Displacement Conversion

Converting Engine Displacement

Engine Displacement Conversion

- ✓ Cubic Centimeters (cc's) are standard for motorcycles
- 🗸 Cubic Inches is standard for American made car's
- ✓ Liters is standard for import cars.

To convert engine displacement remember three mathmatical facts.

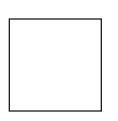
First: 2.54 cm = 1 inch

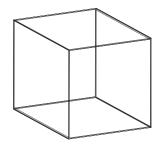
Second: $2.54^3 = 16.387064 = ((2.54 \times 2.54) \times 2.54)$

Third: 1 liter = 1,000 cubic centimeters.

Formulas:

(cubic inches) x 16.387064 = (cubic centimeters) (cubic centimeters) / 16.387064 = (cubic inches) (cubic centimeters) / 1,000 = (liters)





Example 1:

If 2.54 centimeters is 1 inch, then $2.54^3 = 16.387064$ cubic centimeters is 1 cubic inch. Hence 904 cubic centimeters is 904 / 16.387064 = 55.16546466163799 cubic inches. Since 1,000 cubic centimeters is 1 liter; 904 cubic centimeters is .904 liters. So a "Ducati 904 Engine" is equivalent to 55 cubic inches or .9 liter.

Example 2:

If 1 inch is 2.54 centimeters, then 1 cubic inch is $2.54^3 = 16.387064$ cubic centimeters. Hence 308 cubic inches is $350 \times 16.387064 = 5,047.215711999999$ cubic centimeters. Since 1,000 cubic centimeters is 1 liter; 5,047.215711999999 cubic centimeters is 5.047215711999999 liters. So a "Chevy 308 Engine" is equivalent to 5,047 cubic centimeters or 5 liters.

Example 3:

If 2.54 centimeters is 1 inch, then $2.54^3 = 16.387064$ cubic centimeters is 1 cubic inch.

Since 1,000 cubic centimeters is 1 liter; 5.5 liter is 5,500 cubic centimeters.

Hence 5,500 cubic centimeters is 5,500 / 16.387064 = 335.6305925210276 cubic inches.

So a "Mercedes SLK55 Roadster 5.5 Liter" is equivalent to 335 cubic inches or 5,500 cubic centimeters.