The **Metalsmith Suite**

... consists of nine calculation programs and three information resources.

for iPhone, iPod, iPad.
Available through iTunes.
$3.99

Convert Units
This screen converts one measurement to another, for instance changing grams to ounces.
• Choose Length, Weight, Volume, or Temperature from the tabs above the wheels.
• Spin the left wheel to select a unit of measurement, then enter the value using the keypad.
• Spin the right wheel to select the desired unit of measurement, and tap the orange Equal key to see the answer.
> Flip the wheels to see the same value in other units.

Cost of...
The next three screens all require a metals price to derive accurate numbers.

• In any of the Cost screens, touch the arrow beside the words Spot Price >
• You will be taken to a new screen. If you are connected to the Internet, the current prices will appear in the white box. If you are not connected you will get a message reminding you that the prices are not up to date.
• Touch the Gold window, hit clear or use the delete key, then use the keypad to enter the gold price. Repeat for silver and platinum. If you are only looking for one metal, you can leave the others blank.
• Touch Save. These values will stay loaded until you change them.

Cost of Sheet Metal
This screen allows you to get an approximate cost for metal in a given size.
• Select a metal or alloy with the first wheel.
• Spin the second wheel to choose inches or millimeters, then tap the blue bar in the center of the wheel and enter a value using the keypad.
• Spin the third wheel to choose a unit of measurement, tap the blue bar, then type in a number.
• Spin the fourth wheel and repeat for thickness.
• Tap the orange Equal key to see the result.

Cost of Wire

This screen allows you to get an approximate cost for a given length of wire in a specific size.
• Select a metal or alloy with the first wheel.
• Spin the second wheel to choose your preferred unit of measurement, then tap the blue bar in the center of the wheel and enter a value using the keypad.
• Spin the third wheel to choose a unit of measurement, tap the blue bar, then type in a number.
• Tap the orange Equal key to see the result.

Cost of Shot

This screen allows you to get an approximate cost for a given weight of various jewelry metals.
• Select a metal or alloy with the first wheel.
• Spin the second wheel to choose your preferred unit of measurement, then tap the blue bar in the center of the wheel and enter a value using the keypad.
• Tap the orange Equal key to see the result.

Casting Needs

This screen calculates how much metal will be needed for a casting. It is especially helpful for pricing commission work in various alloys.
• Spin the first wheel to select a metal or alloy.
• Spin the second wheel to select the unit of measurement used to weigh the wax model. Tap the blue bar and use the keypad to enter the weight.
• Tap the orange Equal key to see the answer.

Drawing Length

This screen calculates how much a wire will stretch when drawn. It will help you determine what length to start with to yield a known length of wire.
• Spin the first wheel to choose the unit of measurement, then tap the blue bar and enter the starting length of the wire.
• Spin the second wheel to select the unit of measure for the wire, then tap the blue bar and enter the thickness of the wire before drawing.
• Select the unit of measure with the third wheel, tap the blue bar, then enter the gauge you intend to draw the metal down to.
• Tap the orange Equal key to see the result. Adjust as needed to determine the proper starting length.

Tubing Blanks

This screen helps you determine the width of a strip of metal that will yield tubing of a specific size.
- Spin the first wheel to select your preferred unit of measurement, then tap the blue bar and enter the thickness of metal you will be using.
- Choose either the inside diameter (ID) or outside diameter (OD).
- Tap the orange Equal key to calculate the proper starting width.

Metal Conversion

If you have an object in one metal that you want to remake or cast in a different metal, this screen will help you calculate the weight. From there you can return to Cost of Shot to calculate the approximate cost.
- Use the first wheel to select the metal of the piece now.
- Spin the second wheel to select a preferred unit of measurement, then tap the blue bar and use the keypad to enter the weight of the known object.
- Select the metal you are curious about with the third wheel.
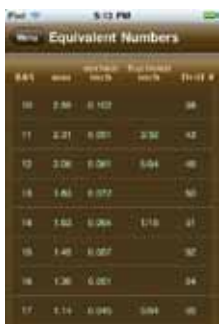- Tap the orange Equal key to see how much the object will weigh in a different metal.

Gold Alloying

This screen calculates how much metal is needed to convert gold of one karat to gold of another karat. To raise purity you will need to add pure gold. To lower the karat, add some combination of silver and copper (the proportion depends on the color you want).
- Spin the first wheel to select your starting alloy.
- Spin the center wheel to select your preferred unit of measurement, then tap the blue bar and enter the weight of the metal on hand.
- Spin the third wheel to choose the target alloy.
- Tap the orange Equal key to see how much metal to add.

RESOUCE SCREENS

Equivalent Numbers

This helpful screen compares measurements in several commonly used systems. It's handy when you are trying to match a drill bit to a B&S size, or when instructions are given in a system that is unfamiliar. Flick the screen upward to scroll through the entire list.

Metal Properties

This list of commonly used metals shows the industrial or scientific abbreviation, the melting point in Fahrenheit and Celsius, and the specific gravity (which is useful when calculating casting needs).

Gem Properties

This list provides a visual sample of 50 popular gemstones. Tap on the name and you will get details about each stone's hardness, sensitivity to heat, and a bit of its history and folklore. There is even a pronunciation guide.

Each gem provides a photo, pronunciation guide, hardness, and information about the gem.

Instructions

The instructions given here are also included within the app.