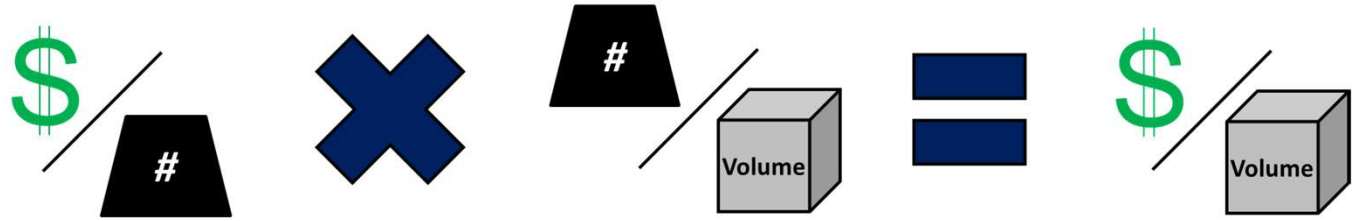
Volume Cost Calculations

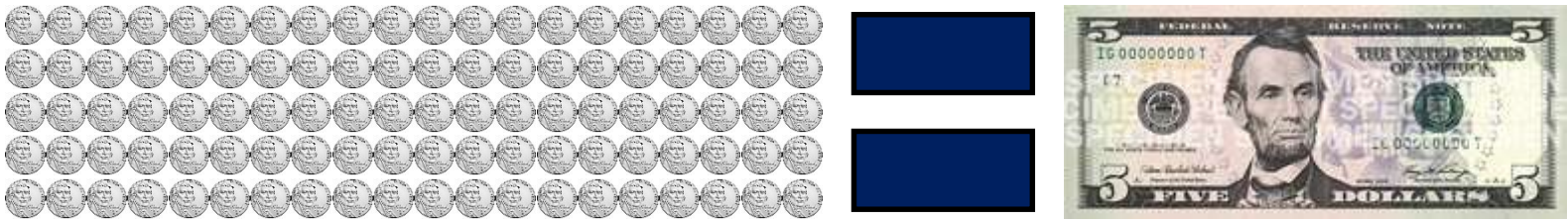
Explained

Volume Cost Explained

Insights for improving business profitability



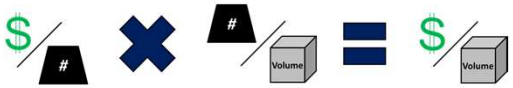
- ***Never select a material based on its price per unit weight***, as that is only one half of the equation to determine your true volume cost.
- To understand how much a given material costs you to fill a given volume, you must calculate the price per unit weight of that material and multiply that by its unit weight per volume.
- **A material's density (unit weight over volume) is just as important as price per weight** when selecting which material to buy to fill a given volume, all other factors constant.
  - A hypothetical material that costs $0.05/# and weighs 100 pounds per cubic foot ('pcf') is just as expensive as a material that costs $5/# and weighs 1pcf*.



* Freight factors excluded

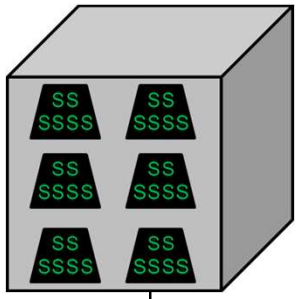
Ways to Improve Volume Cost

Decrease price per unit weight; or decrease unit density



Example

- **Price per unit weight:** $6 per pound
- **Unit density:** 6 pounds per cubic foot *('pcf')*
- **Volume cost:** $36/cubic foot ('cf')

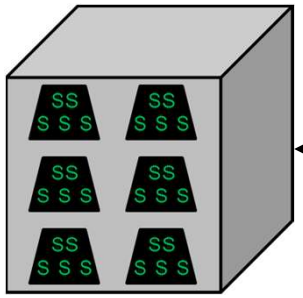


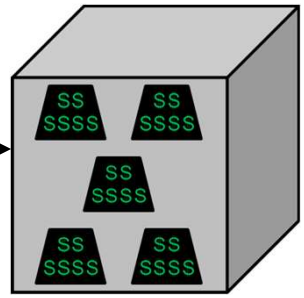
Decrease price per unit weight:

- **Price per unit weight:** ~~$6~~ ➔ $5 per pound
- **Unit density:** 6 pcf
- **Volume cost:** $36/cf ➔ $30/cf
  - Note: the 16.67% decrease in price per unit weight resulted in a 16.67% decrease in volume cost.

Decrease unit density:

- **Price per unit weight:** $6 per pound
- **Unit density:** ~~6~~ ➔ 5 pcf
- **Volume cost:** $36/cf ➔ $30/cf
  - Note: the 16.7% decrease in unit density resulted in a 16.7% decrease in volume cost.





If both the price per unit weight and the unit density are reduced, the resulting decrease in volume cost is compounded.
Example: ~~$6~~ ➔5/# x ~~6~~ ➔5pcf = ~~36~~ ➔$25 per cubic foot
(-16.7%) x (-16.7%) = (-30.56%)

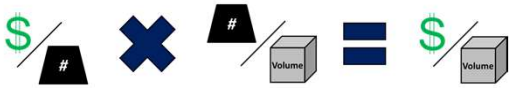
Key:

$ = $1

= 1 pound

Volume Cost Lessons Applied

Examples of how to use volume cost in select applications



Concrete Filler: *Decrease price and/or density of common aggregates or use substitutes to save weight and cost of applied concrete.*

Resins / Coatings: *Reduce the price and/or density of fillers / extenders to improve profitability.*
Example:*

- *Resin:*
  - *Cost: ~$2/#*
  - *Bulk Density: 65 – 70 pcf = ~9#/gallon*
  - *Volume cost = $18 / gallon.*
- Spex•Lite® *Ultra Light Filler Beads*
  - *Cost: ~$6/#*
  - *Bulk Density: 1.3 pcf = 0.18#/gallon*
  - *Volume cost = $1.08 / gallon.*

Please contact us at Info@SpexLite.com or at 440-462-1500 for specific recommendations and assistance using Spex•Lite® in **your** *application to achieve volume cost savings!*

* *Actual bulk density and cost factors may change your volume cost calculation, but in this example, combining* Spex•Lite® *with a hypothetical resin could create a significant cost advantage.*

Thank you!

For more information, please contact Spex•Lite® at either 440-462-1500 or Info@SpexLite.com