Pattern Headings: Materials H 1158

PATTERNS: **Concrete**; **Metals**

TYPES OF HEADINGS COVERED BY THE PATTERN: Headings for individual materials and types of materials. *Examples:* **Dental materials**; **Foam rubber**; **Glass**; **Laminated metals**; **Plastics**; **Plywood**; **Porous materials**. Included are headings formed using the free-floating subdivision **–Materials** under scientific and technical disciplines and under types of equipment and construction, for example, **Telecommunication–Materials**; **Space vehicles–Materials**; **Nuclear reactors–Materials**. The category does not include the heading **Materials**. Some overlap exists with the category for chemicals (H 1149). Headings for individual substances and types of substances such as **Polyethylene** and **Nonferrous metals** should follow the pattern for materials when they are discussed as basic substances from which something can be made, including their engineering properties, processing, suitability for intended use, etc. They should follow the pattern for chemicals when discussed from the standpoint of their chemical structure, effects, reactions, etc.

CONFLICTS: Any subdivision listed here can be used as a free-floating subdivision under any heading belonging to the category if it is appropriate and no conflict exists in the subject authority file. Subject authority records may exist for headings employing variant phrases or subdivisions equivalent to subdivisions on this list.

LC practice:
If an exceptional variant form is to be retained, make a UF reference from the equivalent free-floating subdivision form following the procedures in H 195 if the reference does not yet exist. Otherwise, submit a proposal to change the variant form along with all bibliographic records requiring correction following the procedures in H 193.

> *Note: Most form subdivisions coded $v in this list may also be used as topical subdivisions coded $x when assigned to works **about** the form (see H 1075, sec. 1.d.).*

$x Abrasion resistance *(May Subd Geog)*
$x Acoustic properties *(May Subd Geog)*
$x Additives *(May Subd Geog)*
$x Air content *(May Subd Geog)*
$x Air content *$x* Measurement
$x Air content *$x* Measurement *$x* Instruments
$x Analysis
$x Anodic oxidation *(May Subd Geog)*
$x Biocompatibility *(May Subd Geog)*
$x Biodegradation *(May Subd Geog)*

H 1158 Pattern Headings: Materials

$x Brittleness *(May Subd Geog)*
$x Carbon content *(May Subd Geog)*
$x Cavitation erosion *(May Subd Geog)*
$x Chemical resistance
$x Cobalt content *(May Subd Geog)*
$x Cold working *(May Subd Geog)*
$x Coloring
$x Combustion *(May Subd Geog)*
$x Compression testing *(May Subd Geog)*
$x Conservation *(May Subd Geog)*
$x Cooling *(May Subd Geog)*
$x Corrosion[1] *(May Subd Geog)*
$x Corrosion fatigue *(May Subd Geog)*
$x Cracking *(May Subd Geog)*
$x Creep *(May Subd Geog)*
$x Curing *(May Subd Geog)*
$x Defects *(May Subd Geog)*
$x Defects $x Reporting *(May Subd Geog)*
$x Density
$x Deoxidizing *(May Subd Geog)*
$x Desulfurization *(May Subd Geog)*
$x Deterioration *(May Subd Geog)*
$x Dewatering *(May Subd Geog)*
$x Dissolution
$x Drying *(May Subd Geog)*
$x Ductility
$x Effect of high temperatures on *(May Subd Geog)*
$x Effect of lasers on *(May Subd Geog)*
$x Effect of low temperatures on *(May Subd Geog)*
$x Effect of radiation on *(May Subd Geog)*
$x Effect of salt on *(May Subd Geog)*
$x Effect of temperature on *(May Subd Geog)*
$x Elastic properties *(May Subd Geog)*
$x Electric properties *(May Subd Geog)*
$x Embrittlement
$x Environmental aspects *(May Subd Geog)*
$x Environmental testing *(May Subd Geog)*
$x Erosion *(May Subd Geog)*
$x Etching *(May Subd Geog)*

$x Expansion and contraction *(May Subd Geog)*
$x Extrusion *(May Subd Geog)*
$x Fatigue *(May Subd Geog)*
$x Finishing *(May Subd Geog)*
$x Finishing $x Waste disposal *(May Subd Geog)*
$x Finishing $x Waste minimization *(May Subd Geog)*
$x Fire testing *(May Subd Geog)*
$x Fires and fire prevention *(May Subd Geog)*
$x Flammability *(May Subd Geog)*
$x Fluid dynamics
$x Formability
$x Fracture *(May Subd Geog)*
$x Galvanomagnetic properties *(May Subd Geog)*
$x Hardenability *(May Subd Geog)*
$x Heat treatment *(May Subd Geog)*
$x Heating *(May Subd Geog)*
$x Helium content *(May Subd Geog)*
$x Hot working *(May Subd Geog)*
$x Hydrogen content *(May Subd Geog)*
$x Hydrogen embrittlement
$x Imaging *(May Subd Geog)*
$x Impact testing *(May Subd Geog)*
$x Inclusions *(May Subd Geog)*
$x Law and legislation[2] *(May Subd Geog)*
$x Machinability
$x Magnetic properties *(May Subd Geog)*
$x Mechanical properties
$x Metallography[3]
$x Metallurgy[3]
$x Microbiology *(May Subd Geog)*
$x Microscopy[4] *(May Subd Geog)*
$x Microstructure
$x Mixing *(May Subd Geog)*
$x Moisture *(May Subd Geog)*
$x Nitrogen content *(May Subd Geog)*
$x Nondestructive testing *(May Subd Geog)*
$x Optical properties
$x Oxygen content *(May Subd Geog)*
$x Painting *(May Subd Geog)*
$x Penetration resistance

H 1158 Pattern Headings: Materials

$x Permeability
$x Physiological effect *(May Subd Geog)*
$x Pickling *(May Subd Geog)*
$x Pickling *$x* By-products
$x Pickling *$x* Waste disposal *(May Subd Geog)*
$x Plastic properties
$x Prices *(May Subd Geog)*
$x Pump placing *(May Subd Geog)*
$x Quality control
$x Quenching *(May Subd Geog)*
$x Radioactive contamination[5] *(May Subd Geog)*
$x Radiography *(May Subd Geog)*
$x Rapid solidification processing *(May Subd Geog)*
$x Recycling *(May Subd Geog)*
$x Refining *(May Subd Geog)*
$x Religious aspects[6]
$x Sampling *(May Subd Geog)*
$x Service life *(May Subd Geog)*
$x Skid resistance *(May Subd Geog)*
$x Solubility *(May Subd Geog)*
$v Specifications *(May Subd Geog)*
$x Spectra
$x Stress corrosion *(May Subd Geog)*
$x Surfaces
$x Surfaces *$x* Defects *(May Subd Geog)*
$x Surfaces *$x* Optical properties
$x Testing
$x Texture *(May Subd Geog)*
$x Thermal conductivity *(May Subd Geog)*
$x Thermal fatigue *(May Subd Geog)*
$x Thermal properties *(May Subd Geog)*
$x Thermomechanical properties
$x Thermomechanical treatment *(May Subd Geog)*
$x Toxicology *(May Subd Geog)*
$x Transport properties *(May Subd Geog)*
$x Transportation *(May Subd Geog)*
$x Transportation *$x* Law and legislation[2] *(May Subd Geog)*
$x Tritium content *(May Subd Geog)*

$x Viscosity *(May Subd Geog)*
$x War use *(May Subd Geog)*
$x Weldability *(May Subd Geog)*

NOTES

[1]Not valid under the heading **Metals**.

[2]See H 1154.5 for further subdivisions used under legal topics.

[3]Not valid under the heading **Metals**. Use only under individual metals and groups of metals.

[4]Not valid under the heading **Metals**. Use under individual materials and groups of materials other than metals. Use **–Metallography** under individual metals and groups of metals.

[5]Not valid under materials and types of materials that are inherently radioactive.

[6]May be subdivided topically by a religion or Christian denomination. Editorially establish each heading of the type **[*material*]–Religious aspects–[*name of religion or denomination*]**. For instructions on the use of the subdivision, see H 1998.