



Calculating Solder Paste Volume Percent

Density of Typical Solder Paste (90% metal) 10 c.c. syringe weights 42-g	
Paste Density	$= 42 / 10$ $= 4.2\text{-g/ml}$
Flux Density	30cc syringe weights 30.4g
Flux Density	$= 30.4 / 30.0$ $= 1.013\text{-g/ml}$
Volume of Flux	$= \text{Wt \% Flux} / \text{Sp Gr of Flux}$ $= 10 / 1.013$ $= 9.87\text{ml}$
Volume of Paste for 100g	$= 100 / 4.2$ $= 23.81$
Volume of Metal	$= 23.81 - 9.87$ $= 13.94$
Volume % Metal	$= \text{Volume of Metal} / \text{Volume of Paste}$ $= 13.94 / 23.81$ $= 58.55\%$
Volume % Flux	$= \text{Volume of Flux} / \text{Volume of Paste}$ $= 9.87 / 23.81$ $= 41.45\%$