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NICOL SCALES & MEASUREMENT IS AN ISO ACCREDITED CALIBRATION
COMPANY THAT HAS PROVIDED CALIBRATION, REPAIR AND SALES OF ALL TYPES
OF WEIGHING AND MEASUREMENT PRODUCTS SINCE 1931.

DIMENSIONING WHITE PAPER

The Future of Shipping Is Dimensional Weight: Here's What You Need to Know

From small businesses and mail counters to large operations and warehouses, parcel and package shipment is a daily occurrence. Many of these facilities routinely use large shipping carriers, such as FedEx®, UPS® and DHL®. In order to more accurately reflect billable weight, these large carriers are now determining shipment pricing based on either dimensional weight or actual weight—whichever is greater.

Dimensional weight, often referred to as dim weight, reflects the package's density—the amount of space the package utilizes in relation to its weight. To determine dim weight, a package's length, width and height are multiplied, resulting in its cubic size, and then divided by 166 for domestic or 139 for international shipments.

$$\text{Dimensional Weight (lbs)} \times \frac{L \times W \times H}{166}$$

When lightweight items are shipped in large packages, carriers can reach maximum volumetric capacity in their shipping containers far before reaching weight capacities. To better maximize carrier capacity and efficiency, dim weight policies prompt shippers to more efficiently package their items with less wasted space and to maintain a higher regard for the importance of package density. Companies who ship packages without properly calculating dim weight will pay increased shipping costs from miscalculated dimensions or due to freight compliance issues.

Implementing Dimensional Weighing

Measuring dimensions manually is more time consuming than obtaining the package's weight with a conventional shipping/postal scale. How can businesses ensure freight compliance and deter revenue-loss from miscalculated dimensions, without adding time to their process? There are manufacturers modernizing dimensioning technology to provide shippers with solutions to quickly, efficiently and accurately obtain package dimensions for shipment with dimensioning systems.

Dimensioning systems use sensing and imaging technology to calculate the dimensions of packages to determine dim weight. Although dimensioning systems differ in performance and technology, they provide valuable solutions to ensure companies optimize dim-weight shipping with accurate package dimensions—all without slowing processes.

Dimensioning Key Facts

1. Optimize the way you package items. Pack items with only the material needed to safely ship and choose the best-sized cartons.
2. Use quality packaging materials for strength, durability and to reduce the amount of empty space when determining dim weight.
3. Do your research. Speak with your carriers to determine the dim weight policies they have in place. Knowing the shipping requirements now can help deter compliance fees in the future.
4. Document your total monthly shipping charges to ensure your dim-weight shipping charges are accurate and that you're measuring the correct dim weight.
5. Poly bags, tubes and irregular shapes need cubic measurements to determine dim weight. Manually measuring irregular cubic dimensions can be complicated—a dimensioning system can measure them for you.
6. Streamline your system. Utilizing dimensioning systems can maximize your process flow and limit the amount of time spent measuring dim weight.

7. Not all dimensioning systems are created equal. If speed, accuracy and dependability are important to your shipping business, ensure that your dimensioning system can deliver all three.
8. If you ship a variety of items, from oversized packages to thin mailers, closely research the maximum package height and widths dimensioning systems can measure.
9. Certain dimensioning systems can integrate scales to provide package dimensions and weight at the same time. Some can integrate this data with existing shipping software as well.
10. Consider maintenance and support when you purchase a dimensioning system. Does the dimensioning system you purchase include a support network?

For more information about dim weight and Rice Lake Weighing Systems' dimensioning solutions, visit **www.ricelake.com/idimension** or contact a Rice Lake dimensioning specialist at **800-472-6703** or **dimension@ricelake.com**.