

**§ 178.347-2 Material and thickness of material.**

(a) The type and thickness of material for DOT 407 specification cargo tanks must conform to §178.345–2, but in no case may the thickness be less than that determined by the minimum thickness requirements in §178.320(a). Tables I and II identify the specified minimum thickness values to be employed in that the determination:

Table I—Specified Minimum Thickness of Heads (or Bulkheads and Baffles When Used as Tank Reinforcement) Using Mild Steel (MS), High Strength Low Alloy Steel (HSLA), Austenitic Stainless Steel (SS), or Aluminum (AL)—Expressed in Decimals of an Inch After Forming

<b>Volume capacity in gallons per inch</b>	<b>10 or less</b>	<b>Over 10 to 14</b>	<b>Over 14 to 18</b>	<b>Over 18 to 22</b>	<b>Over 22 to 26</b>	<b>Over 26 to 30</b>	<b>Over 30</b>
Thickness (MS)	0.100	0.100	0.115	0.129	0.129	0.143	0.156
Thickness (HSLA)	0.100	0.100	0.115	0.129	0.129	0.143	0.156
Thickness (SS)	0.100	0.100	0.115	0.129	0.129	0.143	0.156
Thickness (AL)	0.160	0.160	0.173	0.187	0.194	0.216	0.237

Table II—Specified Minimum Thickness of Shell Using Mild Steel (MS), High Strength Low Alloy Steel (HSLA), Austenitic Stainless Steel (SS), or Aluminum (AL)—Expressed in Decimals of an Inch After Forming

<b>Volume capacity in gallons per inch</b>	<b>10 or less</b>	<b>Over 10 to 14</b>	<b>Over 14 to 18</b>	<b>Over 18 to 22</b>	<b>Over 22 to 26</b>	<b>Over 26 to 30</b>	<b>Over 30</b>
Thickness (MS)	0.100	0.100	0.115	0.129	0.129	0.143	0.156
Thickness (HSLA)	0.100	0.100	0.115	0.129	0.129	0.143	0.156
Thickness (SS)	0.100	0.100	0.115	0.129	0.129	0.143	0.156
Thickness (AL)	0.151	0.151	0.160	0.173	0.194	0.216	0.237

(b) [Reserved]

[Amdt. 178–89, 54 FR 25030, June 12, 1989, as amended at 55 FR 37064, Sept. 7, 1990; Amdt. 178–104, 59 FR 49135, Sept. 26, 1994; 68 FR 19285, Apr. 18, 2003]