

# DRAFT AMENDMENT

## ISO 15500-6:2012/DAM 1

ISO/TC 22/SC 41

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## Road vehicles — Compressed natural gas (CNG) fuel system components —

### Part 6: Automatic valve

### AMENDMENT 1

*Véhicules routiers — Composants des systèmes de combustible gaz naturel comprimé (GNC) —*

*Partie 6: Valve automatique*

*AMENDEMENT 1*

ICS: 43.060.40

**PREVIEW**  
iTech STANDARD  
(standards.itih.ai)  
Full standard:  
<https://standards.itih.ai/catalog/standards/sist/94b82252-a746-4c25-b7b0-4e3ff6bc248c1/iso-15500-6-2012-amd-1>  
2016

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Reference number  
ISO 15500-6:2012/DAM 1:2015(E)

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**Clause 4 d)**

In addition to the markings specified above, if the valve is compatible with start/stop systems, one of the following additional marks shall be used for automatic cylinder valves:

(a) "H1"if the valve is to be used with an engine that shuts off automatically when the vehicle comes to a halt;

(b) "H2"if the valve is to be used with an engine that, in addition to (a), it also shuts off automatically when the vehicle drives with an electric motor only;

(c) "H3"if the valve is to be used with an engine that, in addition to (a) or (b), it also shuts off automatically when the accelerator pedal is released

**5 Construction and assembly**

**5.1** The automatic valve shall comply with the applicable provisions of ISO 15500-1 and ISO 15500-2, and with the tests specified in clause 6 of this part of ISO 15500. All automatic valves, including solenoid valves, cylinder valves and valves with manual by-pass, shall comply with the tests specified in clause 6. Tolerances should follow the specifications of ISO 15500-2

**6 Tests**

**6.1 Applicability**

The tests required to be carried out are indicated in Table 1.

**Table 1 — Tests applicable**

Test	Applicable	Test procedure as required by ISO 15500-2	Specific test requirements of this part of ISO 15500
Hydrostatic strength	X	X	X (see 6.2)
Leakage	X	X	X (see 6.3)
Excess torque resistance	X	X	
Bending moment	X	X	
Continued operation	X	X	X (see 6.4)
Corrosion resistance	X	X	
Oxygen ageing	X	X	
<u>Ozone ageing</u>	<u>X</u>	<u>X</u>	
<u>Heat Ageing</u>	<u>X</u>	<u>X</u>	

<a href="#">Automotive Fluids</a>	X	X	
Electrical overvoltages	X	X	
Non-metallic material immersion	X	X	
Vibration resistance	X	X	
Brass material compatibility	X	X	
Insulation resistance	X		X (see 6.5)
Minimum opening voltage	X		X (see 6.6)
Pressure impulse	X		X (see 6.7)

#### 6.4 Continued operation

6.4.1 Test the automatic valve in accordance with the procedure for testing continued operation given in ISO 15500-2, for 50 000 cycles, but lower the downstream pressure of the test fixture to less than 2 % of working pressure, and perform the leakage test in accordance with 6.3 of this part of ISO 15500. The valve shall continue to operate according to the manufacturer's specifications.

6.4.2 Following cycling and leakage testing, perform the hydrostatic strength test in accordance with 6.2 of this part of ISO 15500.

6.4.3 If the automatic valve is to be used in vehicles with start-stop systems, and closed during commanded stop phases, the valve shall be submitted to the following numbers of operations during test :

- a) 200,000 cycles (mark "H1") if the engine shuts off automatically when the vehicle comes to a halt;
- b) 500,000 cycles (mark "H2") if, in addition to (a), the engine also shuts off automatically when the vehicle drives with the electric motor only;
- c) 1,000,000 cycles (mark "H3") if, in addition to (a) or (b), the engine also shuts off automatically when the accelerator pedal is released.