

# Troemner Stainless Steel Test Weights



*Precision & Balance Matched Only By Nature.*



## **General Information** –

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

Stainless Steel Class F Cylindrical, Cube and Grip Handle Weights are legal for trade, which means their design meets specifications as outlined in NIST Handbook 105-1 and are approved to be used on legal for trade devices within the United States. Weights 5 kg / 10 lb and below must be made of stainless steel of quality not lower than 300 series stainless steel. Adjusting cavities are typically on the top of the weight and must be tamper resistant.

## **NIST Class F Tolerances** –

Please see the Tolerance Chart within the Mass Standards Handbook in the back of this desk reference for specific information on the tolerance of each weight for NIST Class F.

## **Construction and General Shape** –

Troemner's Stainless Steel Test Weights are available in a variety of styles, including cylindrical weights, cube weights, and stackable grip handle weights. Troemner's Stainless Steel Test Weights are manufactured from grade 303 stainless steel alloy that possesses closely controlled density, low magnetic susceptibility, good stability and resistance to corrosion and handling damage.

- Weights (200 g, 8 oz, 0.5 lb, or 5 ozt) and larger have two-piece construction which indicates that the weight is constructed of multiple pieces of raw material. In the case of Class F weights, this means that the weight body is constructed from one piece of material with an adjusting cavity. This cavity contains the adjusting material, which is typically the same material from which the weight is made. Once the weight is adjusted into tolerance it is sealed using an aluminum cap and stainless steel back-up spacer.



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- Cylindrical weights (smaller than 200 g, 8 oz, 0.5 lb or 5 ozt) are one-piece construction, which means the weight is manufactured from a single uniform piece of raw material. One-piece Class F weights of this size are adjusted by grinding material off the bottom of the weight.
- Weights 12 GN through 2 GN and 500 mg through 200 mg and .05 ozt through .005 ozt are flat stainless steel with one side of the weight turned up for easy handling.
- 100 mg through 1 mg weights are flat aluminum with one side of the weight turned up for easy handling.
- A one-piece construction weight has no other material added to it, and it has no method of adjustment other than removing material by grinding or polishing.

**Surface Finish** – All surfaces shall be smooth and free of scratches as outlined in NIST Handbook 105-1.

## **Presentation** –

- Individual weights are not supplied in protective cases as standard. However, for an extra charge, a polypropylene protective weight case can be specified and ordered in a variety of constructions to meet your needs.
- Weight sets are supplied in sturdy plastic cases with a carrying handle. Larger weight sets where the total weight is greater than 10 kg or 15 lb are supplied in a case with metal reinforced corners and bottoms with padded handles for easier carrying. Weights 200 g / 8 oz and above have their own compartment within the dense foam interior case. Smaller weights are contained within a smaller synthetic leather case that fits into the larger "master" carrying case. This "case within a case" design helps keep smaller weights from getting lost and also allows smaller weights to be taken out of the master case and used closer to the user's application.

## **Ordering a Certificate With Your Weight or Weight Set** –

The following certificates are available to meet your traceability and compliance needs. Complete information on our calibration certificates is located in the Weight Calibration Certificate Options section of this desk reference.

- Weights and weight sets supplied without weight certificates come with **Troemner's Statement of Accuracy**.
- To order **Troemner's NVLAP Weight Calibration Certificate**, specify the Troemner part number using the table at the end of this section followed by "W."
- To order **Troemner's Traceable Certificate**, specify the Troemner part number followed by "T."

## **Stainless Steel Test Weight Sets Configuration Information** –

Troemner's Stainless Steel Test Weights are available in a variety of standard configurations and set capacities including cylindrical weights and cube sealer weight sets. Select one of the following sets that meet your needs. If you do not see a set that meets your needs, a customized weight set consisting of the weights you require can be configured and supplied in a protective weight case. Ask your Troemner sales representative for a special quotation.



Accredited by the National Voluntary Laboratory Accreditation Program for the specific scope of Accreditation under Lab Code 105013.



# Stainless Steel Test Weights

## AVOIRDUPOIS STAINLESS STEEL TEST WEIGHT SETS

Weight Set	Part #	10 lb	5 lb	2 lb	1 lb	.5 lb	.3 lb	.2 lb	.1 lb	.05 lb	.03 lb	.02 lb	.01 lb	.005 lb	.003 lb	.002 lb	.001 lb	8 oz	4 oz	2 oz	1 oz	.5 oz	.2 oz	.1 oz	.05 oz	1/2 oz	1/4 oz	1/8 oz	1/16 oz	1/32 oz	20 GN	10 GN	5 GN	2 GN	1 GN		
1 lb—1/32 oz	TW-1				1													1	1	1	1					1	1	1	1	2							
1 lb—.001 lb	TW-1 D.				1	1		2	1	1		2	1	1		2	1																				
1 lb—.05 oz	TW-1 D.O.				1													1	1	1	1	1	2	1	1												
2 lb—1/32 oz	TW-2			1	1													1	1	1	1					1	1	1	1	2							
2 lb—.001 lb	TW-2 D.			1	1	1		2	1	1		2	1	1		2	1																				
2 lb—.05 oz	TW-2 D.O.			1	1													1	1	1	1	1	2	1	1												
2 lb—1/32 oz	TW-4			2	1													1	1	1	1					1	1	1	1	2							
2 lb—.001 lb	TW-4 D.			2	1	1		2	1	1		2	1	1		2	1																				
2 lb—.05 oz	TW-4 D.O.			2	1													1	1	1	1	1	2	1	1												
5 lb—1/32 oz	TW-5		1	2	1													1	1	1	1					1	1	1	1	2							
5 lb—.001 lb	TW-5 D.		1	2	1	1		2	1	1		2	1	1		2	1																				
5 lb—.05 oz	TW-5 D.O.		1	2	1													1	1	1	1	1	2	1	1												
10 lb—1/32 oz	TW-10	1	1	2	1													1	1	1	1					1	1	1	1	2							
10 lb—.001 lb	TW-10 D.	1	1	2	1	1		2	1	1		2	1	1		2	1																				
10 lb—.05 oz	TW-10 D.O.	1	1	2	1													1	1	1	1	1	2	1	1												
.2 lb—.001 lb	TW-15							2	1	1		2	1	1		2	1																				
.3 lb—.001 lb	TW-25						1	1	1	1	1	1	1	1	1	1	1																				
4 oz—1/32 oz	TW-30																		1	1	1					1	1	1	1	2							
4 oz—.05 oz	TW-35																		1	1	1	1	2	1	1												
5 lb—1 GN	TW-45		3		5													1	1	1	1					1	1	1	1	2	1	2	2	2	2	1	
5 lb—1/32 oz	TW-50		5		5													1	1	1	1					1	1	1	1	2							
5 lb—.001 lb	TW-50 D.		5		5	1		2	1	1		2	1	1		2	1																				
5 lb—.05 oz	TW-50 D.O.		5		5													1	1	1	1	1	2	1	1												
5 lb—.001 lb	TW-50 COMBO		5		5			2	1	1		2	1	1		2	1	1	1	1	1					1	1	1	1	2							
(3)—10 lb	TW-60	3																																			
(6)—5 lb	TW-65		6																																		
10 lb—1/32 oz	TW-75	2	1	2	1													1	1	1	1					1	1	1	1	2							
10 lb—.001 lb	TW-75 D.	2	1	2	1	1		2	1	1		2	1	1		2	1																				
10 lb—.05 oz	TW-75 D.O.	2	1	2	1													1	1	1	1	1	2	1	1												
10 lb—.001 lb	TW-75 COMBO	2	1	2	1			2	1	1		2	1	1		2	1	1	1	1	1					1	1	1	1	2							
10 lb—1/32 oz	TW-100	3	3		5													1	1	1	1					1	1	1	1	2							
10 lb—.001 lb	TW-100 D.	3	3		5	1		2	1	1		2	1	1		2	1																				
10 lb—.05 lb	TW-100 D.O.	3	3		5													1	1	1	1	1	2	1	1												
10 lb—.001 lb	TW-100 COMBO	3	3		5			2	1	1		2	1	1		2	1	1	1	1	1					1	1	1	1	2							



# Stainless Steel Test Weights

		METRIC STAINLESS STEEL TEST WEIGHT SETS																				
		5000	2000	1000	500	200	100	50	20	10	5	2	1	500	200	100	50	20	10	5	2	1
		g	g	g	g	g	g	g	g	g	g	g	g	mg	mg	mg	mg	mg	mg	mg	mg	mg
Weight Set	Part #																					
50 g—1 g	TW-50-1							1	2	1	1	2	1									
50 g—10 mg	TW-50-10							1	2	1	1	2	1	1	2	1	1	2	1			
50 g—1 mg	TW-50-01							1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
100 g—1 g	TW-100-1						1	1	2	1	1	2	1									
100 g—10 mg	TW-100-10						1	1	2	1	1	2	1	1	2	1	1	2	1			
100 g—1 mg	TW-100-01						1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
500 g—1 g	TW-500-1				1	2	1	1	2	1	1	2	1									
500 g—10 mg	TW-500-10				1	2	1	1	2	1	1	2	1	1	2	1	1	2	1			
500 g—1 mg	TW-500-01				1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
1000 g—1 g	TW-1000-1			1	1	2	1	1	2	1	1	2	1									
1000 g—10 mg	TW-1000-10			1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1			
1000 g—1 mg	TW-1000-01			1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
2000 g—1 g	TW-2000-1		1	1	1	2	1	1	2	1	1	2	1									
2000 g—10 mg	TW-2000-10		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1			
2000 g—1 mg	TW-2000-01		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
5000 g—1g	TW-5000-1	1	2	1	1	2	1	1	2	1	1	2	1									
5000 g—10 mg	TW-5000-10	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1			
5000 g—1 mg	TW-5000-01	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
2000 g—1 g	TW-55-1		5		5	2	1	1	2	1	1	2	1									
2000 g—10 mg	TW-55-10		5		5	2	1	1	2	1	1	2	1	1	2	1	1	2	1			
2000 g—1 mg	TW-55-01		5		5	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
5000 g—1 g	TW-75-1	2	2	1	5	2	1	1	2	1	1	2	1									
5000 g—10 mg	TW-75-10	2	2	1	5	2	1	1	2	1	1	2	1	1	2	1	1	2	1			
5000 g—1 mg	TW-75-01	2	2	1	5	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1
(3)—5000 g	TW-80-1	3																				





# Stainless Steel Test Weights

## STAINLESS STEEL INDIVIDUAL TEST WEIGHTS

Metric Weights		Avoirdupois Weights		Troy & Pennyweight Weights		Grain Weights	
Description	Part #	Description	Part #	Description	Part #	Description	Part #
30 kg grip handle	1378	50 lb grip handle	1276	500 ozt	1400	2000 GN	1500
25 kg grip handle	1376	30 lb grip handle	1275	200 ozt	1402	1000 GN	1502
24 kg grip handle	1375	25 lb grip handle	1274	100 ozt	1404	500 GN	1504
20 kg grip handle	1374	20 lb grip handle	1272	50 ozt	1406	300 GN	1506
16 kg grip handle	1373	10 lb grip handle	1270	20 ozt	1408	200 GN	1508
10 kg grip handle	1372	10 lb	1201	10 ozt	1410	100 GN	1510
8 kg grip handle	1371	5 lb	1203	5 ozt	1412	50 GN	1512
5 kg grip handle	1370	4 lb	1205	2 ozt	1414	30 GN	1514
5 kg	1302	3 lb	1207	1 ozt	1416	20 GN	1516
4 kg	1304	2 lb	1209	1/2 ozt	1418	12 GN	1518
3 kg	1306	2 lb cube	1202	1/4 ozt	1420	10 GN	1520
2 kg	1308	1 lb	1211	1/8 ozt	1422	6 GN	1522
1 kg	1310	1 lb cube	1204	1/16 ozt	1424	5 GN	1524
1 kg cube	1301	12 oz	1212	1/32 ozt	1426	4 GN	1526
500 g	1312	8 oz	1213	.5 ozt	1428	3 GN	1528
500 g cube	1303	8 oz cube	1206	.2 ozt	1430	2 GN	1530
400 g	1313	4 oz	1215	.1 ozt	1432	1 GN	1532
300 g	1314	4 oz cube	1208	.05 ozt	1434	.5 GN	1534
300 g cube	1305	2 oz	1217	.02 ozt	1436	.2 GN	1536
200 g	1316	2 oz cube	1210	.01 ozt	1438	.1 GN	1538
200 g cube	1307	1 oz	1220	.005 ozt	1440		
100 g	1318	1/2 oz	1222	20 dwt	1442		
100 g cube	1309	1/4 oz	1224	10 dwt	1444		
50 g	1320	1/8 oz	1226	5 dwt	1446		
30 g	1322	1/16 oz	1228	2 dwt	1448		
20 g	1324	1/32 oz	1230	1 dwt	1450		
10 g	1326	.5 oz	1231	.5 dwt	1452		
5 g	1328	.3 oz	1232	.2 dwt	1454		
3 g	1330	.2 oz	1233	.1 dwt	1456		
2 g	1332	.1 oz	1234				
1 g	1334	.05 oz	1235				
500 mg	1336	.5 lb	1236				
300 mg	1338	.3 lb	1238				
200 mg	1340	.2 lb	1240				
100 mg	1342	.1 lb	1242				
50 mg	1344	.05 lb	1244				
30 mg	1346	.03 lb	1246				
20 mg	1348	.02 lb	1248				
10 mg	1350	.01 lb	1250				
5 mg	1352	.005 lb	1252				
3 mg	1354	.003 lb	1254				
2 mg	1356	.002 lb	1256				
1 mg	1358	.001 lb	1258				

  

Weight Cases	
10 lb, 5 kg	TW-40
20 lb, 25 lb	TW-50
10 kg, 8 kg	TW-50
50 lb, 30 kg	TW-100
20 kg, 16 kg	TW-100



### Hummingbird Help

Have your part number ready when placing an order.

