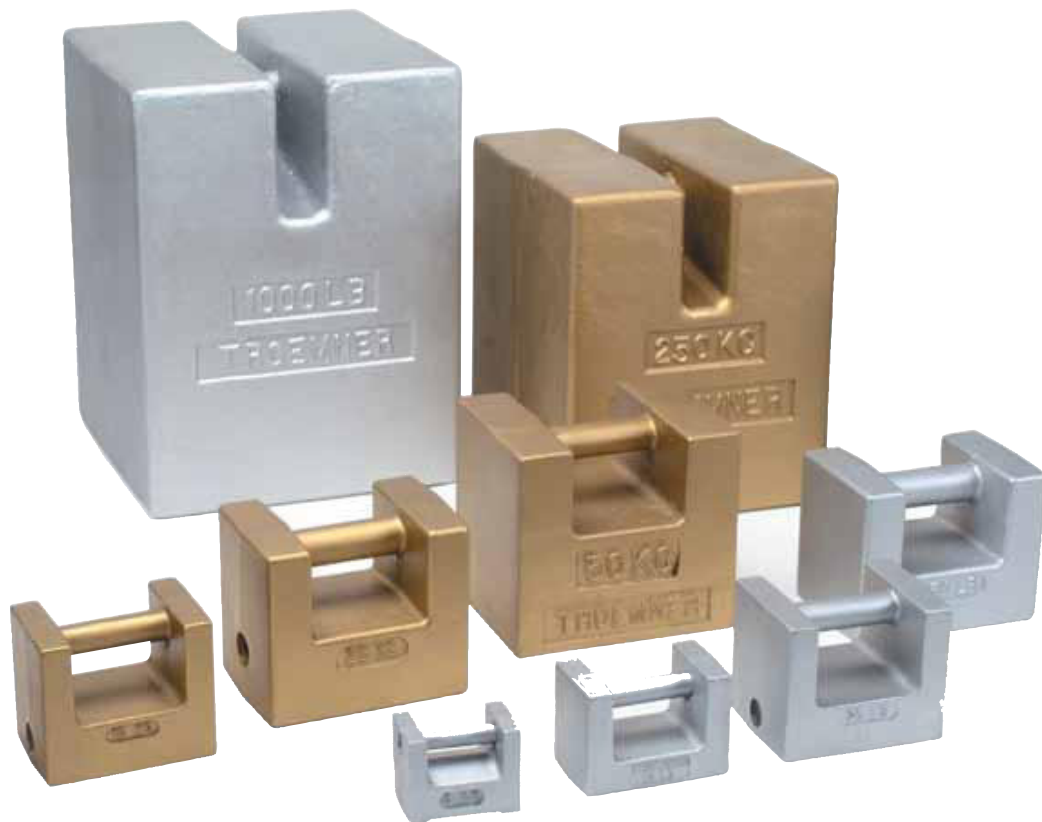




Cast Iron Heavy Capacity & Grip Handle Weights

NIST Class F and ANSI/ASTM E617 Class 4, 5, 6 and 7



General Information

Cast Iron Grip Handle Weights larger than 5 kg/10 lb are legal for trade, which means their design is acceptable for use in checking weighing devices where the price of the item being purchased is based on its weight. Cast Iron Grip Handle weights 5 kg/10 lb and smaller are not legal for trade and are classified as ANSI/ASTM E617 Class 6. If you require a 2 kg or 5 lb weight for a legal for trade application, look for the Stainless Steel Test Weights section on page 83.

Suggested Markets

Cast Iron Grip Handle Weights are primarily used to test commercial weighing devices by state and local weights and measures officials, device installers, and service technicians. Cast Iron Grip Handle weights may be used to test most accuracy Class III scales, all scales of Class III L or III H, and scales not marked with a class designation. Class F is also acceptable for use in verifying scales that have a 0.1% accuracy and lower.

Tolerance Classes

Cast Iron Grip Handle Weights are adjusted to NIST Class F and ANSI/ASTM E617 Class 4, 5, 6 and 7. Refer to Troemner's Tolerance Chart on pages 19-20 for specific information on the tolerance of each weight in a given class. Troemner's Tolerance Chart is also available on www.troemner.com for additional reference.

Construction and General Shape

Troemner's Cast Iron Weights are manufactured to meet NIST Handbook 105-1 specifications. The weights are manufactured from high quality iron that meets specifications for hardness. Castings are free of cracks, pits and sharp edges and meet surface roughness requirements. Each weight has an adjusting cavity located on its side. Adjusting cavities are sealed with a lead plug and steel back-up spacer to provide a tamper resistant seal of the adjusting cavity. Weights 50 kg/100 lb and below are designed to be picked up by hand. Weights above 50 kg/100 lb are designed to be picked up by means of a hook.

Surface Finish

All surfaces are smooth and free of scratches, dents and pores as outlined in NIST Handbook 105-1. Weights are protected by a durable coat of paint to protect the casting from rusting. Paint will be hard and resistant to chipping. Color coding – gold for metric and silver for avoirdupois – is used to differentiate the weights. Surface finish specifications are available on www.troemner.com for additional reference.



Cast Iron Heavy Capacity & Grip Handle Weights

Individual Weights

Cast Iron Grip Handle Weights are not supplied in cases. Troemner manufactures a variety of custom containers and carts to properly store and transport your Cast Iron Weights and to keep them clean and protected. Containers and carts can be manufactured from a variety of materials depending on your application and environment. Please contact a Troemner Sales Representative at [800-249-5554](tel:800-249-5554) or troemner@troemner.com for complete details and to discuss available options.

Metric Individual Weights

Weight	Part #**	Length (inches)	Width (inches)	Height (inches)	Weight	Part #**	Length (inches)	Width (inches)	Height (inches)
2000 kg	9296	20.50	27.25	30.00	50 kg	9288	7.31	9.00	8.25
1000 kg	9294	20.63	20.25	21.69	25 kg	9286	5.56	7.75	6.75
500 kg	9292	14.75	14.63	20.75	20 kg	9284	5.50	7.63	5.88
250 kg	9291	12.75	12.25	14.75	10 kg	9282	4.38	6.19	5.19
200 kg	9290	12.75	12.25	12.00	5 kg*	9280	3.25	5.38	3.88
100 kg	9289	9.50	9.50	10.50	2 kg*	9278	2.38	3.88	2.81

Avoirdupois Individual Weights

Weight	Part #**	Length (inches)	Width (inches)	Height (inches)	Weight	Part #**	Length (inches)	Width (inches)	Height (inches)
5000 lb	9092	26.88	26.50	30.00	250 lb	9081	9.50	9.50	11.75
3000 lb	9090	20.19	20.31	29.50	200 lb	9083	9.56	9.19	9.19
2500 lb	9088	20.38	20.38	24.50	100 lb	9082	7.38	9.13	7.56
2000 lb	9087	20.38	20.63	19.88	50 lb	9080	5.56	8.00	6.38
1500 lb	9093	16.38	16.75	24.50	30 lb	9079	5.00	7.25	5.13
1250 lb	9091	15.00	18.25	19.00	25 lb	9078	4.75	6.19	5.19
1000 lb	9086	14.75	14.63	19.00	20 lb	9076	3.88	6.19	5.19
750 lb	9089	12.75	12.38	19.88	10 lb*	9074	3.88	5.38	3.56
500 lb	9084	12.75	12.38	13.50	5 lb*	9072	2.38	3.88	3.13

* Not legal for trade. ANSI/ASTM E617 Class 6.

** For creating a complete part #, refer to page 102.

Note: Above dimensions are subject to casting tolerances.



Creating Your Complete Cast Iron Weight Part Number

1. Select a "Part #"

Select a part # from the preceding tables for each product that you wish to order.

2. Select an Available Class Designation

Cast Iron weights are supplied with NIST Class F tolerances. To order a Cast Iron weight in an ANSI/ASTM E617 class listed below, add a dash and the Class Code to the end of the part number. For help selecting the correct class for your application, please review the "Selecting Weight Classes" section beginning on page 15.

ANSI/ASTM E617 Classes	Code
Class 4	4
Class 5	5
Class 6	6
Class 7	7

3. Select a Certificate Code (optional)

Select a certificate code from the following table. To learn more about Troemner's certificates, please review the "Certificate Options" section beginning on page 23.

Available Certificates	Code
NVLAP + Accredited Certificate	W
Traceable Certificate	T

4. Create Your Complete Part Number(s)

Specify the Part Number + Certificate Code (optional) for each product that you wish to order.



Cast Iron weights are supplied with NIST Class F tolerances. To order a Cast Iron weight in an ANSI/ASTM E617 class listed above add a dash and the Class Code to the end of the part number.

* NVLAP Laboratory Code 105013-0



Cast Iron Slotted Weights

NIST Class F and ANSI/ASTM E617 Class 4, 5, 6 and 7



General Information

Cast Iron Slotted Weights are used in a variety of applications such as pressure, torque, and tensile strength testing. Cast Iron Slotted Weights are typically used with a hanger that also has its weight calibrated so the hanger can be used as part of the overall weight under test. Several Cast Iron Slotted Weights may be used together to build up from a minimum weight to a maximum test load. The hanger weight selected should be able to accommodate the total load needed.

Suggested Markets

Cast Iron Slotted Weights are primarily used to calibrate large capacity scales.

Tolerance Classes

Cast Iron Slotted Weights are adjusted to ANSI/ASTM E617 Class 4, 5, 6 and 7. Refer to Troemner's Tolerance Chart on pages 19-20 for specific information on the tolerance of each weight in a given class. Troemner's Tolerance Chart is also available on www.troemner.com for additional reference.

Surface Finish

Troemner's Cast Iron Slotted Weights are manufactured from a high quality iron that meets ANSI/ASTM E617 hardness requirements. Castings meet ANSI/ASTM E617 surface roughness requirements and are free of cracks, pits and sharp edges. All surfaces are smooth and free of scratches, dents and pores as outlined in NIST Handbook 105-1 or ANSI/ASTM E617. Weights are protected by a durable coat of paint to protect the casting from rusting. Paint will be hard and resistant to chipping. Color coding – gold for metric and silver for avoirdupois – is used to differentiate the weights. Surface finish specifications are available on www.troemner.com for additional reference.

Construction and General Shape

Cast Iron Slotted Weights above 2 kg/5 lb have adjusting cavities. Weights below 2 kg/5 lb are adjusted by removing material from the underside of the weight. Each weight has its nominal value cast into the topside of the weight.

Weights are protected by a durable coat of paint to protect the casting from rusting. Weights 50 kg/100 lb and above are provided with two handles on opposite ends to aid in lifting.

Hangers - Cast Iron Slotted Weights are typically used with a hanger that also has its weight calibrated so the hanger can be used as part of the overall weight under test. Weight hangers are available in a variety of lengths and weight capacities. Hangers are calibrated to a mass value, and also have a capacity of how much weight can be loaded onto them. The length of each hanger and slotted weight dimensions are listed in the table on page 105. To determine which hanger will accommodate your weights, use the stem height of the hanger as the maximum height, then use the thickness dimension of each weight along with the quantity you intend to place on the hanger to determine the total height of your stack of weights. The height of your stack of weights should be less than the length of the hanger. The dimension of the hook opening is ½ inch.



Cast Iron Slotted Weights Individual Weights

Cast Iron Slotted Weights are not supplied in cases. Troemner manufactures a variety of custom containers and carts to properly store and transport your Cast Iron Slotted Weights and to keep them clean and protected. Containers and carts can be manufactured from a variety of materials depending on your application and environment. Please contact a Troemner Sales Representative at [800-249-5554](tel:800-249-5554) or troemner@troemner.com for complete details and to discuss available options.



Metric Individual Weights

Weight	Part #**	Diameter (inches)	Base Height (inches)	Slot Width (inches)	Stem Diameter (inches)	Stem Height (inches)	Hanger Capacity
100 kg*	9702	17.00	4.00	1.00			
50 kg*	9700	17.00	2.00	1.00			
20 kg	9698	10.25	2.38	0.56			
10 kg	9696	8.00	1.94	0.56			
5 kg	9694	6.00	1.69	0.56			
2 kg	9692	5.00	1.00	0.56			
1 kg	9690	5.00	0.56	0.56			
500 g	9688	5.00	0.31	0.56			
200 g	9686	3.75	0.31	0.56			
2 kg Hanger	9685	5.00	0.88		0.31	36.00	250 kg
1 kg Hanger	9684	3.75	1.13		0.25	20.25	75 kg
1 kg Hanger	9682	3.75	1.13		0.25	9.25	75 kg
500 g Hanger	9680	3.75	0.38		0.25	20.25	50 kg
500 g Hanger	9678	3.75	0.44		0.25	9.25	50 kg

* Indicates weight with handles.

** For creating a complete part #, refer to page 102.

Avoirdupois Individual Weights

Weight	Part #**	Diameter (inches)	Base Height (inches)	Slot Width (inches)	Stem Diameter (inches)	Stem Height (inches)	Hanger Capacity
200 lb*	9752	17.00	3.63	1.00			
100 lb*	9750	17.00	1.88	1.00			
50 lb	9498	10.25	2.75	0.56			
25 lb	9497	10.25	1.38	0.56			
20 lb	9496	8.00	1.88	0.56			
10 lb	9494	6.00	1.50	0.56			
5 lb	9492	5.00	1.13	0.56			
2 lb	9490	5.00	0.56	0.56			
1 lb	9488	5.00	0.31	0.56			
1/2 lb	9486	3.75	0.31	0.56			
5 lb Hanger	9484	5.00	1.00		0.31	36.00	500 lb
2 lb Hanger	9482	3.75	1.13		0.25	20.25	300 lb
2 lb Hanger	9480	3.75	1.13		0.25	9.25	300 lb
1 lb Hanger	9478	3.75	0.31		0.25	20.25	200 lb
1 lb Hanger	9476	3.75	0.31		0.25	9.25	200 lb

* Indicates weight with handles.

** For creating a complete part #, refer to page 102.