

Table 1.2-17. Determining manure spreader capacity.

Spreader capacity, weight basis:

Tons per load = volume x density ÷ 2,000

Density varies from 55 to 62 lb/cu ft depending on manure moisture:

dry manure is 55 and liquid manure is 62.

Spreader capacity, volume basis:

100 gal per load = volume ÷ 13.4

Calculate the volumes as follows (see diagrams at right):

Solid or semisolid manure

A. Box-shaped spreader¹ (level load)

Volume = length (l) x width (w) x depth (d)

B. Box-shaped spreader¹ (piled load)

Volume = length (l) x width (w) x [depth (d) + stacking height (h) x 0.8]

C. Flail-type barrel spreader (level load)

Volume = length (l) x depth (d) x depth (d) x 1.6

D. Flail-type barrel spreader (piled load)

Volume = length (l) x depth (d) x 1.6 x [depth (d) + stacking height (h)]

Liquid manure

Box-shaped spreader¹—same as box-shaped spreader (level load)

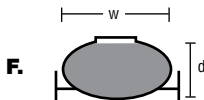
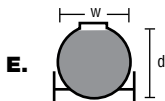
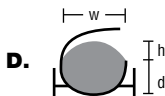
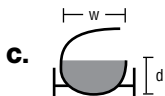
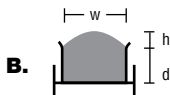
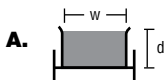
Flail-type barrel spreader—same as flail-type spreader (level load)

E. Tank spreader (round)

Volume = length (l) x tank diameter (d) x tank diameter (d) x 0.8

F. Tank spreader (noncircular)

Volume = length (l) x width (w) x depth (d) x 0.8



1. For a box spreader with sloping sides, use an average width.