

WHY SCALES

- **Precision** – as much as a 20% difference in the weight of an ingredient measured by volume
- **Consistency** – weighing does not have discrepancies caused by the weather, altitude, size ingredients, or the tools being used as can happen when you measure by volume
- **Repeatability** – precision and consistency makes it more likely to be able to repeat a great recipe
- **Faster and Easier** – one tool for measuring many ingredients
- **Less Clean-up** – tare to zero out the scale, and add the next ingredient for one-bowl recipe preparation
- **Recipe Conversion** – adjusting the yield of a recipe (to make either more or less) are mathematically easier using metric grams than volume measurements
- **Unit Conversion** – selecting lb, ounce, gram or other unit converts the weight automatically between units
- **Cost effective** – buy in bulk and then measure out the bulk quantity into recipe-sized portions

TYPES

- **Mechanical** – uses a platform mounted on a heavy spring to measure weight, manually activating a pointer.
- **Balance** – operates by performing comparisons between known masses and the object to be weighed.
- **Digital** – works based on an electrical cor called a strain gauge load cell. The electrical resistance of the strain gauge changes based upon the compression and a simple computer in the digital scale allows it to calculate the weight of a load by the c in resistance. It provides fast, accurate readings and resists moisture, operating either on batteries or electricity.



USES

- Portion control – most common
- Batching
- Weighing ingredients
- Nutrition management
- Price computing
- Shipping and receiving
- Piece counting
- Point-of-sale weighing
- Weight estimating



SCALE TERMINOLOGY

- Calibration** – setting or correcting the scale
- Capacity** – The maximum weight measurable by the scale on its platform.
- Divisions** – defines the amount of scale increments; *d* is the symbol for the minimum division that can be indicated or recorded.
- Drift** – when outside influences, such as ambient temperatures, impact the scale's performance, the weight number can shift continuously
- Resolution** – the smallest fraction of a unit of measurement that a scale can detect in the quantity that it is measuring. The smallest difference in mass that can be displayed on a scale (commonly signified as *d*) also called readability, divisions or increments.
- Stabilization Period** – the time required to display a stable weight value depending on the scale's environment, software filters, etc.
- Strain Gauge Load Cell** – converts the applied weight or force into an electrical signal.
- Tare** – resets the scale display to zero in order to measure only the weight of an item. It is frequently used to subtract the weight of containers.
- Tolerance** – amount of error allowed in a scale's weight value

CARE AND USE

- Be sure to check if your scale is submersible or not before exposing to water. (SD1110X, SD1120, SD2210X and SD2220 are submersible.)
- Wipe clean with a damp cloth.
- Store the scale at room temperature between 32 to 104°F/0 to 40°C.
- Scales are precision instruments and must be handled with extreme care.
- Battery technology works best at room temperature.
- Place the scale gently on a hard and flat surface and make sure it is steady before use.
- Do not place overweight items on the scale.
- Store the scale in a position that keeps it free from any load bearing weight. (The SD1502 stores well vertically like a book.) Storing the scale with pressure on the load cells can distort the weight measurements over time.
- Hold the scale from the bottom when moving.



UNIT COMPARISON

model	capacity	lb	lb:oz	oz	lb:/ oz	/ oz	fl oz	kg	g	ml	ozt	tln	tit	gn	dwt	mo	tol	ct
Master Scales																		
SD0204	2 lb/1 kg			0.01 oz					0.1 g									
SD0502	5 lb/2.27 kg			0.1 oz					1 g									
SD1114	11 lb/5 kg			0.1 oz					1 g									
SD1112	11 lb/5 kg			0.1 oz					1 g									
SD2202	22 lb/10 kg			0.1 oz					1 g									
SD3302	33 lb/15 kg			0.2 oz					5 g									
SD5502	55 lb/25 kg			0.2 oz					5 g									
Submersible Scales																		
SD1110X	11 lb/5 kg/176 oz	0.005 lb	0 lb:0.1 oz	0.05 oz	0 lb:1/8 oz	1/8 oz			1 g									
SD1120	11 lb/5 kg/176 oz	0.002 lb	0 lb:0.1 oz	0.05 oz	0 lb:1/8 oz	1/8 oz		0.001 kg	1 g									
SD2210X	22 lb/10 kg/352 oz	0.005 lb	0 lb:0.1 oz	0.05 oz	0 lb:1/8 oz	1/8 oz			1 g									
SD2220	22 lb/10 kg/352 oz	0.002 lb	0 lb:0.1 oz	0.05 oz	0 lb:1/8 oz	1/8 oz		0.001 kg	1 g									
Economy Scales																		
SD0602	6 lb/3 kg/105 oz/3 L	0.001 lb		0.1 oz					1 g	1 ml								
SD1104	11 lb/5 kg/176 oz/5 L				0 lb:0.1 oz		0.1 fl oz		1 g	1 ml								
SD2206	22 lb/352 oz/10 kg		0 lb:0.1 oz	0.1 oz					2 g									
Glass Scales																		
SD1502	15 lb/7 kg			0.1 oz					1 g									
Precision Scales																		
SD0202	2.2 lb/1 kg			0.01 oz					0.1 g									
SD0204	2 lb/1 kg			0.01 oz					0.1 g									
Specialty Scales																		
SDC0602	3 kg/6.5 lb/3 L			0.005 oz					0.1 g	0.1 ml								
Receiving Scales																		
SDR220	220 lb/100 kg			2 oz					50 g									

When selling against the competition, use this chart to compare the resolution in the appropriate unit to the competition's resolution of that unit. For example, if a chef needs to measure portions at 1.25 oz, you can recommend the SD1110X, SD1120, SD2210X or SD2220 because they measures at a resolution of 0.05 oz for a larger capacity. If a chef needs to measure in 1 g increments, there are many more scales to choose from.