

## **College, casters and tipping points**

Those are three terms that don't go together very often and highlights the fact that unusual circumstances are often the greatest challenge for our customers and the greatest opportunity for us. But college, casters and tipping points are what this unique case study are all about.



A manufacturer of customized furniture and cabinetry came to us with a very particular requirement. It had a contract to produce threedrawer cabinets in various sizes to be used in college dorms and classrooms. Because dorm assignments and classroom configurations change, the cabinets had to be easily moved. So far, no problem. But there's the thing. Lots of times, students would open all three drawers at the same time, or the content of the top drawer outweighed the others. The result was that the cabinet would tip over which was sometimes dangerous and always a

complete aggravation. They wanted a caster assembly that made it easy to roll the cabinets but kept them from tipping over. Certainly not the usual kind of project we are asked to spec.

This is a situation in which our fully integrated manufacturing operation was able to shine. Our engineering department went wild over the challenge and had a concept and initial specs within days. The idea was brilliant.

We riveted four casters to a steel plate. Then, a three-sided box was in turn welded to that The fourth side of the box was a steel facing plate imprinted with the company's logo that easily slid into place to complete the rectangle. The assembly was attached to the cabinet. Once the cabinet was rolled into place, a patio stone was placed in the open side of the box and the facing plate was put into position. Voila! A caster assembly that prevents tipping.

Within three weeks we had a working prototype and within months, hundreds of the cabinets appeared on college campuses. Absolutely every piece of the assembly was produced in our facility, which meant that we could easily meet lead times and ensure quality.

And, of course, the casters on this project were a perfect match to the cabinet's functionality and the conditions in which it would be used. We chose a 3 x 1-1/4 caster with our proprietary ProTech<sup>™</sup> wheels to provide silent soft-cushioned mobility and offer the shock absorption and floor protection perfect for the college environment.

Interestingly, it was our customer-focused approach that won us the opportunity in the first place. The customer's manufacturing facility was housed in a 100-year old building with a heritage site designation that prevented any substantive modifications. The floors were all wood – not the best for a production environment and presenting less than optimal conditions for the carts that were being used. In addition, the company was obligated to use its best efforts to maintain the condition of the floors. We showed them that casters with our ProTech wheels and ball bearings would ensure smooth rollability without marking the floors. If we could solve that problem, they correctly thought we might be able to help with the cabinets.

In the end, we produced thousands of these unique non-tipping, cabinet assemblies, creating six different plate/caster configurations corresponding to three different cabinet sizes.

Sometimes the ultimate caster innovation isn't entirely about the casters. It's more about the way in which they are used and how they are attached.

For more information on how CasterWorld can provide solutions for your wheel and caster needs, call 1-877-473-9309 or email sales@casterworldbc.com. Visit our website at www.casterworldbc.com