

trying to challenge charges. “We were getting an after-the-fact surcharge with no way to dispute it,” says Stewart. “We had a scenario where we shipped three of the exact same item. One bill came in smaller, another was what we predicted, but the last one was huge! It included hundreds of dollars in back charges for dimensional weight shipping and we had no way of truly going back on it to say what the exact dimensions of the package were.” The waters were choppy and the sky red in Wholesale Marine’s shipping department after a year of struggling with new dimensional billing practices. So began the search for a solution to their dimensional weight woes.

The first step towards dim weight smooth sailing was analyzing their current process and seeing where it was breaking down. Stewart realized that the company needed a reliable and efficient system to document package dimensions and weights to help them get the best shipping rates for each individual item shipped. Wholesale Marine also needed a solution fast—and they found one with Rice Lake’s iDimension™ 300.

iDimension 300 is a 3D imaging and sensing technology system that instantly



Installed over their pre-existing conveyor line, iDimension 300 streamlines dimensions, package images and weight data with third-party postal software to ensure the most cost-effective shipping.

captures dimensions of normal packages like boxed Yeti® coolers, as well as irregular shapes (think shrink-wrapped anchors and polybags filled with fishing accessories). iDimension is able to convert these irregular shapes into cubed dimensions. It is an easy addition to almost any warehouse or shipping department, and since it operates on imaging technology with

no moving parts, maintenance is virtually non-existent. iDimension’s web service is accessed with a DHCP IP address and its free API allows users like Wholesale Marine to interface using a simple HTTP request and XML parsing method to store dimensional data for their records.

The iDimension at Wholesale Marine’s distribution center is installed over their

“Now we have the ability to ship at the best price. We were sending packages that were too big for the carrier based on our old process. We’re not getting those dings on fees anymore. Everything is streamlined and automated as it goes through shipping.”

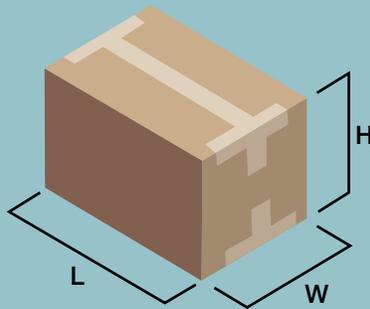
—AJ Stewart, Web Development

## The Future of Shipping Is Dim Weight

### What is dimensional weight and how can dimensioning systems optimize shipping?

In order to more accurately reflect billable weight, large carriers such as FedEx®, UPS® and DHL® are 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.



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

L = Length in inches

W = Width in inches

H = Height in inches

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. Companies who ship packages without properly calculating dim weight could pay increased shipping costs from miscalculated dimensions or freight compliance issues.

How can businesses ensure freight compliance and deter revenue-loss from miscalculated dimensions, without adding extra time? Incorporate a dimensioning system into the shipping process. Dimensioning systems use sensing and imaging technology to calculate the dimensions of packages to determine dim weight. They provide valuable solutions to ensure companies optimize dim weight shipping with accurate package dimensions—all without slowing processes.