



# **Analytical Precision Weights**



### **General Information**

Troemner Analytical Precision Metric Weights are available in Troemner UltraClass Platinum, UltraClass Gold, and UltraClass and ANSI/ASTM E617 Class 000, 00, 0, 1, 2, 3 and 4. Troemner Analytical Precision Avoirdupois Weights are available in ANSI/ASTM E617 Class 1, 2, 3, and 4. Individual sizes ranging from 0.05 mg through 1000 kg with sets from 0.05 mg-0.5 mg through 1 mg-50 kg.

## Construction

Milligram Weights - Weights 500 mg and below are made of sheet metal and are one-piece construction with one side turned up to make them easy to handle with forceps. Milligram weights are marked with their nominal value with the exception of Class 000, 00 and 0.

Gram Weights - Troemner Analytical Precision Weights 1 g and larger consist of a body and a lifting knob. The lifting knob is specifically designed for use with forceps or some other lifting device. Weight bottoms are slightly recessed to expose the smallest possible area to wear. Each weight is marked with their nominal value with the exception of Class 000, 00 and 0.

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Troemner Analytical Precision Weights are available in either one-piece or two-piece construction. One-piece construction (Class 000, 00 and 0) indicates the weight is manufactured from a single uniform piece of Stainless Steel, the weight has no other material added to it, and it has no method of adjustment other than removing material by polishing.

Two-piece construction means the weight is made of multiple pieces of stainless steel. Troemner UltraClass Series and ANSI/ASTM E617 Class 1, 2, 3 and 4 weights 1 g and larger are produced from two pieces of material. The body of the weight is the primary piece and the knob of the weight is the secondary piece. The knob has a thread that screws into the body and is tightened. There is a cavity below the knob thread in the body which contains adjusting material, typically the same material from which the weight is made.

## Material Specifications

Material Specifications for Class 000, 00 and 0 Weights			Material Specifications for UltraClass Series, and Class 1, 2, 3 and 4 Weights		
Range	<b>Base Material</b>	Density	Range	Base Material	Density
25 kg-50 kg	316 Stainless Steel	7.95 g/cm3 at 20°C	25 kg-50 kg	316 Stainless Steel	7.95 g/cm3 at 20°C
1 g-20 kg	Troemner Alloy 8	8.03 g/cm3 at 20°C		Troemner Alloy 8	8.03 g/cm3 at 20°C
5 mg-500 mg	304 Stainless Steel	7.95 g/cm3 at 20°C		304 Stainless Steel	7.95 g/cm3 at 20°C
Below 5 mg	3003-H14 Aluminum	2.7 g/cm3 at 20°C	Below 5 mg	3003-H14 Aluminum	2.7 g/cm3 at 20°C

## **Suggested Markets**

Suggested Markets for Analytical Precision Weights include, but are not limited to, pharmaceutical, biotech, nanotechnology, life science, forensic and nuclear industries.