance

03.120.20 Product and company certification. Conformity assessment

**Including laboratory accreditation and audit programmes and auditing*

03.120.30 Application of statistical methods

03.120.99 Other standards related to quality

03.140 Patents. Intellectual property

- 03.160 Law. Administration**
**This group includes standards for general use*
**Including flags and associated symbols (emblems) of political and administrative entities, military flags, flags of organizations, etc.*
- 03.180 Education**
- 03.200 Leisure. Tourism**
**Camping equipment, see 97.200.30*
- 03.220 Transport**
**Transport of dangerous goods, see 13.300*
- 03.220.01 Transport in general
- 03.220.20 Road transport
**Including road transport services*
**Road traffic control equipment and installations, see 93.080.30*
- 03.220.30 Transport by rail
**Including rail transport services*
**Rail traffic control equipment and installations, see 93.100*
- 03.220.40 Transport by water
**Including water transport services*
**Water transport control equipment and installations, see 93.140*
- 03.220.50 Air transport
**Including air transport services*
**Air transport control equipment and installations, see 93.120*
- 03.220.99 Other forms of transport
- 03.240 Postal services**
**Including postal equipment, postboxes and letter-boxes, etc.*
-

07 MATHEMATICS. NATURAL SCIENCES

- 07.020 Mathematics**
**Application of statistical methods in quality assurance, see 03.120.30*
- 07.030 Physics. Chemistry**
**This group includes standards in the field of physics and chemistry as natural sciences*
**Applied physics, see 17*
**Chemical technology, see 71*
- 07.040 Astronomy. Geodesy. Geography**
- 07.060 Geology. Meteorology. Hydrology**
- 07.080 Biology. Botany. Zoology**
**Including biotechnology*
- 07.100 Microbiology**
- 07.100.01 Microbiology in general
- 07.100.10 Medical microbiology
**Laboratory medicine, see 11.100*
- 07.100.20 Microbiology of water
**Examination of biological properties of water, see 13.060.70*
- 07.100.30 Food microbiology
**Including microbiology of animal feeding stuffs*
**Animal feeding stuffs, see 65.120*
**General methods of tests and analysis for food products, see 67.050*
- 07.100.99 Other standards related to microbiology

11 HEALTH CARE TECHNOLOGY

11.020 Medical sciences and health care facilities in general

**IT application in health care technology, see 35.240.80*

11.040 Medical equipment

- 11.040.01 Medical equipment in general
- 11.040.10 Anaesthetic, respiratory and reanimation equipment
 - *Including medical gas installations*
- 11.040.20 Transfusion, infusion and injection equipment
 - *Including blood packs and intravascular catheters*
- 11.040.30 Surgical instruments and materials
 - *Including surgical dressings, sutures, etc.*
- 11.040.40 Implants for surgery, prosthetics and orthotics
 - *Ophthalmic implants, see 11.040.70*
- 11.040.50 Radiographic equipment
 - *Including radiographic diagnostic and therapy equipment*
 - *Dental, medical and industrial radiographic films, see 37.040.25*
- 11.040.55 Diagnostic equipment
 - *Including medical monitoring equipment, medical thermometers and related materials*
- 11.040.60 Therapy equipment
- 11.040.70 Ophthalmic equipment
 - *Including ophthalmic implants*
- 11.040.99 Other medical equipment

11.060 Dentistry

- 11.060.01 Dentistry in general
- 11.060.10 Dental materials
- 11.060.15 Dental implants
- 11.060.20 Dental equipment
 - *Dental radiographic films, see 37.040.25*
- 11.060.25 Dental instruments

11.080 Sterilization and disinfection

- 11.080.01 Sterilization and disinfection in general
 - *Including sterilization methods, air quality of surgery rooms, etc.*
- 11.080.10 Sterilizing equipment
- 11.080.20 Disinfectants and antiseptics
 - *Chemicals for industrial and domestic disinfection purposes, see 71.100.35*
- 11.080.30 Sterilized packaging
- 11.080.99 Other standards related to sterilization and disinfection

11.100 Laboratory medicine

**Including toxicology, biocompatibility, biological evaluation, in-vitro diagnostics systems, doping control, analysis of blood, urine, etc.*
**Medical microbiology, see 07.100.10*

11.120 Pharmaceuticals

- 11.120.01 Pharmaceuticals in general
- 11.120.10 Medicaments
 - *Including medical prescriptions*
- 11.120.20 Medical materials
 - *Surgical materials, see 11.040.30*
- 11.120.99 Other standards related to pharmaceuticals
 - *Including equipment for pharmaceutical industry*

11.140 Hospital equipment

**Including hospital beds, surgical tables, medical garments, medical gloves, containers for sharp disposal, etc.*

- 11.160 First aid**
**Including kits, equipment, facilities and medical transport for first aid*
- 11.180 Aids for disabled or handicapped persons**
**Including aids for elderly people*
**Hearing aids, see 17.140.50*
- 11.180.01 Aids for disabled and handicapped persons in general
- 11.180.10 Aids and adaptation for moving
**Including wheelchairs and walking sticks*
- 11.180.20 Aids for ostomy and incontinence
- 11.180.30 Aids and adaptations for reading
**Including Braille*
**Glasses and contact lenses, see 11.040.70*
- 11.180.40 Aids for drinking and eating
- 11.180.99 Other standards related to aids for disabled and handicapped people
- 11.200 Birth control. Mechanical contraceptives**
- 11.220 Veterinary medicine**
**Including equipment specific to veterinary medicine*

13 ENVIRONMENT. HEALTH PROTECTION. SAFETY

- 13.020 Environmental protection**
- 13.020.01 Environment and environmental protection in general
- 13.020.10 Environmental management
**Including Environmental Management Systems (EMS), certification and audit*
- 13.020.20 Environmental economics
**Including sustainable development*
- 13.020.30 Environmental impact assessment
**Including environmental risk management*
- 13.020.40 Pollution, pollution control and conservation
**Including ecotoxicology*
- 13.020.50 Ecolabelling
- 13.020.60 Product life-cycles
- 13.020.70 Environmental projects
- 13.020.99 Other standards related to environmental protection
- 13.030 Wastes**
**Standards for industrial and agricultural wastes should be classified under sub-groups according to their type*
- 13.030.01 Wastes in general
- 13.030.10 Solid wastes
- 13.030.20 Liquid wastes. Sludge
**Sewage water disposal and treatment, see 13.060.30*
- 13.030.30 Special wastes
**Including radioactive wastes, hospital wastes, carcasses, and other hazardous wastes*
- 13.030.40 Installations and equipment for waste disposal and treatment
**Including street cleaning equipment, waste containers, incineration and compaction equipment, equipment for dumping of refuse, landfill sites, etc.*
**Waste collection vehicles, see 43.160*
**Waste chutes, see 91.140.70*
**Food waste disposal units, see 97.040.50*
- 13.030.50 Recycling
**Including relevant equipment*
- 13.030.99 Other standards related to wastes
**Including waste prevention*

- 13.040 Air quality**
- 13.040.01 Air quality in general
 - 13.040.20 Ambient atmospheres
 - *Including indoor air*
 - 13.040.30 Workplace atmospheres
 - *Air quality of surgery rooms, see 11.080*
 - 13.040.35 Cleanrooms and associated controlled environments
 - 13.040.40 Stationary source emissions
 - 13.040.50 Transport exhaust emissions
 - 13.040.99 Other standards related to air quality
- 13.060 Water quality**
- *Standards for examination of water should be classified under sub-groups according to their type of water*
 - *Including toxicity, biodegradability, protection against pollution, related installations and equipment*
 - 13.060.01 Water quality in general
 - 13.060.10 Water of natural resources
 - 13.060.20 Drinking water
 - *Mineral water, see 67.160.20*
 - *Chemicals for purification of water, see 71.100.80*
 - *Drinking water supply systems, see 91.140.60*
 - 13.060.25 Water for industrial use
 - *Including water for commercial use: for swimming pools, fish breeding, etc.*
 - 13.060.30 Sewage water
 - *Including sewage water disposal and treatment*
 - *Liquid wastes, see 13.030.20*
 - *Drainage systems, see 91.140.80*
 - *Sewage systems, see 93.030*
 - 13.060.45 Examination of water in general
 - *Including sampling*
 - 13.060.50 Examination of water for chemical substances
 - 13.060.60 Examination of physical properties of water
 - 13.060.70 Examination of biological properties of water
 - *Microbiology of water, see 07.100.20*
 - 13.060.99 Other standards related to water quality
- 13.080 Soil quality. Pedology**
- *Soil properties related to geotechnics, see 93.020*
 - 13.080.01 Soil quality and pedology in general
 - *Including pollution, erosion, degradation, etc.*
 - 13.080.05 Examination of soils in general
 - *Including sampling*
 - 13.080.10 Chemical characteristics of soils
 - 13.080.20 Physical properties of soils
 - 13.080.30 Biological properties of soils
 - 13.080.40 Hydrological properties of soils
 - 13.080.99 Other standards related to soil quality
 - *Including agricultural aspects related to soils and re-use of soil materials*
- 13.100 Occupational safety. Industrial hygiene**
- *Protective clothing and equipment, see 13.340*
 - *Workplace lighting, see 91.160.10*
- 13.110 Safety of machinery**
- *This group includes standards only for general use*
- 13.120 Domestic safety**
- *Child safety, see 97.190*
 - *Safety of toys, see 97.200.50*
- 13.140 Noise with respect to human beings**
- *Including audiometry*
 - *Hearing protectors, see. 13.340.20*
 - *Acoustics and acoustic measurements, see 17.140*

- 13.160 Vibration and shock with respect to human beings**
**Vibrations, shock and vibration measurements, see 17.160*
- 13.180 Ergonomics**
- 13.200 Accident and disaster control**
**Including emergency evacuations and emergency control systems*
**Seismic and vibration protection of buildings, see 91.120.25*
- 13.220 Protection against fire**
- 13.220.01 Protection against fire in general
**Including fire safety*
- 13.220.10 Fire-fighting
**Including equipment and vehicles*
**Flameproof clothing, see 13.340.10*
- 13.220.20 Fire protection
**Including equipment*
- 13.220.40 Ignitability and burning behaviour of materials and products
- 13.220.50 Fire-resistance of building materials and elements
- 13.220.99 Other standards related to protection against fire
- 13.230 Explosion protection**
**Electrical apparatus for explosive atmospheres, see 29.260.20*
**Explosives and pyrotechnics, see 71.100.30*
- 13.240 Protection against excessive pressure**
**Including safety valves, bursting disc devices, etc.*
- 13.260 Protection against electric shock**
**Including tools for working with voltages*
- 13.280 Radiation protection**
**Including protection against radio-frequency radiation*
**Radiation measurements, see 17.240*
- 13.300 Protection against dangerous goods**
**Including performance requirements for dangerous goods, their handling, storage, transportation, marking, labelling, etc.*
**Nuclear fissile materials, see 27.120.30*
**Explosives, see 71.100.30*
- 13.310 Protection against crime**
**Including security services, security procedures, burglar alarm devices, burglary resisting materials and equipment, bullet resisting materials and equipment, anti-theft devices for vehicles, safes, strongrooms, etc.*
- 13.320 Alarm and warning systems**
**Burglar alarm and warning systems, see 13.310*
**Warning devices for road vehicles, see 43.040.20*
- 13.340 Protective equipment**
**Occupational safety, see 13.100*
- 13.340.01 Protective equipment in general
- 13.340.10 Protective clothing
**Including flameproof clothing, personal flotation devices (life jackets)*
- 13.340.20 Head protective equipment
**Including helmets, eye-protectors, hearing protectors, etc.*
- 13.340.30 Respiratory protective devices
- 13.340.40 Protective gloves
**Medical gloves, see 11.140*
- 13.340.50 Protective footwear
- 13.340.99 Other protective equipment

17 METROLOGY AND MEASUREMENT. PHYSICAL PHENOMENA

17.020 Metrology and measurement in general

**Including measuring instruments in general, preferred numbers, standard measures, general aspects of reference materials, etc*

**Quantities and units, see 01.060*

**Chemical reference materials, see 71.040.30*

17.040 Linear and angular measurements

**Including Geometrical Product Specifications (GPS)*

17.040.01 Linear and angular measurements in general

17.040.10 Limits and fits

17.040.20 Properties of surfaces

17.040.30 Measuring instruments

17.040.99 Other standards related to linear and angular measurements

17.060 Measurement of volume, mass, density, viscosity

**Including measuring instruments*

**Volumetric measurements of petroleum products and natural gas, see 75.180.30*

17.080 Measurement of time, velocity, acceleration, angular velocity

**Including measuring instruments*

**Time-measuring instruments, see 39.040*

17.100 Measurement of force, weight and pressure

**Including measuring instruments*

17.120 Measurement of fluid flow

**Including measuring instruments and installations*

17.120.01 Measurement of fluid flow in general

17.120.10 Flow in closed conduits

**Gas meters in buildings, see 91.140.40*

**Water meters in buildings, see 91.140.60*

17.120.20 Flow in open channels

17.140 Acoustics and acoustic measurements

**Including measuring instruments and testing equipment*

**Noise with respect to human beings, see 13.140*

**Acoustics in building, see 91.120.20*

17.140.01 Acoustic measurements and noise abatement in general

17.140.20 Noise emitted by machines and equipment

**Standards included in this sub-group shall also be included in other groups and/or sub-groups according to their subject*

17.140.30 Noise emitted by means of transport

**Including road noise, railway noise, harbour noise and airport noise*

**Standards included in this sub-group shall also be included in other groups and/or sub-groups according to their subject*

17.140.50 Electroacoustics

**Including hearing aids and sound level meters*

17.140.99 Other standards related to acoustics

17.160 Vibrations, shock and vibration measurements

**Including measuring instruments and installations*

**Vibration and shock with respect to human beings, see 13.160*

**Balancing and balancing machines, see 21.120.40*

**Vibration protection of buildings, see 91.120.25*

- 17.180 Optics and optical measurements**
17.180.01 Optics and optical measurements in general
17.180.20 Colours and measurement of light
17.180.30 Optical measuring instruments
**Including spectrosopes, geodetic instruments, etc.*
**Ophthalmic optics and instruments, see 11.040.70*
**Laser equipment, see 31.260*
**Fibre optics, see 33.180*
**Optical equipment, see 37.020*
**Photographic equipment lenses, see 37.040.10*
17.180.99 Other standards related to optics and optical measurements
- 17.200 Thermodynamics and temperature measurements**
17.200.01 Thermodynamics in general
17.200.10 Heat. Calorimetry
17.200.20 Temperature-measuring instruments
**Including thermostats*
**Medical thermometers, see 11.040.50*
17.200.99 Other standards related to thermodynamics
- 17.220 Electricity. Magnetism. Electrical and magnetic measurements**
17.220.01 Electricity. Magnetism. General aspects
**Including electromagnetism*
17.220.20 Measurement of electrical and magnetic quantities
**Including measuring instruments, instrument transformers*
**Electric energy meters in buildings, see 91.140.50*
17.220.99 Other standards related to electricity and magnetism
- 17.240 Radiation measurements**
**Radiation protection, see 13.280*

19 TESTING

**This field includes standards for general use only*
**Analytical chemistry, see 71.040*

- 19.020 Test conditions and procedures in general**
- 19.040 Environmental testing**
**Including testing equipment*
- 19.060 Mechanical testing**
**Including testing equipment*
**Mechanical testing of metals, see 77.040.10*
- 19.080 Electrical and electronic testing**
**Including testing equipment*
**Equipment for measuring electrical and magnetic quantities, see 17.220.20*
- 19.100 Non-destructive testing**
**Including testing equipment: industrial apparatus for X-ray and gamma radiography, penetrant flaw detectors, etc.*
**Non-destructive testing of welded joints, see 25.160.40*
**Industrial radiographic films, see 37.040.25*
**Non-destructive testing of metals, see 77.040.20*
- 19.120 Particle size analysis. Sieving**
**Including test sieves*

21 MECHANICAL SYSTEMS AND COMPONENTS FOR GENERAL USE

21.020 Characteristics and design of machines, apparatus, equipment

**Including reliability, dependability, maintainability, durability, etc.*

**Safety of machinery, see 13.110*

21.040 Screw threads

**Screw threads for aerospace construction, see 49.030.10*

21.040.01 Screw threads in general

21.040.10 Metric screw threads

21.040.20 Inch screw threads

**Including Whitworth screw threads*

**Pipe threads, see 21.040.30*

21.040.30 Special screw threads

**Including miniature screw threads, pipe threads, etc.*

21.060 Fasteners

**Fasteners related to surgery, prosthetics and orthotics, see 11.040.40*

**Fasteners for aerospace construction, see 49.030*

21.060.01 Fasteners in general

21.060.10 Bolts, screws, studs

21.060.20 Nuts

21.060.30 Washers, locking elements

21.060.40 Rivets

21.060.50 Pins, nails

21.060.60 Rings, bushes, sleeves, collars

21.060.70 Clamps and staples

21.060.99 Other fasteners

21.080 Hinges, eyelets and other articulated joints

21.100 Bearings

21.100.01 Bearings in general

21.100.10 Plain bearings

21.100.20 Rolling bearings

21.120 Shafts and couplings

21.120.01 Shafts and couplings in general

21.120.10 Shafts

21.120.20 Couplings

21.120.30 Keys and keyways, splines

21.120.40 Balancing and balancing machines

21.120.99 Other standards related to shafts and couplings

21.140 Seals, glands

**Seals for pipe and hose assemblies, see 23.040.80*

21.160 Springs

**Steel for springs, see 77.140.25*

21.180 Housings, enclosures, other machine parts

21.200 Gears

21.220 Flexible drives and transmissions

21.220.01 Flexible drives and transmissions in general

21.220.10 Belt drives and their components

- 21.220.20 Cable or rope drives and their components
 - 21.220.30 Chain drives and their components
 - 21.220.99 Other flexible drives and transmissions
- 21.240 Rotary-reciprocating mechanisms and their parts**
**Including pistons, piston-rings, crankshafts, etc. for general engineering*
- 21.260 Lubrication systems**
**Lubricants, see 75.100*

23 FLUID SYSTEMS AND COMPONENTS FOR GENERAL USE

**Measurement of fluid flow, see 17.120*

- 23.020 Fluid storage devices**
**Small containers for transportation of fluids and bulk materials, see 55.140*
**Storage devices for petroleum products and natural gas, see 75.200*
- 23.020.01 Fluid storage devices in general
 - 23.020.10 Stationary containers and tanks
 - 23.020.20 Vessels and containers mounted on vehicles
**Tanker trucks, see 43.080.10*
**Tankers, see 47.020.85*
**Tank wagons, see 45.060.20*
**Small containers for fluids, see 55.140*
 - 23.020.30 Gas pressure vessels, gas cylinders
**Steam pressure vessels, see 27.060.30*
**Steel for pressure purposes, see 77.140.30*
 - 23.020.40 Cryogenic vessels
 - 23.020.99 Other fluid storage devices
- 23.040 Pipeline components and pipelines**
**Pipeline components and pipelines for petroleum products and natural gas, see 75.200*
- 23.040.01 Pipeline components and pipelines in general
 - 23.040.10 Iron and steel pipes
**Steel pipes and tubes for specific use, see 77.140.75*
 - 23.040.15 Non-ferrous metal pipes
**Non-ferrous metal pipes and tubes for specific use, see 77.150*
 - 23.040.20 Plastics pipes
 - 23.040.40 Metal fittings
 - 23.040.45 Plastics fittings
 - 23.040.50 Pipes and fittings of other materials
 - 23.040.60 Flanges, couplings and joints
 - 23.040.70 Hoses and hose assemblies
 - 23.040.80 Seals for pipe and hose assemblies
 - 23.040.99 Other pipeline components
- 23.060 Valves**
- 23.060.01 Valves in general
 - 23.060.10 Globe valves
 - 23.060.20 Ball and plug valves
 - 23.060.30 Gate valves
 - 23.060.40 Pressure regulators
**Including pressure-reducers*
**Protection against excessive pressure, see 13.240*
 - 23.060.50 Check valves
 - 23.060.99 Other valves

- 23.080 Pumps**
**Pumps for fluid power systems, see 23.100.10*
**Vacuum pumps, see 23.160*
- 23.100 Fluid power systems**
23.100.01 Fluid power systems in general
23.100.10 Pumps and motors
23.100.20 Cylinders
23.100.40 Piping and couplings
23.100.50 Control components
**Including valves*
23.100.60 Filters, seals and contamination of fluids
**Hydraulic fluids, see 75.120*
23.100.99 Other fluid power system components
- 23.120 Ventilators. Fans. Air-conditioners**
**Marine ventilation and air-conditioning systems, see 47.020.90*
**Mining ventilation and air-conditioning systems, see 73.100.20*
**Ventilation and air-conditioning in buildings, see 91.140.30*
- 23.140 Compressors and pneumatic machines**
**Compressed air, see 71.100.20*
- 23.160 Vacuum technology**
**Including vacuum pumps*
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25 MANUFACTURING ENGINEERING

**This field includes standards for general use*

- 25.020 Manufacturing forming processes**
- 25.040 Industrial automation systems**
**IT applications in industry, see 35.240.50*
25.040.01 Industrial automation systems in general
25.040.10 Machining centres
25.040.20 Numerically controlled machines
25.040.30 Industrial robots. Manipulators
25.040.40 Industrial process measurement and control
25.040.99 Other industrial automation systems
- 25.060 Machine tool systems**
25.060.01 Machine tool systems in general
25.060.10 Modular units and other devices
25.060.20 Dividing and tool-workpiece holding devices
25.060.99 Other machine tool systems
- 25.080 Machine tools**
**Woodworking machines, see 79.120.10*
25.080.01 Machine tools in general
25.080.10 Lathes
25.080.20 Boring and milling machines
25.080.25 Planing machines
25.080.30 Broaching machines
25.080.40 Drilling machines
25.080.50 Grinding and polishing machines
25.080.60 Sawing machines
25.080.99 Other machine tools

- 25.100 Cutting tools**
**Including industrial diamonds*
**Woodworking tools, see 79.120.20*
- 25.100.01 Cutting tools in general
 - 25.100.10 Turning tools
 - 25.100.20 Milling tools
 - 25.100.25 Tools for planing and broaching machines
 - 25.100.30 Drills, countersinks, reamers
 - 25.100.40 Saws
 - 25.100.50 Taps and threading dies
 - 25.100.60 Files
 - 25.100.70 Abrasives
 - 25.100.99 Other cutting tools
- 25.120 Chipless working equipment**
- 25.120.01 Chipless working equipment in general
 - 25.120.10 Forging equipment. Presses. Shears
 - 25.120.20 Rolling, extruding and drawing equipment
 - 25.120.30 Moulding equipment
 - 25.120.40 Electrochemical machines
 - 25.120.99 Other chipless working equipment
- 25.140 Hand-held tools**
**Tools for working with voltages, see 13.260*
- 25.140.01 Hand-held tools in general
 - 25.140.10 Pneumatic tools
 - 25.140.20 Electric tools
**Chain- and brush-saws, see 65.060.80*
 - 25.140.30 Hand-operated tools
**Including wrenches, screwdrivers, pliers, nippers, hammers, etc.*
 - 25.140.99 Other hand-held tools
- 25.160 Welding, brazing and soldering**
**Including gas welding, electric welding, plasma welding, electron beam welding, plasma cutting, etc.*
- 25.160.01 Welding, brazing and soldering in general
**Including welders' qualifications*
 - 25.160.10 Welding processes
**Including thermal cutting and cladding*
 - 25.160.20 Welding consumables
**Including electrodes, filler metals, gases, etc.*
 - 25.160.30 Welding equipment
**Including thermal cutting equipment*
 - 25.160.40 Welded joints and welds
**Including welding positions, and mechanical and non-destructive testing of welded joints*
 - 25.160.50 Brazing and soldering
**Including brazing and soldering alloys and equipment*
- 25.180 Industrial furnaces**
- 25.180.01 Industrial furnaces in general
 - 25.180.10 Electric furnaces
 - 25.180.20 Fuel furnaces
- 25.200 Heat treatment**

- 25.220 Surface treatment and coating**
**Including processes and equipment for surface treatment and coating*
**Heat treatment, see 25.200*
**Surface treatment and coating in aerospace industry, see 49.040*
**Corrosion of metals, see 77.060*
**Paint coating, see 87.020*
- 25.220.01 Surface treatment and coating in general
- 25.220.10 Surface preparation
**Including surface preparation for painting, cleaning, scouring, blasting, etc.*
- 25.220.20 Surface treatment
**Including anodization, conversion coating, thermal spraying, etc.*
- 25.220.40 Metallic coatings
**Including electrolytic depositions, cathodic coatings, autocatalytic coatings, etc.*
- 25.220.50 Enamels
- 25.220.60 Organic coatings
- 25.220.99 Other treatments and coatings
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27 ENERGY AND HEAT TRANSFER ENGINEERING

- 27.010 Energy and heat transfer engineering in general**
- 27.020 Internal combustion engines**
**This group includes standards for general use*
**Internal combustion engines for road vehicles, see 43.060*
**Marine engines, see 47.020.20*
- 27.040 Gas and steam turbines. Steam engines**
**Hydraulic turbines, see 27.140*
- 27.060 Burners. Boilers**
- 27.060.01 Burners and boilers in general
**Burners and boilers for central heating systems, see 91.140.10*
- 27.060.10 Liquid and solid fuel burners
- 27.060.20 Gas fuel burners
- 27.060.30 Boilers and heat exchangers
**Including steam pressure vessels*
**Heat exchangers for the chemical industry, see 71.120.30*
**Heating appliances for buildings, see 97.100*
- 27.070 Fuel cells**
- 27.080 Heat pumps**
- 27.100 Power stations in general**
**Including thermal power plants*
**Nuclear power plants, see 27.120.20*
**Hydraulic power plants, see 27.140*
**Solar power stations, see 27.160*
**Wind turbine systems, see 27.180*
- 27.120 Nuclear energy engineering**
- 27.120.01 Nuclear energy in general
- 27.120.10 Reactor engineering
- 27.120.20 Nuclear power plants. Safety
**Radiation protection, see 13.280*
- 27.120.30 Fissile materials
**Including raw materials*
**Radioactive wastes, see 13.030.30*

- 27.120.99 Other standards related to nuclear energy
- 27.140 Hydraulic energy engineering**
**Including hydraulic turbines*
- 27.160 Solar energy engineering**
**Including photovoltaic energy systems*
- 27.180 Wind turbine systems and other alternative sources of energy**
**Including generation of electrical energy*
- 27.200 Refrigerating technology**
**Air-conditioners, see 23.120*
**Refrigerants, see 71.100.45*
**Household refrigerating appliances, see 97.040.30*
**Commercial refrigerating appliances, see 97.130.20*
- 27.220 Heat recovery. Thermal insulation**
**This group includes standards for general use*
**Thermal insulation of buildings, see 91.120.10*
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29 ELECTRICAL ENGINEERING

- 29.020 Electrical engineering in general**
**Including voltages, general electrical terminology, electrical documentation, electrical tables, safety, fire hazard testing, etc.*
**Electrical diagrams and charts, see 01.100.25*
**Electrical power stations, see 27.100*
**Electromagnetic compatibility, see 33.100*
- 29.030 Magnetic materials**
**Steels with special magnetic properties, see 77.140.40*
- 29.035 Insulating materials**
- 29.035.01 Insulating materials in general
- 29.035.10 Paper and board insulating materials
- 29.035.20 Plastics and rubber insulating materials
**Including adhesive tapes*
- 29.035.30 Ceramic and glass insulating materials
- 29.035.50 Mica based materials
- 29.035.60 Varnished fabrics
- 29.035.99 Other insulating materials
- 29.040 Insulating fluids**
- 29.040.01 Insulating fluids in general
- 29.040.10 Insulating oils
- 29.040.20 Insulating gases
- 29.040.99 Other insulating fluids
- 29.045 Semiconducting materials**
- 29.050 Conducting materials**
- 29.060 Electrical wires and cables**
- 29.060.01 Electrical wires and cables in general
- 29.060.10 Wires
**Including electric rods, busbars, etc.*
- 29.060.20 Cables

- 29.080 Insulation**
**Insulating materials, see 29.035*
**Insulating fluids, see 29.040*
- 29.080.01 Electrical insulation in general
29.080.10 Insulators
**Including fittings and other components for insulators*
- 29.080.20 Bushings
29.080.30 Insulation systems
29.080.99 Other standards related to insulation
- 29.100 Components for electrical equipment**
**Electronic components, see 31*
- 29.100.01 Components for electrical equipment in general
29.100.10 Magnetic components
29.100.20 Electrical and electromechanical components
29.100.99 Other components for electrical equipment
- 29.120 Electrical accessories**
- 29.120.01 Electrical accessories in general
29.120.10 Conduits for electrical purposes
29.120.20 Connecting devices
29.120.30 Plugs, socket-outlets, couplers
29.120.40 Switches
29.120.50 Fuses and other overcurrent protection devices
29.120.70 Relays
29.120.99 Other electrical accessories
- 29.130 Switchgear and controlgear**
- 29.130.01 Switchgear and controlgear in general
29.130.10 High voltage switchgear and controlgear
**Including enclosed switchgear and controlgear*
29.130.20 Low voltage switchgear and controlgear
**Including switchgear and controlgear assemblies*
29.130.99 Other switchgear and controlgear
- 29.140 Lamps and related equipment**
- 29.140.01 Lamps in general
29.140.10 Lamp caps and holders
29.140.20 Incandescent lamps
29.140.30 Fluorescent lamps. Discharge lamps
29.140.40 Luminaires
29.140.50 Lighting installation systems
**Including supply track systems*
29.140.99 Other standards related to lamps
- 29.160 Rotating machinery**
- 29.160.01 Rotating machinery in general
29.160.10 Components for rotating machines
29.160.20 Generators
29.160.30 Motors
29.160.40 Generating sets
29.160.99 Other standards related to rotating machinery
- 29.180 Transformers. Reactors**
**Instrument transformers, see 17.220.20*
- 29.200 Rectifiers. Convertors. Stabilized power supply**
**Including semiconductor convertors*
- 29.220 Galvanic cells and batteries**
- 29.220.01 Galvanic cells and batteries in general
29.220.10 Primary cells and batteries
29.220.20 Acid secondary cells and batteries
29.220.30 Alkaline secondary cells and batteries

- 29.220.99 Other cells and batteries
- 29.240 Power transmission and distribution networks**
**Electricity supply systems in buildings, see 91.140.50*
- 29.240.01 Power transmission and distribution networks in general
- 29.240.10 Substations. Surge arresters
- 29.240.20 Power transmission and distribution lines
- 29.240.30 Control equipment for electric power systems
**Measuring instruments for electrical quantities, see 17.220.20*
- 29.240.99 Other equipment related to power transmission and distribution networks
**Including capacitors for power networks*
- 29.260 Electrical equipment for working in special conditions**
- 29.260.01 Electrical equipment for working in special conditions in general
- 29.260.10 Electrical installations for outdoor use
- 29.260.20 Electrical apparatus for explosive atmospheres
- 29.260.99 Other electrical equipment for working in special conditions
- 29.280 Electric traction equipment**
**Including railway electric fixed installations*
**Electric road vehicles, see 43.120*
**Non-electric railway tractive stock, see 45.060.10*
-

31 ELECTRONICS

- 31.020 Electronic components in general**
**Magnetic components, see 29.100.10*
- 31.040 Resistors**
- 31.040.01 Resistors in general
- 31.040.10 Fixed resistors
- 31.040.20 Potentiometers, variable resistors
- 31.040.30 Thermistors
- 31.040.99 Other resistors
- 31.060 Capacitors**
- 31.060.01 Capacitors in general
- 31.060.10 Fixed capacitors
- 31.060.20 Ceramic and mica capacitors
- 31.060.30 Paper and plastics capacitors
- 31.060.40 Tantalum electrolytic capacitors
- 31.060.50 Aluminium electrolytic capacitors
- 31.060.60 Variable capacitors
- 31.060.70 Power capacitors
**Capacitors for power networks, see 29.240.99*
- 31.060.99 Other capacitors
- 31.080 Semiconductor devices**
**Semiconducting materials, see 29.045*
- 31.080.01 Semiconductor devices in general
- 31.080.10 Diodes
- 31.080.20 Thyristors
- 31.080.30 Transistors
- 31.080.99 Other semiconductor devices
- 31.100 Electronic tubes**
- 31.120 Electronic display devices**
**Including liquid crystal displays*

- 31.140 Piezoelectric and dielectric devices**
- 31.160 Electric filters**
- 31.180 Printed circuits and boards**
- 31.190 Electronic component assemblies**
**Including preassembled modules*
- 31.200 Integrated circuits. Microelectronics**
**Including electronic chips, logical and analogue microstructures*
**Microprocessors, see 35.160*
- 31.220 Electromechanical components for electronic and telecommunications equipment**
 - 31.220.01 Electromechanical components in general
 - 31.220.10 Plug-and-socket devices. Connectors
 - 31.220.20 Switches
 - 31.220.99 Other electromechanical components
- 31.240 Mechanical structures for electronic equipment**
- 31.260 Optoelectronics. Laser equipment**
**Including photoelectric tubes and cells*

33 TELECOMMUNICATIONS. AUDIO AND VIDEO ENGINEERING

- 33.020 Telecommunications in general**
**Including infrastructure*
- 33.030 Telecommunication services. Applications**
**Including supplementary services and service aspects*
- 33.040 Telecommunication systems**
**Including network (system) aspects*
 - 33.040.01 Telecommunication systems in general
 - 33.040.20 Transmission systems
**Including synchronization, cable systems, integrated cabling, pathways and multiplexing*
 - 33.040.30 Switching and signalling systems
**Including telecommunication call charging and billing aspects*
 - 33.040.35 Telephone networks
**Including Public Switched Telephone Network (PSTN), Private Telecommunication Network (PTN) and Private Integrated Services Network (PISN)*
 - 33.040.40 Data communication networks
**Including Packet Switched Public Data Network (PSPDN) and Ethernet*
**Integrated Services Digital Network (ISDN), see 33.080*
**OSI local, wide and metropolitan area networks, see 35.110*
**Modems, see 35.180*
 - 33.040.50 Lines, connections and circuits
**Including access networks and network elements*
 - 33.040.99 Other equipment for telecommunication systems
- 33.050 Telecommunication terminal equipment**
 - 33.050.01 Telecommunication terminal equipment in general
 - 33.050.10 Telephone equipment
 - 33.050.20 Paging equipment
 - 33.050.30 Equipment for telex, teletext, telefax
**Modems, see 35.180*

- 33.050.99 Other telecommunication terminal equipment
- 33.060 Radiocommunications**
 - 33.060.01 Radiocommunications in general
 - 33.060.20 Receiving and transmitting equipment
 - 33.060.30 Radio relay and fixed satellite communications systems
 - 33.060.40 Cabled distribution systems
 - 33.060.99 Other equipment for radiocommunications
- 33.070 Mobile services**
 - 33.070.01 Mobile services in general
 - 33.070.10 Terrestrial Trunked Radio (TETRA)
 - 33.070.20 Paging systems
 - *Including European Radio Message System (ERMES)*
 - 33.070.30 Digital Enhanced Cordless Telecommunications (DECT)
 - 33.070.40 Satellite
 - *Including Global Positioning System (GPS)*
 - 33.070.50 Global System for Mobile Communication (GSM)
 - 33.070.99 Other mobile services
- 33.080 Integrated Services Digital Network (ISDN)**
- 33.100 Electromagnetic compatibility (EMC)**
 - *Including radio interference*
 - 33.100.01 Electromagnetic compatibility in general
 - 33.100.10 Emission
 - 33.100.20 Immunity
 - 33.100.99 Other aspects related to EMC
- 33.120 Components and accessories for telecommunications equipment**
 - *Plug-and-socket devices, connectors, see 31.220.10*
 - *Switches, see 31.220.20*
 - 33.120.01 Components and accessories in general
 - 33.120.10 Coaxial cables. Waveguides
 - 33.120.20 Wires and symmetrical cables
 - 33.120.30 R.F. connectors
 - 33.120.40 Aerials
 - 33.120.99 Other components and accessories
- 33.140 Special measuring equipment for use in telecommunications**
- 33.160 Audio, video and audiovisual engineering**
 - 33.160.01 Audio, video and audiovisual systems in general
 - *Stage and studio equipment, see 97.200.10*
 - 33.160.10 Amplifiers
 - 33.160.20 Radio receivers
 - 33.160.25 Television receivers
 - 33.160.30 Audio systems
 - *Including tape recorders, records, magnetic tapes, cassettes, compact disks (CD), etc.*
 - 33.160.40 Video systems
 - *Including video tape recorders, cameras, cassettes, laser discs, etc.*
 - 33.160.50 Accessories
 - *Including headphones, loudspeakers, microphones, etc.*
 - 33.160.60 Multimedia systems and teleconferencing equipment
 - 33.160.99 Other audio, video and audiovisual equipment
- 33.170 Television and radio broadcasting**
 - *Equipment for television and radio broadcasting, see 33.160*
 - *Stage and studio equipment, see 97.200.10*
- 33.180 Fibre optic communications**
 - 33.180.01 Fibre optic systems in general

- 33.180.10 Fibres and cables
- 33.180.20 Fibre optic interconnecting devices
- 33.180.30 Optic amplifiers
- 33.180.99 Other fibre optic equipment

33.200 Telecontrol. Telemetry

**Including Supervising, Control and Data Acquisition System (SCADA)*

35 INFORMATION TECHNOLOGY. OFFICE MACHINES

35.020 Information technology (IT) in general

**Including general aspects of IT equipment*

35.040 Character sets and information coding

**Including coding of audio, picture, multimedia and hypermedia information, IT security techniques, encryption, bar coding, etc.*

35.060 Languages used in information technology

35.080 Software development and system documentation

35.100 Open systems interconnection (OSI)

35.100.01 Open systems interconnection in general

35.100.05 Multilayer applications

**Including International Standardized Profiles*

35.100.10 Physical layer

35.100.20 Data link layer

35.100.30 Network layer

35.100.40 Transport layer

35.100.50 Session layer

35.100.60 Presentation layer

35.100.70 Application layer

35.110 Networking

**Including local area networks (LAN), metropolitan area networks (MAN), wide area networks (WAN), etc.*

**Private Integrated Services Network (PISN), see 33.040.35*

**Integrated Services Digital Network (ISDN), see 33.080*

35.140 Computer graphics

35.160 Microprocessor systems

**Including PCs, calculators, etc.*

**Integrated circuits, see 31.200*

35.180 IT terminal and other peripheral equipment

**Including modems*

35.200 Interface and interconnection equipment

35.220 Data storage devices

35.220.01 Data storage devices in general

35.220.10 Paper cards and tapes

35.220.20 Magnetic storage devices in general

35.220.21 Magnetic disks

**Including flexible disks, diskettes, disk packs, disk cartridges, etc.*

35.220.22 Magnetic tapes

35.220.23 Cassettes and cartridges for magnetic tapes

35.220.30 Optical storage devices

**Including compact disks (CD) and magneto-optical devices (MO)*

35.220.99 Other data storage devices

- 35.240 Applications of information technology**
- 35.240.01 Application of information technology in general
 - 35.240.10 Computer-aided design (CAD)
 - 35.240.15 Identification cards and related devices
 - *Including application of cards for banking, trade, telecommunications, transport, etc.*
 - 35.240.20 IT applications in office work
 - *Including text processing systems, text communication, text presentation, Office Document Architecture (ODA), etc.*
 - 35.240.30 IT applications in information, documentation and publishing
 - *Including Standard Generalized Markup Language (SGML), automatic translation machines, etc.*
 - 35.240.40 IT applications in banking
 - *Including automatic banking facilities*
 - 35.240.50 IT applications in industry
 - *Including design automation*
 - 35.240.60 IT applications in transport and trade
 - *Including EDIFACT*
 - 35.240.70 IT applications in science
 - *Including digital geographic information*
 - 35.240.80 IT applications in health care technology
 - *Including computer tomography*
 - 35.240.99 IT applications in other fields

35.260 Office machines

**Including typewriters, dictation equipment, addressing machines, letter opening machines, letter folding machines, postal franking machines, their ribbons and other accessories, etc.*

**Telephones, see 33.050.10*

**Telex and telefax, see 33.050.30*

**Copying machines, see 37.100.10*

**Wrapping and packaging equipment, see 55.200*

**Paper based stationery, see 85.080*

**Office furniture, see 97.140*

**Non-paper based stationery, see 97.180*

37 IMAGE TECHNOLOGY

37.020 Optical equipment

**Including microscopes, telescopes, etc.*

**Ophthalmic equipment, see 11.040.70*

**Optical measuring instruments, see 17.180.30*

**Photographic equipment lenses, see 37.040.10*

37.040 Photography

**Photographic studios, see 97.200.10*

- 37.040.01 Photography in general
- 37.040.10 Photographic equipment. Projectors
- 37.040.20 Photographic paper, films and plates. Cartridges
- 37.040.25 Radiographic films
 - *Including dental, medical and industrial radiographic films*
- 37.040.30 Photographic chemicals
- 37.040.99 Other standards related to photography

37.060 Cinematography

**Cinematographic studios, see 97.200.10*

- 37.060.01 Cinematography in general
- 37.060.10 Motion picture equipment
- 37.060.20 Motion picture films. Cartridges
- 37.060.99 Other standards related to cinematography

37.080 Document imaging applications

**Including micrographics, electronic and optical applications*

**Optical storage devices, see 35.220.30*

- 37.100 Graphic technology**
37.100.01 Graphic technology in general
**Including proof corrections*
37.100.10 Reproduction equipment
**Including printing, copying and duplicating machines, bookbinding equipment, etc.*
37.100.20 Materials for graphic technology
**Inks, see 87.080*
37.100.99 Other standards related to graphic technology
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39 PRECISION MECHANICS. JEWELLERY

39.020 Precision mechanics

39.040 Horology

- 39.040.01 Horology in general
39.040.10 Watches
39.040.20 Clocks
39.040.99 Other time-measuring instruments

39.060 Jewellery

- *Including precious metals, precious and semi-precious stones*
**Industrial diamonds, see 25.100*
-

43 ROAD VEHICLE ENGINEERING

43.020 Road vehicles in general

- *Including road vehicle testing, recycling of road vehicles*
**Road transport, see 03.220.20*
**Transport exhaust emissions, see 13.040.50*

43.040 Road vehicle systems

- *Electric road vehicle systems, see 43.120*
**Motor cycle and moped systems, see 43.140*
**Cycle systems, see 43.150*

- 43.040.01 Road vehicle systems in general
43.040.15 Car informatics. On board computer systems
**Including navigation systems, car radio, etc.*
43.040.10 Electrical and electronic equipment
43.040.20 Lighting, signalling and warning devices
43.040.30 Indicating and control devices
43.040.40 Braking systems
43.040.50 Transmissions, suspensions
**Including clutches, gearboxes, power-steering systems, Cardan shafts, differentials, wheels, rims, etc.*
**Tyres for road vehicles, see 83.160.10*
43.040.60 Bodies and body components
**Including vehicle frame and structure, heating devices, air-conditioning systems for passenger/driver compartments, roof load carriers, etc.*
Loading compartments, see 43.080.10
43.040.65 Glazing and wiper systems
**Including cleaning, defrosting and demisting devices, mirrors, etc.*
43.040.70 Couplings
**Including towing attachments and fifth wheel assemblies*
43.040.80 Safety installations and restraint systems
**Including airbags, safety belts and traffic accident issues*
43.040.99 Other road vehicle systems

- 43.060 Internal combustion engines for road vehicles**
**Standards for internal combustion engines for general use, see 27.020*
- 43.060.01 Internal combustion engines for road vehicles in general
 43.060.10 Engine block and internal components
 43.060.20 Pressure charging and air/exhaust gas ducting systems
 43.060.30 Cooling systems. Lubricating systems
**Antifreezes, see 71.100.45*
**Lubricants, see 75.100*
- 43.060.40 Fuel systems
 43.060.50 Electrical and electronic equipment. Control systems
**Including ignition systems and starter motors*
- 43.060.99 Other components and systems of internal combustion engines
- 43.080 Commercial vehicles**
**Road vehicle systems, see 43.040*
**Tyres for road vehicles, see 83.160.10*
- 43.080.01 Commercial vehicles in general
 43.080.10 Trucks and trailers
**Including tanker trucks and loading compartments*
**Industrial trucks, see 53.060*
- 43.080.20 Buses
 43.080.99 Other commercial vehicles
- 43.100 Passenger cars. Caravans and light trailers**
**Road vehicle systems, see 43.040*
**Tyres for road vehicles, see 83.160.10*
**Camping equipment, see 97.200.30*
- 43.120 Electric road vehicles**
**Including their components and systems*
**Tyres for road vehicles, see 83.160.10*
- 43.140 Motor cycles and mopeds**
**Including their components and systems*
**Tyres for road vehicles, see 83.160.10*
- 43.150 Cycles**
**Including their components and systems*
**Tyres for road vehicles, see 83.160.10*
- 43.160 Special purpose vehicles**
**Including waste collection vehicles and components and systems for special purpose vehicles*
**Fire-fighting vehicles, see 13.220.10*
**Mobile cranes, see 53.020.20*
**Earth-moving machinery, see 53.100*
**Agricultural tractors and trailed vehicles, see 65.060.10*
- 43.180 Diagnostic, maintenance and test equipment**
**Including repairing facilities*
**Petrol stations, see 75.200*

45 RAILWAY ENGINEERING

- 45.020 Railway engineering in general**
**Railway transport, see 03.220.30*
**Construction of railways, see 93.100*
- 45.040 Materials and components for railway engineering**

- 45.060 Railway rolling stock**
**Including materials, components and electric and electronic equipment for railway rolling stock*
- 45.060.01 Railway rolling stock in general
- 45.060.10 Tractive stock
**Electric traction equipment, see 29.280*
- 45.060.20 Trailing stock
**Including tank wagons*
- 45.080 Rails and railway components**
**Including track components*
- 45.100 Cableway equipment**
**Including ropeway equipment*
- 45.120 Equipment for railway/cableway construction and maintenance**
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47 SHIPBUILDING AND MARINE STRUCTURES

- 47.020 Shipbuilding and marine structures in general**
**Including offshore structures, except offshore structures for petroleum and natural gas industries, and seabed mining*
**Water transport, see 03.220.40*
**Offshore structures for seabed mining, see 73.100.30*
**Offshore structures for petroleum and natural gas industries, see 75.180.10*
- 47.020.01 General standards related to shipbuilding and marine structures
- 47.020.05 Materials and components for shipbuilding
- 47.020.10 Hulls and their structure elements
- 47.020.20 Marine engines and propulsion systems
**Standards for internal combustion engines for general use, see 27.020*
- 47.020.30 Piping systems
- 47.020.40 Lifting and cargo handling equipment
- 47.020.50 Deck equipment and installations
- 47.020.60 Electrical equipment of ships and of marine structures
- 47.020.70 Navigation and control equipment
**Telecommunications equipment, see 33.060*
- 47.020.80 Accommodation spaces
- 47.020.85 Cargo spaces
**Including tanks and tankers*
- 47.020.90 Marine ventilation, air-conditioning and heating systems
- 47.020.99 Other standards related to shipbuilding and marine structures
- 47.040 Seagoing vessels**
**Including their systems and components*
- 47.060 Inland navigation vessels**
**Including their systems and components*
- 47.080 Small craft**
**Including small craft systems and components, and life-saving apparatus*
**Personal flotation devices (life jackets), see 13.340.10*

49 AIRCRAFT AND SPACE VEHICLE ENGINEERING

- 49.020 Aircraft and space vehicles in general**
**Including aircraft performance, flight dynamics, etc.*
**Air transport, see 03.220.50*
- 49.025 Materials for aerospace construction**
- 49.025.01 Materials for aerospace construction in general
 - 49.025.05 Ferrous alloys in general
 - 49.025.10 Steels
 - 49.025.15 Non-ferrous alloys in general
 - 49.025.20 Aluminium
 - 49.025.30 Titanium
 - 49.025.40 Rubber and plastics
 - 49.025.50 Adhesives
 - 49.025.60 Textiles
**Including textile glass and coated fabrics*
 - 49.025.99 Other materials
- 49.030 Fasteners for aerospace construction**
**Fasteners for general use, see 21.060*
- 49.030.01 Fasteners in general
 - 49.030.10 Screw threads
**Screw threads for general use, see 21.040*
 - 49.030.20 Bolts, screws, studs
 - 49.030.30 Nuts
 - 49.030.40 Pins, nails
 - 49.030.50 Washers and other locking elements
 - 49.030.60 Rivets
 - 49.030.99 Other fasteners
- 49.035 Components for aerospace construction**
**Tyres for aircraft, see 83.160.20*
- 49.040 Coatings and related processes used in aerospace industry**
**Coatings for general use, see 25.220*
- 49.045 Structure and structure elements**
- 49.050 Aerospace engines and propulsion systems**
**Including fuel systems*
- 49.060 Aerospace electric equipment and systems**
- 49.080 Aerospace fluid systems and components**
- 49.090 On-board equipment and instruments**
**Including navigation instruments and telecommunications equipment*
- 49.095 Passenger and cabin equipment**
- 49.100 Ground service and maintenance equipment**
- 49.120 Cargo equipment**
**Air mode containers, pallets and nets, see 55.180.30*
- 49.140 Space systems and operations**
**Including space data and information transfer systems, and ground support equipment for launch site operations*

53 MATERIALS HANDLING EQUIPMENT

53.020 Lifting equipment

**Lifting equipment for shipbuilding, see 47.020.40*

**Lifts and escalators, see 91.140.90*

53.020.01 Lifting appliances in general

53.020.20 Cranes

**Including mobile cranes, tower cranes, jib cranes, bridge cranes, etc.*

53.020.30 Accessories for lifting equipment

**Including lifting hooks, shackles, link chains, wire ropes, etc.*

**Wire ropes and link chains for general use, see 77.140.65*

53.020.99 Other lifting equipment

53.040 Continuous handling equipment

53.040.01 Continuous handling equipment in general

53.040.10 Conveyors

53.040.20 Components for conveyors

**Including conveyor belts, chains, chain wheels, etc.*

53.040.30 Pneumatic transport and its components

53.040.99 Other continuous handling equipment

53.060 Industrial trucks

**Including fork-lift trucks, sliding platforms, etc.*

**Trucks and trailers, see 43.080.10*

53.080 Storage equipment

**Including loading devices, shelves, etc.*

**Storing and warehousing, see 55.220*

**Installations for storage of agricultural produce, see 65.040.20*

**Shelving for shops, see 97.130.10*

53.100 Earth-moving machinery

**Including tractors, excavators, loaders, graders, etc.*

53.120 Equipment for manual handling

**Including shovels, spades, crowbars, picks, etc.*

55 PACKAGING AND DISTRIBUTION OF GOODS

55.020 Packaging and distribution of goods in general

55.040 Packaging materials and accessories

**Including wrappers, paper, films, foils, cords, sealing devices, cushioning, etc.*

**Adhesive tapes for general purposes, see 83.180*

55.060 Spools. Bobbins

**Including holders, supports, etc. for externally wound or mounted material*

**Photographic and cinematographic film rolls, cores, spools, etc., see 37.040.20 and 37.060.20*

**Cones, tubes, beams, etc. for textile materials, see 59.120.20*

55.080 Sacks. Bags

**Including sachets, envelopes*

- 55.100 Bottles. Pots. Jars**
**Small containers for liquids and their closures*
- 55.120 Cans. Tins. Tubes**
**Light gauge metal and plastics containers*
- 55.130 Aerosol containers**
- 55.140 Barrels. Drums. Canisters**
**Containers mainly for transportation of fluids including also casks, pails, large tin cans for shipping materials, etc.*
**Fluid storage devices, see 23.020*
- 55.160 Cases. Boxes. Crates**
**Containers for solid goods or objects and bulk materials*
- 55.180 Freight distribution of goods**
 55.180.01 Freight distribution of goods in general
 55.180.10 General purpose containers
 55.180.20 General purpose pallets
 55.180.30 Air mode containers, pallets and nets
 55.180.40 Complete, filled transport packages
**Including reusable packages*
 55.180.99 Other standards related to freight distribution of goods
- 55.200 Packaging machinery**
**Including labelling, marking, branding, filling, sealing machines, etc.*
- 55.220 Storing. Warehousing**
**Storage equipment, see 53.080*
- 55.230 Distribution and vending machines**
**Including distribution of tickets, food, beverages, tobacco products, etc.*

59 TEXTILE AND LEATHER TECHNOLOGY

- 59.020 Processes of the textile industry**
- 59.040 Textile auxiliary materials**
**Including feathers and down*
**Surface active agents, see 71.100.40*
- 59.060 Textile fibres**
 59.060.01 Textile fibres in general
**Including mixtures of fibres*
 59.060.10 Natural fibres
 59.060.20 Man-made fibres
 59.060.30 Mineral and metal fibres
 59.060.99 Other textile fibres
- 59.080 Products of the textile industry**
**Materials for the reinforcement of composites, see 59.100*
**Fishing nets, see 65.150*
**Upholstery, see 97.140*
**Home textiles and linen, see 97.160*
 59.080.01 Textiles in general
**Including colour fastness of textiles*
 59.080.20 Yarns
**Including plied yarns, textured yarns, threads*
 59.080.30 Textile fabrics
**Including nonwovens, felts, lace, etc.*

- 59.080.40 Coated fabrics
- 59.080.50 Ropes
 - *Including strings, straps, bands
 - *Wire ropes for lifting, see 53.020.30
 - *Steel wire ropes, see 77.140.65
- 59.080.60 Textile floor coverings
 - *Including carpets, rugs, floor mats, etc.
 - *Non-textile floor coverings, see 97.150
- 59.080.70 Geotextiles
- 59.080.99 Other products of the textile industry

- 59.100 Materials for the reinforcement of composites**
- 59.100.01 Materials for the reinforcement of composites in general
- 59.100.10 Textile glass materials
- 59.100.20 Carbon materials
- 59.100.30 Aramide materials
- 59.100.99 Other materials for the reinforcement of composites

- 59.120 Textile machinery**
- 59.120.01 Textile machinery in general
- 59.120.10 Spinning, twisting and texturing machines
 - *Including machines and equipment for manufacturing man-made filaments and fibres and for preparing fibres for spinning
- 59.120.20 Winding machines and equipment
 - *Including machines and equipment for reeling, balling, warping, sizing, beaming, etc. of yarns
- 59.120.30 Looms. Weaving machines
- 59.120.40 Knitting machines
 - *Including household knitting machines
- 59.120.50 Dyeing and finishing equipment
 - *Laundry appliances, see 97.060
- 59.120.99 Other textile machinery

- 59.140 Leather technology**
- *Including fur and imitation leather
- *Footwear, see 61.060
- *Sewing machines and machines for footwear production, see 61.080
- 59.140.01 Leather technology in general
- 59.140.10 Processes and auxiliary materials
- 59.140.20 Raw skins, hides and pelts
- 59.140.30 Leather and furs
- 59.140.35 Leather products
 - *Including trunks, suitcases, handbags, purses, wallets, dog-collars, etc. made of materials other than leather
 - *Products of the clothing industry, see 61
- 59.140.40 Machines and equipment for leather and fur production
- 59.140.99 Other standards related to leather technology

61 CLOTHING INDUSTRY

- 61.020 Clothes**
 - *Including underwear, nightwear, knitwear, military clothing, hosiery, etc. and their labelling and size coding schemes
 - *Medical garments, see 11.140
 - *Protective clothing, see 13.340.10

- 61.040 Headgear. Clothing accessories. Fastening of clothing**
 - *Including ties, gloves, scarves, handkerchiefs, belts, braces, buttons, zip-fasteners, buckles, umbrellas, etc.
 - *Protective headgear, see 13.340.20
 - *Protective gloves, see 13.340.40

- 61.060 Footwear**
**Including shoelaces*
**Protective footwear, see 13.340.50*
- 61.080 Sewing machines and other equipment for the clothing industry**
**Including household sewing machines*
**Washing machines, driers, ironing and pressing appliances, see 97.060*
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65 AGRICULTURE

- 65.020 Farming and forestry**
**Pedology, soil analysis, see 13.080*
**Logging, see 79.020*
- 65.020.01 Farming and forestry in general
- 65.020.20 Plant growing
**Including horticulture, floriculture, seeds, plant diseases*
- 65.020.30 Animal husbandry and breeding
**Including sanitary inspection*
**Veterinary medicine, see 11.220*
- 65.020.40 Landscaping and silviculture
- 65.020.99 Other standards related to farming and forestry
- 65.040 Farm buildings, structures and installations**
- 65.040.01 Farm buildings and installations in general
- 65.040.10 Livestock buildings, installations and equipment
**Including milking machines*
- 65.040.20 Buildings and installations for processing and storage of agricultural produce
**Including slaughterhouses and related equipment*
- 65.040.30 Greenhouses and other installations
- 65.040.99 Other standards related to farm buildings and installations
- 65.060 Agricultural machines, implements and equipment**
**Tyres for agricultural machinery, see 83.160.30*
- 65.060.01 Agricultural machines and equipment in general
- 65.060.10 Agricultural tractors and trailed vehicles
- 65.060.20 Soil-working equipment
- 65.060.25 Equipment for storage, preparation and distribution of fertilizers
- 65.060.30 Sowing and planting equipment
- 65.060.35 Irrigation and drainage equipment
- 65.060.40 Plant care equipment
- 65.060.50 Harvesting equipment
- 65.060.60 Viticultural and wine-making equipment
- 65.060.70 Horticultural equipment
**Including lawnmowers, equipment for olive cultivation and olive production*
- 65.060.80 Forestry equipment
**Including chain- and brush-saws*
- 65.060.99 Other agricultural machines and equipment
- 65.080 Fertilizers**
**Including soil conditioners and culture medium*
- 65.100 Pesticides and other agrochemicals**
- 65.100.01 Pesticides and other agrochemicals in general
- 65.100.10 Insecticides
**Wood-protecting chemicals, see 71.100.50*
- 65.100.20 Herbicides
- 65.100.30 Fungicides
**Wood-protecting chemicals, see 71.100.50*

- 65.100.99 Other pesticides and agrochemicals
- 65.120 Animal feeding stuffs**
**Microbiology of animal feeding stuffs, see 07.100.30*
- 65.140 Beekeeping**
**Including equipment and installations for beekeeping*
**Honey, see 67.180.10*
- 65.145 Hunting**
**Including equipment and installations for hunting*
- 65.150 Fishing and fish breeding**
**Including hunting of marine mammals and reptiles, collection and breeding of aquatic molluscs and other marine products, equipment and installations for fishing and fish breeding, etc.*
**Water for fish breeding, see 13.060.25*
**Fish and fishery products, see 67.120.30*
- 65.160 Tobacco, tobacco products and related equipment**

67 FOOD TECHNOLOGY

- 67.020 Processes in the food industry**
**Including food hygiene*
- 67.040 Food products in general**
- 67.050 General methods of tests and analysis for food products**
**Food microbiology, see 07.100.30*
**Sensory analysis, see 67.240*
- 67.060 Cereals, pulses and derived products**
**Including grains, corn, flours, baked products, etc.*
- 67.080 Fruits. Vegetables**
**Including canned, dried and quick-frozen fruits and vegetables*
**Fruit and vegetable juices and nectars, see 67.160.20*
- 67.080.01 Fruits, vegetables and derived products in general
- 67.080.10 Fruits and derived products
**Including nuts*
- 67.080.20 Vegetables and derived products
**Including tomato concentrates, ketchup, etc.*
- 67.100 Milk and milk products**
- 67.100.01 Milk and milk products in general
- 67.100.10 Milk and processed milk products
**Including dried milk, condensed milk and evaporated milk*
- 67.100.20 Butter
- 67.100.30 Cheese
**Including cottage cheese, whey cheese*
- 67.100.40 Ice cream and ice confectionery
**Including sorbets*
- 67.100.99 Other milk products
- 67.120 Meat, meat products and other animal produce**
- 67.120.01 Animal produce in general
- 67.120.10 Meat and meat products
- 67.120.20 Poultry and eggs
- 67.120.30 Fish and fishery products
**Including aquatic molluscs and other marine products*
- 67.120.99 Other animal produce

- 67.140 Tea. Coffee. Cocoa**
67.140.10 Tea
**Including herb teas*
67.140.20 Coffee and coffee substitutes
67.140.30 Cocoa
- 67.160 Beverages**
67.160.01 Beverages in general
67.160.10 Alcoholic beverages
67.160.20 Non-alcoholic beverages
**Including juices, nectars, mineral waters, lemonades, root beer, cola drinks, etc.*
**Tea, coffee, cocoa, see 67.140*
- 67.180 Sugar. Sugar products. Starch**
67.180.10 Sugar and sugar products
**Including molasses, sweets, sugar confectionery, honey, etc.*
67.180.20 Starch and derived products
**Including glucose syrups, etc.*
- 67.190 Chocolate**
- 67.200 Edible oils and fats. Oilseeds**
67.200.10 Animal and vegetable fats and oils
**Butter, see 67.100.20*
67.200.20 Oilseeds
- 67.220 Spices and condiments. Food additives**
67.220.10 Spices and condiments
67.220.20 Food additives
**Including salt, vinegar, food preservation additives, etc.*
- 67.230 Prepackaged and prepared foods**
**Including baby food*
- 67.240 Sensory analysis**
- 67.250 Materials and articles in contact with foodstuffs**
**Including catering containers, and materials and articles in contact with drinking water*
- 67.260 Plant and equipment for the food industry**
**Refrigerating equipment, see 27.200*
**Cold rooms, see 97.130.20*
-

71 CHEMICAL TECHNOLOGY

- 71.020 Production in the chemical industry**
**Including plant layout and services, process design and control, processing operations, security measures, etc.*
- 71.040 Analytical chemistry**
**This group includes standards for general use*
71.040.01 Analytical chemistry in general
71.040.10 Chemical laboratories. Laboratory equipment
**Including hydrometers, alcoholometers, etc.*
**Apparatus for measurement of volume, mass, density, viscosity, see 17.060*
**Spectroscopes, see 17.180.30*
**Temperature-measuring instruments, see 17.200.20*
**Laboratory ware, see 71.040.20*
71.040.20 Laboratory ware and related apparatus
71.040.30 Chemical reagents
**Including chemical reference materials*

- 71.040.40 Chemical analysis
**Including analysis of gases*
- 71.040.50 Physicochemical methods of analysis
**Including spectrophotometric and chromatographic analysis*
- 71.040.99 Other standards related to analytical chemistry

71.060 Inorganic chemicals

- 71.060.01 Inorganic chemicals in general
- 71.060.10 Chemical elements
- 71.060.20 Oxides
**Including dioxides, peroxides, etc.*
- 71.060.30 Acids
- 71.060.40 Bases
- 71.060.50 Salts
- 71.060.99 Other inorganic chemicals

71.080 Organic chemicals

- 71.080.01 Organic chemicals in general
- 71.080.10 Aliphatic hydrocarbons
- 71.080.15 Aromatic hydrocarbons
- 71.080.20 Halogenated hydrocarbons
- 71.080.30 Organic nitrogen compounds
- 71.080.40 Organic acids
- 71.080.50 Anhydrides
- 71.080.60 Alcohols. Ethers
- 71.080.70 Esters
- 71.080.80 Aldehydes and ketones
- 71.080.90 Phenols
- 71.080.99 Other organic chemicals

71.100 Products of the chemical industry

- *Photographic chemicals, see 37.040.30*
- *Raw materials for rubber and plastics, see 83.040*
- *Paints and varnishes, see 87.040*
- *Inks, see 87.080*
- 71.100.01 Products of the chemical industry in general
- 71.100.10 Materials for aluminium production
- 71.100.20 Gases for industrial application
**Including compressed air and hydrogen*
**Liquefied petroleum gases, see 75.160.30*
- 71.100.30 Explosives. Pyrotechnics
- 71.100.35 Chemicals for industrial and domestic disinfection purposes
**Medical disinfectants and antiseptics, see 11.080.20*
- 71.100.40 Surface active agents
- 71.100.45 Refrigerants and antifreezes
- 71.100.50 Wood-protecting chemicals
- 71.100.55 Silicones
- 71.100.60 Essential oils
- 71.100.70 Cosmetics. Toiletries
- 71.100.80 Chemicals for purification of water
- 71.100.99 Other products of the chemical industry

71.120 Equipment for the chemical industry

- *Transport of dangerous chemicals, see 13.300*
- 71.120.01 Equipment for the chemical industry in general
- 71.120.10 Reaction vessels and their components
- 71.120.20 Columns
- 71.120.30 Heat exchangers
- 71.120.99 Other equipment for the chemical industry

73 MINING AND MINERALS

73.020 Mining and quarrying

**Including exploration, opening-up, development, working of mineral deposits, drilling, construction of mines, mining operations, processing of minerals, etc.*

73.040 Coals

**Coal products, see 75.160.10*

73.060 Metalliferous minerals

**Uranium-containing minerals, see 27.120.30*

73.060.01 Metalliferous minerals in general

73.060.10 Iron ores

73.060.20 Manganese ores

73.060.30 Chromium ores

73.060.40 Aluminium ores

73.060.99 Other metalliferous minerals

73.080 Non-metalliferous minerals

**Including mica, fluorspar, etc.*

**Industrial diamonds, see 25.100*

**Precious and semi-precious stones, see 39.060*

73.100 Mining equipment

**Electrical apparatus for explosive atmospheres, see 29.260.20*

73.100.01 Mining equipment in general

73.100.10 Tunnelling and tubbing equipment

73.100.20 Ventilation, air-conditioning and illumination equipment

73.100.30 Equipment for drilling and mine excavation

**Including equipment for seabed mining*

**Drilling equipment for the petroleum industry, see 75.180.10*

73.100.40 Haulage and hoisting equipment

73.100.99 Other mining equipment

73.120 Equipment for processing of minerals

**Including equipment for milling, sizing, separation, flotation, concentration, etc.*

75 PETROLEUM AND RELATED TECHNOLOGIES

75.020 Extraction and processing of petroleum and natural gas

75.040 Crude petroleum

75.060 Natural gas

75.080 Petroleum products in general

75.100 Lubricants, industrial oils and related products

**Including mineral oils, fluids for metal working and for temporary protection against corrosion*

**Lubrication systems, see 21.260*

**Insulating oils, see 29.040.10*

75.120 Hydraulic fluids

**Fluid power systems, see 23.100*

- 75.140 Waxes, bituminous materials and other petroleum products**
**Asphalts for building, see 91.100.50*
**Asphalts for road construction, see 93.080.20*
- 75.160 Fuels**
75.160.01 Fuels in general
75.160.10 Solid fuels
**Including coal products, coke, peat, wood, etc.*
**Coals, see 73.040*
75.160.20 Liquid fuels
75.160.30 Gaseous fuels
**Including liquefied petroleum gases*
**Hydrogen, see 71.100.20*
**Natural gas, see 75.060*
- 75.180 Equipment for petroleum and natural gas industries**
75.180.01 Equipment for petroleum and natural gas industries in general
75.180.10 Exploratory, drilling and extraction equipment
**Including offshore structures*
75.180.20 Processing equipment
75.180.30 Volumetric equipment and measurements
75.180.99 Other equipment for petroleum and natural gas industries
- 75.200 Petroleum, petroleum products and natural gas handling equipment**
**Including petroleum and natural gas storage devices, distribution systems, pipelines, petrol stations, dispensing devices, etc.*

77 METALLURGY

- 77.020 Production of metals**
- 77.040 Testing of metals**
77.040.01 Testing of metals in general
77.040.10 Mechanical testing of metals
**Mechanical testing in general, see 19.060*
**Mechanical testing of welded joints, see 25.160.40*
77.040.20 Non-destructive testing of metals
**Non-destructive testing in general, see 19.100*
**Non-destructive testing of welded joints, see 25.160.40*
77.040.30 Chemical analysis of metals
**Chemical analysis in general, see 71.040.40*
**Chemical analysis of ferrous metals, see 77.080*
**Chemical analysis of ferroalloys, see 77.100*
**Chemical analysis of non-ferrous metals, see 77.120*
77.040.99 Other methods of testing of metals
- 77.060 Corrosion of metals**
**Surface treatment and coating, see 25.220*
- 77.080 Ferrous metals**
**Including classification, designation, sampling, chemical analysis, etc.*
**Dimensions and quality grades of iron and steel products, see 77.140*
77.080.01 Ferrous metals in general
77.080.10 Irons
77.080.20 Steels

- 77.100 Ferroalloys**
**Including classification, designation, sampling, chemical analysis, etc.*
- 77.120 Non-ferrous metals**
**Including classification, designation, sampling, chemical analysis, etc.*
**Precious metals for dentistry, see 11.060.10*
**Precious metals for jewellery, see 39.060*
**Dimensions and quality grades of non-ferrous metal products, see 77.150*
- 77.120.01 Non-ferrous metals in general
 77.120.10 Aluminium and aluminium alloys
 77.120.20 Magnesium and magnesium alloys
 77.120.30 Copper and copper alloys
 77.120.40 Nickel, chromium and their alloys
 77.120.50 Titanium and titanium alloys
 77.120.60 Lead, zinc, tin and their alloys
 77.120.70 Cadmium, cobalt and their alloys
 77.120.99 Other non-ferrous metals and their alloys
- 77.140 Iron and steel products**
**Standards containing quality grades and form of products should be classified in both types of relevant sub-groups*
**Steel products for aerospace construction, see 49.025.10*
- 77.140.01 Iron and steel products in general
 77.140.10 Heat-treatable steels
 77.140.15 Steels for reinforcement of concrete
 77.140.20 Stainless steels
**Including alloyed steels, corrosion-resistant steels, heat-resisting steels, etc.*
 77.140.25 Spring steels
 77.140.30 Steels for pressure purposes
**Steels for pressure pipes and tubes for specific use, see 77.140.75*
 77.140.35 Tool steels
 77.140.40 Steels with special magnetic properties
 77.140.45 Non-alloyed steels
 77.140.50 Flat steel products and semi-products
**Including plate, sheet and strip*
**Steel strips for springs, see 77.140.25*
 77.140.60 Steel bars and rods
 77.140.65 Steel wire, wire ropes and link chains
**Lifting link chains and wire ropes, see 53.020.30*
**Steel wire for springs, see 77.140.25*
 77.140.70 Steel profiles
**Including sections*
 77.140.75 Steel pipes and tubes for specific use
**Including hollow steel bars and sections*
**Steel pipes for general use, see 23.040.10*
 77.140.80 Iron and steel castings
 77.140.85 Iron and steel forgings
 77.140.99 Other iron and steel products
- 77.150 Products of non-ferrous metals**
**Including products of non-ferrous metal alloys*
**Products of non-ferrous metals for aerospace construction, see 49.025*
- 77.150.01 Products of non-ferrous metals in general
 77.150.10 Aluminium products
 77.150.20 Magnesium products
 77.150.30 Copper products
 77.150.40 Nickel and chromium products
 77.150.50 Titanium products
 77.150.60 Lead, zinc and tin products
 77.150.70 Cadmium and cobalt products
 77.150.99 Other products of non-ferrous metals

- 77.160 Powder metallurgy**
- 77.180 Equipment for the metallurgical industry**
-

79 WOOD TECHNOLOGY

- 79.020 Wood technology processes**
**Including logging and wood treatment*
**Wood-protecting chemicals, see 71.100.50*
- 79.040 Wood, sawlogs and sawn timber**
- 79.060 Wood-based panels**
79.060.01 Wood-based panels in general
79.060.10 Plywood
79.060.20 Fibre and particle boards
79.060.99 Other wood-based panels
- 79.080 Semi-manufactures of timber**
**Including parquet, wood paving, handles, etc.*
- 79.100 Cork and cork products**
- 79.120 Woodworking equipment**
79.120.01 Woodworking equipment in general
79.120.10 Woodworking machines
**Chain- and brush-saws, see 65.060.80*
79.120.20 Woodworking tools
79.120.99 Other woodworking equipment
-

81 GLASS AND CERAMICS INDUSTRIES

- 81.020 Processes in the glass and ceramics industries**
- 81.040 Glass**
81.040.01 Glass in general
81.040.10 Raw materials and raw glass
81.040.20 Glass in building
81.040.30 Glass products
**Bottles, pots, jars, see 55.100*
**Laboratory glassware, see 71.040.20*
- 81.060 Ceramics**
**Including glass-ceramics*
81.060.01 Ceramics in general
81.060.10 Raw materials
81.060.20 Ceramic products
**Ceramic building products, see 91.100.25*
**Sanitary ceramic products, see 91.140.70*
81.060.30 Advanced ceramics
81.060.99 Other standards related to ceramics
- 81.080 Refractories**
**Including ceramic refractories*
- 81.100 Equipment for the glass and ceramics industries**

83 RUBBER AND PLASTICS INDUSTRIES

83.020 Manufacturing processes in the rubber and plastics industries

83.040 Raw materials for rubber and plastics

83.040.01 Raw materials for rubber and plastics in general

83.040.10 Latex and raw rubber

83.040.20 Rubber compounding ingredients

**Including carbon black, kaolin clay, etc.*

83.040.30 Auxiliary materials and additives for plastics

**Including fillers, extenders, hardeners, pigments, plasticizers, etc.*

83.060 Rubber

83.080 Plastics

83.080.01 Plastics in general

83.080.10 Thermosetting materials

**Silicones, see 71.100.55*

83.080.20 Thermoplastic materials

83.100 Cellular materials

83.120 Reinforced plastics

**Materials for the reinforcement of plastics, see 59.100*

83.140 Rubber and plastics products

**Moulding or extrusion products should be classified according to specific products*

**Transmission belts, see 21.220.10*

**Conveyor belts, see 53.040.20*

**Rubber and plastics coated fabrics, see 59.080.40*

**Footwear, see 61.060*

**Tyres, see 83.160*

83.140.01 Rubber and plastics products in general

83.140.10 Films and sheets

**Including plates*

83.140.20 Laminated sheets

83.140.30 Plastics pipes, fittings and valves

**Plastics pipes, fittings and valves for general use, see 23.040.20, 23.040.45, and 23.060*

83.140.40 Hoses

**Hoses for general use, see 23.040.70*

83.140.50 Seals

**Seals for general use, see 21.140 and 23.040.80*

83.140.99 Other rubber and plastics products

83.160 Tyres

**Including tubes and valves*

83.160.01 Tyres in general

83.160.10 Road vehicle tyres

**Including cycle tyres and tyre retreading and repair processes*

83.160.20 Aircraft tyres

83.160.30 Tyres for agricultural machinery

83.160.99 Other tyres

83.180 Adhesives

**Including adhesive tapes*

**Adhesive tapes for electrical insulation purposes, see 29.035.20*

83.200 Equipment for the rubber and plastics industries

85 PAPER TECHNOLOGY

- 85.020 Paper production processes**
**Including paper recycling*
- 85.040 Pulps**
- 85.060 Paper and board**
- 85.080 Paper products**
**Including paper based stationery*
**Other forms of stationery (non-paper based), see 35.260 and 97.180*
**Paper for packaging, see 55.040*
- 85.100 Equipment for the paper industry**
-

87 PAINT AND COLOUR INDUSTRIES

- 87.020 Paint coating processes**
**Surface preparation for painting, see 25.220.10*
- 87.040 Paints and varnishes**
**Including coating powders*
- 87.060 Paint ingredients**
- 87.060.01 Paint ingredients in general
 - 87.060.10 Pigments and extenders
 - 87.060.20 Binders
 - 87.060.30 Solvents
 - 87.060.99 Other paint ingredients
- 87.080 Inks. Printing inks**
**Materials for graphic technology, see 37.100.20*
- 87.100 Paint coating equipment**
-

91 CONSTRUCTION MATERIALS AND BUILDING

- 91.010 Construction industry**
- 91.010.01 Construction industry in general
 - 91.010.10 Legal aspects
 - 91.010.20 Contractual aspects
 - 91.010.30 Technical aspects
**Including tolerances, modular coordination, etc.*
**Construction drawings, see 01.100.30*
 - 91.010.99 Other aspects
- 91.020 Physical planning. Town planning**
- 91.040 Buildings**
- 91.040.01 Buildings in general
**Building materials, see 91.100*
 - 91.040.10 Public buildings
**Including ecclesiastical buildings and hospitals*
 - 91.040.20 Buildings for commerce and industry
 - 91.040.30 Residential buildings

- 91.040.99 Other buildings
- 91.060 Elements of buildings**
**Foundations, see 93.020*
- 91.060.01 Elements of buildings in general
- 91.060.10 Walls. Partitions. Façades
- 91.060.20 Roofs
**Including related elements (gutters, etc.)*
- 91.060.30 Ceilings. Floors. Stairs
**Including screeds, ramps, etc.*
- 91.060.40 Chimneys, shafts, ducts
**Including flues and flue pipes*
- 91.060.50 Doors and windows
**Including doorsets, their components, blinds, shutters*
**Door and window hardware, see 91.190*
- 91.060.99 Other elements of buildings
- 91.080 Structures of buildings**
**Including design, loading on and calculation of structures*
- 91.080.01 Structures of buildings in general
- 91.080.10 Metal structures
- 91.080.20 Timber structures
- 91.080.30 Masonry
- 91.080.40 Concrete structures
- 91.080.99 Other structures
- 91.090 External structures**
**Including fences, gates, arches, sheds, garages, etc.*
- 91.100 Construction materials**
**Iron and steel products, see 77.140*
**Products of non-ferrous metals, see 77.150*
**Sawn timber, see 79.040*
**Wood-based panels, see 79.060*
**Glass, see 81.040.20*
**Plastics products, see 83.140*
- 91.100.01 Construction materials in general
- 91.100.10 Cement. Gypsum. Lime. Mortar
- 91.100.15 Mineral materials and products
**Including earth, sands, clay, slates, stones, etc.*
- 91.100.25 Ceramic and terracotta building products
**Including ceramic tiles, roofing tiles, bricks, etc.*
- 91.100.30 Concrete and concrete products
- 91.100.40 Products in fibre-reinforced cement
- 91.100.50 Binders. Sealing materials
**Including geomembranes, asphalts for buildings, etc.*
- 91.100.60 Thermal and sound insulating materials
- 91.100.99 Other construction materials
- 91.120 Protection of and in buildings**
**Emergencies in buildings, see 13.200*
**Fire protection, see 13.220.20*
**Fire-resistance of building materials and elements, see 13.220.50*
**Alarm and warning systems, see 13.320*
- 91.120.01 Protection of and in buildings in general
- 91.120.10 Thermal insulation of buildings
**Thermal insulation in general, see 27.220*
**Thermal insulating materials, see 91.100.60*
- 91.120.20 Acoustics in building. Sound insulation
**Acoustic measurements and noise abatement in general, see 17.140.01*
**Sound insulating materials, see 91.100.60*
- 91.120.25 Seismic and vibration protection
**Vibrations and vibration measurements, see 17.160*
- 91.120.30 Waterproofing
**Sealing materials, see 91.100.50*
- 91.120.40 Lightning protection

- 91.120.99 Other standards related to protection of and in buildings
- 91.140 Installations in buildings**
**Burners and boilers for industrial purposes, see 27.060*
**Heat pumps, see 27.080*
- 91.140.01 Installations in buildings in general
- 91.140.10 Central heating systems
**Including burners and boilers for central heating purposes*
**Heating appliances, see 97.100*
- 91.140.30 Ventilation and air-conditioning
**Including ventilation ducts*
**Ventilators and air-conditioners, see 23.120*
- 91.140.40 Gas supply systems
**Including gas meters in buildings*
- 91.140.50 Electricity supply systems
**Including electric energy meters in buildings, emergency electrical supplies, etc.*
- 91.140.60 Water supply systems
**Including water meters in buildings*
**External water conveyance systems, see 93.025*
- 91.140.65 Water heating equipment
- 91.140.70 Sanitary installations
**Including bidets, kitchen sinks, baths, waste chutes, etc.*
- 91.140.80 Drainage systems
**Sewage water disposal and treatment, see 13.060.30*
**Drainage systems for rainwater, see 91.060.20*
**External sewage systems, see 93.030*
- 91.140.90 Lifts. Escalators
- 91.140.99 Other installations in buildings
- 91.160 Lighting**
**Theatre, stage and studio lighting equipment, see 97.200.10*
- 91.160.01 Lighting in general
- 91.160.10 Interior lighting
**Including workplace lighting, emergency and safety lighting*
- 91.160.20 Exterior building lighting
**Including flood lighting*
**Street lighting and related equipment, see 93.080.40*
- 91.180 Interior finishing**
**Paint coating processes, see 87.020*
- 91.190 Building accessories**
**Including locks, buzzers, bells, bolts, door and window hardware, etc.*
- 91.200 Construction technology**
**Including measuring methods, construction sites, demolition of structures, etc.*
- 91.220 Construction equipment**
**Including scaffolding, mixers for concrete and mortar, road construction machines. etc.*
**Lifting equipment, see 53.020*
**Earth-moving machinery, see 53.100*

93 CIVIL ENGINEERING

- 93.010 Civil engineering in general**
**Construction drawings, see 01.100.30*
- 93.020 Earthworks. Excavations. Foundation construction. Underground works**
**Including geotechnics*
**Earth-moving machinery, see 53.100*

- 93.025 External water conveyance systems**
**Including buried and above ground installations*
**Internal water supply systems, see 91.140.60*
- 93.030 External sewage systems**
**Sewage water disposal and treatment, see 13.060.30*
**Internal drainage systems, see 91.140.80*
- 93.040 Bridge construction**
- 93.060 Tunnel construction**
- 93.080 Road engineering**
- 93.080.01 Road engineering in general
- 93.080.10 Road construction
**Including road maintenance equipment*
**Road construction equipment, see 91.220*
- 93.080.20 Road construction materials
**Including asphalts, road pavements, etc.*
- 93.080.30 Road equipment and installations
**Including road traffic warning and control systems, devices and installations (speed controls, traffic signal installations, vehicle loop detectors, pavement markers, manholes, etc.)*
- 93.080.40 Street lighting and related equipment
- 93.080.99 Other standards related to road engineering
- 93.100 Construction of railways**
**Including the construction of tramways, funicular railways, cableways, rail traffic control equipment and installations, etc.*
** Rails and railway components, including track, see 45.080*
**Equipment for railway/cableway construction and maintenance, see 45.120*
- 93.110 Construction of ropeways**
**Ropeway equipment, see 45.100*
**Equipment for ropeway construction and maintenance, see 45.120*
- 93.120 Construction of airports**
**Including air transport control equipment and installations*
- 93.140 Construction of waterways and ports**
**Including water transport control equipment and installations*
- 93.160 Hydraulic construction**
**Hydraulic energy equipment, see 27.140*

95 MILITARY ENGINEERING

- 95.020 Military engineering. Military affairs. Weapons**
**Military clothing, see 61.020*

**97 DOMESTIC AND COMMERCIAL EQUIPMENT.
ENTERTAINMENT. SPORTS**

97.020 Home economics in general

- *Including consumer information*
- *Washing, cleaning and removal services, see 03.080.30*
- *Ventilators, air-conditioners, see 23.120*
- *Hand-held electric tools, see 25.140.20*
- *Household electronic appliances, see 33.160*
- *Clocks and watches, see 39.040*
- *Household sewing machines, see 61.080*

97.030 Domestic electrical appliances in general

- *Including water-bed heaters and electric blankets*

97.040 Kitchen equipment

97.040.01 Kitchen equipment in general

97.040.10 Kitchen furniture

- *Kitchen sinks, see 91.140.70*

97.040.20 Cooking ranges, working tables, ovens and similar appliances

- *Including microwave ovens and stove hoods*

97.040.30 Domestic refrigerating appliances

- *Refrigerating technology, see 27.200*

- *Refrigerated display cabinets and cold rooms, see 97.130.20*

97.040.40 Dishwashers

97.040.50 Small kitchen appliances

- *Including food waste disposal units*

97.040.60 Cookware, cutlery and flatware

- *Including table cutlery and table ware*

97.040.99 Other kitchen equipment

97.060 Laundry appliances

- *Including washing-machines, dry-cleaners, driers, ironing and pressing appliances, etc.*

97.080 Floor treatment appliances

- *Including vacuum cleaners, floor-cleaning machines, floor polishers, etc.*

97.100 Domestic, commercial and industrial heating appliances

- *Including thermal storage room heating appliance*

- *Burners and boilers, see 27.060*

- *Central heating systems, see 91.140.10*

97.100.01 Heating appliances in general

97.100.10 Electric heaters

97.100.20 Gas heaters

97.100.30 Solid fuel heaters

97.100.40 Liquid fuel heaters

97.100.99 Heaters using other sources of energy

97.120 Automatic controls for household use

97.130 Shop fittings

97.130.01 Shop fittings in general

97.130.10 Shelving

- *Shelves for storage purposes, see 53.080*

97.130.20 Commercial refrigerating appliances

- *Including refrigerated display cabinets, cold rooms, etc.*

97.130.30 Trolleys for supermarket use

- *Including baskets*

97.130.99 Other shop fittings

- 97.140 Furniture**
**Including upholstery, mattresses, office furniture, school furniture, etc.*
- 97.145 Ladders**
- 97.150 Non-textile floor coverings**
**Textile floor coverings, see 59.080.60*
- 97.160 Home textiles. Linen**
**Including duvets, blankets, bedding*
**Electric blankets, see 97.030*
- 97.170 Body care equipment**
**Including hair-driers, razors, shavers, toothbrushes, massage appliances, radiation skin treatment appliances, etc.*
- 97.180 Miscellaneous domestic and commercial equipment**
**Including scissors, aquarium equipment, articles for domestic animals, battery chargers, mops, insect electrocutors, lighters, matches, paper clips, pens, pencils, etc.*
- 97.190 Equipment for children**
**Including child safety requirements for domestic equipment*
**Children's furniture, see 97.140*
**Playgrounds, see 97.200.40*
**Toys, see 97.200.50*
- 97.195 Items of art and handicrafts**
**Including equipment and materials for creating items of art and handicrafts*
- 97.200 Equipment for entertainment**
**Audio and video systems, see 33.160*
**Photography, see 37.040*
**Cinematography, see 37.060*
- 97.200.01 Equipment for entertainment in general
- 97.200.10 Theatre, stage and studio equipment
**Including lighting equipment*
- 97.200.20 Musical instruments
- 97.200.30 Camping equipment and camp-sites
**Caravans, see 43.100*
- 97.200.40 Playgrounds
**Including amusement rides and devices*
- 97.200.50 Toys
**Including safety of toys*
- 97.200.99 Other equipment for entertainment
- 97.220 Sports equipment and facilities**
**Motor cycles, see 43.140*
**Cycles, see 43.150*
- 97.220.01 Sports equipment and facilities in general
- 97.220.10 Sports facilities
**Including swimming-pools, spas, solaria, sports fields, running-tracks, etc.*
- 97.220.20 Winter sports equipment
**Including ice hockey equipment*
- 97.220.30 Indoor sports equipment
**Including equipment for gymnastics, volleyball, basketball, handball, home sports trainers, etc.*
- 97.220.40 Outdoor and water sports equipment
**Including equipment for mountaineering, football, tennis, swimming, diving, etc.*
**Small craft, see 47.080*
**Personal flotation devices (life jackets), see 13.340.10*
- 97.220.99 Other sports equipment and facilities

99 (No title)

**This field is reserved for internal miscellaneous purposes*

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