

## 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

<b>1/00</b>	<b>Pressure vessels, e.g. gas cylinder, gas tank, replaceable cartridge</b> (pressurised apparatus for purposes other than storage, <u>see</u> the relevant subclasses such as A62C, B05B; associated with vehicles, <u>see</u> the appropriate subclass of classes B60-B64; pressure vessels in general F16J 12/00) <b>[1, 2006.01]</b>	<b>Note(s)</b> This group <u>covers</u> : <ul style="list-style-type: none"> <li>the filling of vessels for storage of compressed or liquefied gases;</li> <li>the filling of pressurised apparatus insofar as it is not covered by a single other subclass, e.g. A62C, B05B.</li> </ul>
1/02	• involving reinforcing arrangements <b>[1, 4, 2006.01]</b>	
1/04	• • Protecting sheatings <b>[1, 2006.01]</b>	5/02 • for filling with liquefied gases <b>[1, 2006.01]</b>
1/06	• • • built-up from wound-on bands or filamentary material, e.g. wires <b>[1, 4, 2006.01]</b>	5/04 • • requiring the use of refrigeration, e.g. filling with helium or hydrogen <b>[1, 2006.01]</b>
1/08	• • Integral reinforcements, e.g. ribs <b>[1, 2006.01]</b>	5/06 • for filling with compressed gases <b>[1, 2006.01]</b>
1/10	• with provision for protection against corrosion, e.g. due to gaseous acid (inhibiting corrosion of metallic material or incrustation in general C23F) <b>[1, 4, 2006.01]</b>	<b>6/00</b> <b>Methods or apparatus for filling vessels not under pressure with liquefied or solidified gases [3, 2006.01]</b>
1/12	• with provision for thermal insulation (thermal insulation in general F16L 59/00) <b>[1, 4, 2006.01]</b>	<b>7/00</b> <b>Methods or apparatus for discharging liquefied, solidified, or compressed gases from pressure vessels, not covered by another subclass [1, 2006.01]</b>
1/14	• constructed of aluminium; constructed of non-magnetic steel <b>[1, 2006.01]</b>	7/02 • Discharging liquefied gases <b>[1, 2006.01]</b>
1/16	• constructed of plastics materials <b>[1, 2006.01]</b>	7/04 • • with change of state, e.g. vaporisation <b>[3, 2006.01]</b>
<b>3/00</b>	<b>Vessels not under pressure [1, 2006.01]</b>	<b>9/00</b> <b>Methods or apparatus for discharging liquefied or solidified gases from vessels not under pressure [1, 2006.01]</b>
3/02	• with provision for thermal insulation (thermal insulation in general F16L 59/00) <b>[1, 2006.01]</b>	9/02 • with change of state, e.g. vaporisation <b>[1, 2006.01]</b>
3/04	• • by insulating layers (F17C 3/08 takes precedence) <b>[1, 2006.01]</b>	9/04 • • Recovery of thermal energy <b>[3, 2006.01]</b>
3/06	• • • on the inner surface, i.e. in contact with the stored fluid <b>[1, 4, 2006.01]</b>	<b>11/00</b> <b>Use of gas-solvents or gas-sorbents in vessels [1, 2006.01]</b>
3/08	• • by vacuum spaces, e.g. Dewar flask (for household use A47J 41/02) <b>[1, 2006.01]</b>	<b>13/00</b> <b>Details of vessels or of the filling or discharging of vessels [1, 2006.01]</b>
3/10	• • by liquid-circulating or vapour-circulating jackets <b>[1, 2006.01]</b>	13/02 • Special adaptations of indicating, measuring, or monitoring equipment (measuring in general G01) <b>[1, 2006.01]</b>
3/12	• with provision for protection against corrosion, e.g. due to gaseous acid (protection against corrosion in general C23F) <b>[1, 2006.01]</b>	13/04 • Arrangement or mounting of valves (valves <u>per se</u> F16K) <b>[1, 2006.01]</b>
<b>5/00</b>	<b>Methods or apparatus for filling pressure vessels with liquefied, solidified, or compressed gases</b> (adding propellants to aerosol containers B65B 31/00) <b>[1, 2006.01]</b>	13/06 • Closures, e.g. cap, breakable member (closures for containers in general B65D) <b>[1, 2006.01]</b>
		13/08 • Mounting arrangements for vessels <b>[1, 2006.01]</b>
		13/10 • Arrangements for preventing freezing <b>[1, 2006.01]</b>

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