

## Integrated Preform Calculator

### Round Pin Integrated Preform Calculator

Alloy =		
Alloy Density =		lb/inches <sup>3</sup>
Alloy Density =		g/cm <sup>3</sup>
Hole Diameter =		inches
Pin Diameter =		inches
Board Thickness =		inches
Hole Volume ( $\pi r^2 H$ ) =		inches <sup>3</sup>
Pin Volume ( $\pi r^2 H$ ) =		inches <sup>3</sup>
Void Volume to Fill =		inches <sup>3</sup>
Center to Center Spacing =		inches
OD =		inches
ID =		inches

Note: See Alloy Density tab at bottom

Note: See Alloy Density tab at bottom

KEY	
	Customer Information
	Calculated Values

Note: Connector strand should be close to 0.020" long (Typically Center to Center Spacing - 0.020")

Note: ID should be roughly 0.005" larger than Pin Diameter

D =	$\frac{M}{V}$	
M =		lbs

$\frac{1lb}{454\text{ gram}}$	$\frac{M}{X}$	
X (Weight) =		grams

Volume Needed & Required Thickness		
Volume x 115% for good fillet formation =		grams
Required Thickness		inches

Note: Maximum Integrated Preform Thickness = 0.018"

$$(OD^2) - (ID^2) \times \text{Thickness} \times 0.7854 \times 16.387 \times \text{Density of Alloy} = \text{Volume Needed}$$

OVER →

Form No. 98576 (A4) R0

[www.indium.com](http://www.indium.com)

[askus@indium.com](mailto:askus@indium.com)

ASIA: Singapore, Cheongju: +65 6268 8678  
 CHINA: Suzhou, Shenzhen, Liuzhou: +86 (0)512 628 34900  
 EUROPE: Milton Keynes, Torino: +44 (0) 1908 580400  
 USA: Utica, Clinton, Chicago: +1 315 853 4900



ISO 9001  
REGISTERED

## Integrated Preform Calculator

### Square Pin Integrated Preform Calculator

Alloy =		
Alloy Density =		lb/inches <sup>3</sup>
Alloy Density =		g/cm <sup>3</sup>
Hole Diameter =		inches
Pin Length =		inches
Pin Width =		inches
Board Thickness =		inches
Hole Volume ( $\pi r^2 H$ ) =		inches <sup>3</sup>
Pin Volume (L x W x H) =		inches <sup>3</sup>
Void Volume to Fill =		inches <sup>3</sup>
Pin Hypotenuse ( $A^2+B^2=C^2$ ) =		inches
Center to Center Spacing =		inches
OD =		inches
ID =		inches

Note: See Alloy Density tab at bottom

Note: See Alloy Density tab at bottom

KEY	
	Customer Information
	Calculated Values

Note: Connector strand should be close to 0.020" long (Typically Center to Center Spacing - 0.020")

Note: ID should be roughly 0.005" larger than Pin Hypotenuse

D =	$\frac{M}{V}$	
M =		lbs

$\frac{1lb}{454 \text{ gram}}$	$\frac{M}{X}$	
X (Weight) =		grams

Volume Needed & Required Thickness		
Volume x 115% for good fillet formation =		grams
Required Thickness		inches

Note: Maximum Integrated Preform Thickness = 0.018"

$$(OD^2) - (ID^2) \times \text{Thickness} \times 0.7854 \times 16.387 \times \text{Density of Alloy} = \text{Volume Needed}$$

[www.indium.com](http://www.indium.com)

[askus@indium.com](mailto:askus@indium.com)

ASIA: Singapore, Cheongju: +65 6268 8678  
 CHINA: Suzhou, Shenzhen, Liuzhou: +86 (0)512 628 34900  
 EUROPE: Milton Keynes, Torino: +44 (0) 1908 580400  
 USA: Utica, Clinton, Chicago: +1 315 853 4900



ISO 9001  
REGISTERED