

# ISO 13985:2006-11 (E)

## Liquid hydrogen - Land vehicle fuel tanks

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>4</b>	<b>Requirements .....</b>	<b>3</b>
4.1	General requirements .....	3
4.2	Mechanical stresses .....	3
4.3	Thermal stresses .....	4
4.4	Materials .....	5
4.5	Design .....	5
4.6	Insulation .....	5
4.7	Accessories .....	6
4.8	Manufacturing and assembly .....	7
<b>5</b>	<b>Type tests .....</b>	<b>7</b>
5.1	Approval of new designs .....	7
5.2	Inner tank burst pressure test .....	8
5.3	Thermal autonomy test .....	8
5.4	Maximum filling level test .....	8
5.5	Accessory type tests .....	8
<b>6</b>	<b>Routine tests and inspection .....</b>	<b>8</b>
6.1	General .....	8
6.2	Pressure test .....	8
6.3	Leak test .....	9
6.4	Verification of the dimensions .....	9
6.5	Destructive and non-destructive tests of welded joints .....	9
6.6	Visual inspection .....	9
<b>7</b>	<b>Marking and labelling .....</b>	<b>9</b>
7.1	Marking method .....	9
7.2	Inner tank markings .....	9
7.3	Outer jacket markings .....	10
7.4	Temporary markings for first filling .....	10
<b>Annex A (normative)</b>	<b>Fuel tank operating ranges .....</b>	<b>11</b>
<b>Annex B (informative)</b>	<b>Hydrogen compatibility .....</b>	<b>12</b>
<b>Annex C (normative)</b>	<b>Fuel tank type tests .....</b>	<b>13</b>
<b>Annex D (normative)</b>	<b>Accessory type tests .....</b>	<b>15</b>