

Defining Process Parameters for Better Measurements and Results

We are committed to making sure that your weighing operations are as accurate and efficient as possible, which is why we developed the Good Weighing Practice™ (GWP®) standard, emphasizing proper scale selection, installation, calibration and testing. The first step of the GWP standard, selection, relies on defining your process parameters so that your trusted weighing partner can recommend the right scale for you. Relevant process parameters for your industry include maximum gross weight, smallest net weight, process tolerance and weighing safety factor.



Maximum Gross Weight

The maximum gross weight that will ever be placed on the scale. This **includes the tare vessel** and all of its contents. This determines the capacity of the appropriate weighing device.

Maximum Gross Weight: _____



Smallest Net Weight

Smallest individual measurement to be made on the scale. **The tare vessel does not count.** Taring the scale resets the net measurement back to zero and any existing load on the scale from before the tare no longer counts. This is part of determining the precision of the appropriate scale.

Smallest Net Weight: _____

METTLER TOLEDO

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Process Tolerance

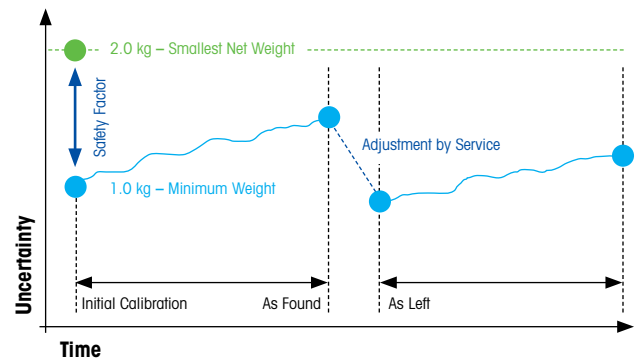
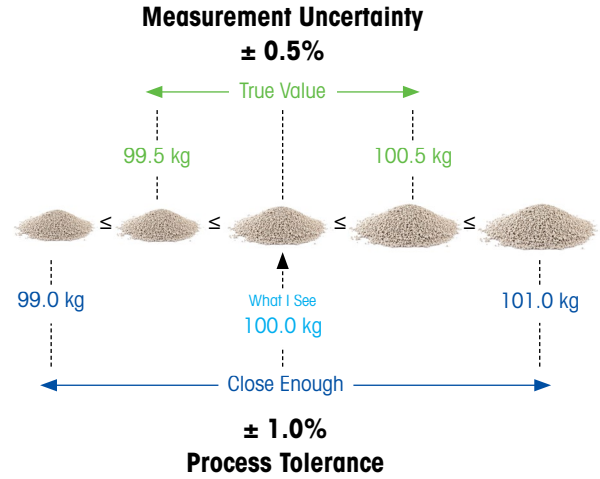
Process tolerance is a user-defined make or break limit between good quality and bad quality. Metrological standards define this value as a percentage (i.e. the significance of the error to the overall measurement). The value cannot be 0% as exact measurements are impossible due to simple rounding among other errors inherent to weighing. This is part of determining the precision of the appropriate scale.

Process Tolerance: _____

Weighing Safety Factor

Safety factor is a user-defined protective buffer. Scale performance decreases from normal wear and tear, operator errors and typical environmental influences such as surrounding equipment, heavy ventilation, etc. A safety factor imposes a cutoff on the lowest usable range of the scale to ensure those influences do not push measurement uncertainty beyond the process tolerance. This is part of determining the precision of the appropriate scale.

Weighing Safety Factor: _____



How Would You Describe Each of Your Weighing Processes?			Safety Factor	
Your Rating: Effects on Quality, Cost, Safety, Efficiency and Waste	Quality Impact	Process Tolerance %	High potential for Out of statistical variations, no operators	1 - 1.5
Super-critical components: high effect and / or cost	Critical	< 0.1	High potential for Out of statistical variations, no operators	1
Expensive, very critical, components or processes	Crucial	0.1	High potential for Out of statistical variations, no operators	1.5
Key components & processes	Very High	0.2	High potential for Out of statistical variations, no operators	2
Above average quality & critical processes	High	0.3	High potential for Out of statistical variations, no operators	3
Average requirements & processes	Medium	1	High potential for Out of statistical variations, no operators	4 - 10
Inexpensive base materials	Low	3	High potential for Out of statistical variations, no operators	4 - 10
Low cost materials and products with low effectivity	Negligible	6 - 10	High potential for Out of statistical variations, no operators	4 - 10

Don't Know Where to Start?

For unknown process parameters or help determining appropriate parameters, please consult the attached guides or reach out to your Carlton Scale sales representative for further consultation.

www.mt.com/GWP

For more information

METTLER TOLEDO Group
Industrial Division
Local contact: www.mt.com/contacts

Subject to technical changes
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