

**§ 178.346-2 Material and thickness of material.**

The type and thickness of material for DOT 406 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). The following Tables I and II identify the specified minimum thickness values to be employed in that 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

Material	Volume capacity in gallons per inch of length								
	14 or less			Over 14 to 23			Over 23		
	MS	HSLA SS	AL	MS	HSLA SS	AL	MS	HSLA SS	AL
Thickness	.100	.100	.160	.115	.115	.173	.129	.129	.187

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<sup>1</sup>

Cargo tank motor vehicle rated capacity (gallons)	MS	SS/HSLA	AL
More than 0 to at least 4,500	0.100	0.100	0.151
More than 4,500 to at least 8,000	0.115	0.100	0.160
More than 8,000 to at least 14,000	0.129	0.129	0.173
More than 14,000	0.143	0.143	0.187

<sup>1</sup>Maximum distance between bulkheads, baffles, or ring stiffeners shall not exceed 60 inches.

[Amdt. 178–89, 54 FR 25028, June 12, 1989, as amended at 55 FR 37064, Sept. 7, 1990; Amdt. 178–105, 59 FR 55176, Nov. 3, 1994; 68 FR 19285, Apr. 18, 2003]