SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

F17 STORING OR DISTRIBUTING GASES OR LIQUIDS

F17C VESSELS FOR CONTAINING OR STORING COMPRESSED, LIQUEFIED, OR SOLIDIFIED GASES; FIXED-CAPACITY GAS-HOLDERS; FILLING VESSELS WITH, OR DISCHARGING FROM VESSELS, COMPRESSED, LIQUEFIED, OR SOLIDIFIED GASES (storing fluids in natural or artificial cavities or chambers in the earth B65G 5/00; construction or assembling of bulk storage containers employing civil-engineering techniques E04H 7/00; variable-capacity gas-holders F17B; liquefaction or refrigeration machines, plants, or systems F25)

Subclass index

VESSELS UNDER PRESSURE; VESSELS NOT UNDER PRESSURE; DETAILS.....1/00, 3/00, 13/00
FILLING; DISCHARGING.....5/00, 6/00, 7/00, 9/00
USE OF GAS-SOLVENTS OR GAS-ABSORBENTS.....11/00

1/00 Pressure vessels, e.g. gas cylinder, gas tank, replaceable cartridge (pressurised apparatus for purposes other than storage, see the relevant subclasses such as A62C, B05B; associated with vehicles, see the appropriate subclass of classes B60-B64; pressure vessels in general F16J 12/00) **[1, 2006.01]**

1/02 • involving reinforcing arrangements **[1, 4, 2006.01]**

1/04 • • Protecting sheatings **[1, 2006.01]**

1/06 • • • built-up from wound-on bands or filamentary material, e.g. wires **[1, 4, 2006.01]**

1/08 • • Integral reinforcements, e.g. ribs **[1, 2006.01]**

1/10 • with provision for protection against corrosion, e.g. due to gaseous acid (inhibiting corrosion of metallic material or incrustation in general C23F) **[1, 4, 2006.01]**

1/12 • with provision for thermal insulation (thermal insulation in general F16L 59/00) **[1, 4, 2006.01]**

1/14 • constructed of aluminium; constructed of non-magnetic steel **[1, 2006.01]**

1/16 • constructed of plastics materials **[1, 2006.01]**

3/00 Vessels not under pressure [1, 2006.01]

3/02 • with provision for thermal insulation (thermal insulation in general F16L 59/00) **[1, 2006.01]**

3/04 • • by insulating layers (F17C 3/08 takes precedence) **[1, 2006.01]**

3/06 • • • on the inner surface, i.e. in contact with the stored fluid **[1, 4, 2006.01]**

3/08 • • by vacuum spaces, e.g. Dewar flask (for household use A47J 41/02) **[1, 2006.01]**

3/10 • • by liquid-circulating or vapour-circulating jackets **[1, 2006.01]**

3/12 • with provision for protection against corrosion, e.g. due to gaseous acid (protection against corrosion in general C23F) **[1, 2006.01]**

5/00 Methods or apparatus for filling pressure vessels with liquefied, solidified, or compressed gases (adding propellants to aerosol containers B65B 31/00) **[1, 2006.01]**

Note(s)

This group covers:
- the filling of vessels for storage of compressed or liquefied gases;
- the filling of pressurised apparatus insofar as it is not covered by a single other subclass, e.g. A62C, B05B.

5/02 • for filling with liquefied gases **[1, 2006.01]**

5/04 • • requiring the use of refrigeration, e.g. filling with helium or hydrogen **[1, 2006.01]**

5/06 • for filling with compressed gases **[1, 2006.01]**

6/00 Methods or apparatus for filling vessels not under pressure with liquefied or solidified gases [3, 2006.01]

7/00 Methods or apparatus for discharging liquefied, solidified, or compressed gases from pressure vessels, not covered by another subclass [1, 2006.01]

7/02 • Discharging liquefied gases **[1, 2006.01]**

7/04 • • with change of state, e.g. vaporisation **[3, 2006.01]**

9/00 Methods or apparatus for discharging liquefied or solidified gases from vessels not under pressure [1, 2006.01]

9/02 • with change of state, e.g. vaporisation **[1, 2006.01]**

9/04 • • Recovery of thermal energy **[3, 2006.01]**

11/00 Use of gas-solvents or gas-sorbents in vessels [1, 2006.01]

13/00 Details of vessels or of the filling or discharging of vessels [1, 2006.01]

13/02 • Special adaptations of indicating, measuring, or monitoring equipment (measuring in general G01) **[1, 2006.01]**

13/04 • Arrangement or mounting of valves (valves per se F16K) **[1, 2006.01]**

13/06 • Closures, e.g. cap, breakable member (closures for containers in general B65D) **[1, 2006.01]**

13/08 • Mounting arrangements for vessels **[1, 2006.01]**

13/10 • Arrangements for preventing freezing **[1, 2006.01]**

13/12 • Arrangements or mounting of devices for preventing or minimising the effect of explosion (flame traps A62C 4/00) **[1, 2006.01]**