

EZ Dump Smartcan Review

By: Dr Thomas Renner, President and Founder of Corporate Injury Management Associates (est.2001) Performed on 2/2/14

Analysis

The EZ Dump container presents employers with an effective, cost efficient and hygienic tool to reduce the risk of on the job injury as per the application intended.

Review

The application as explained and observed is designed to reduce the physical demands of removing a trash bag from the confines of a trash container. First noticed was the reverse trapezoidal shape (wider at the distal end) of the exterior as compared to the traditional trapezoidal shape (wider at the proximal end) of a conventional container. Higher density trash and fluids will tend to settle at the bottom of the container therefore requiring a greater degree of lift force to remove the trash bag from the container. Adding to the weight of the trash bag there will also be contact friction and vacuum forces created as the trash bag is removed from the container. There are many variables that will determine the degree of the friction and vacuum forces but it is safe to say that they are noticeable and substantial. The traditional container (narrowed at the bottom) seemed to increase the friction and vacuum forces upon initial lift force. In addition to increased lift forces the traditional container forces the user to adjust their biomechanical (the use of the body) application to fit the requirements of the container. Because of this there are increased risks associated with this move. The unique aspect of the EZ Dump container is that the main body of the container is easily removed by a step release function. Because of the reverse trapezoidal shape there is little force required to remove the body of the container. This allows the trash bag to be free of the container thereby eliminating the forces of contact friction and vacuum. With the container body removed, the load (trash bag) is now in a position where more efficient and safe lifting practices can be deployed.

As an Industrial Injury Prevention Specialist I first examine the risks of any task. I look at 2 primary factors those being the ergonomics of the task and the biomechanics required to perform the task. My first objective is to create the most efficient ergonomic environment possible to reduce the physical demands of the body. My concern with the traditional container is that removing a trash bag from a container invites the user to use forward flexion techniques resulting in anterior shoulder displacement. This biomechanical position significantly increases the risk of shoulder and low back injury. We have proven that over time this position not only increases the risk of single event claims but also significantly adds to degenerative changes of the involved areas. Creating a safe ergonomic environment where an effective and safe lift can be performed would always be my first recommendation to any employer. In this application the EZ Dump container represents that opportunity of creating a safe environment for employees to complete the task.

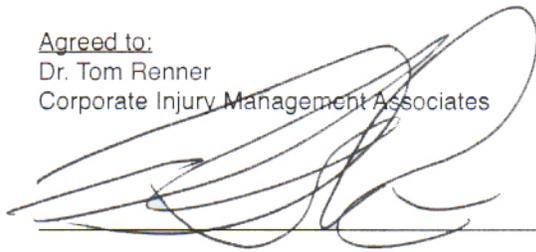
In addition to the ergonomic and biomechanical benefits it appears that the EZ Dump container also has advantages over the traditional container due to the ease at which the container can be

cleaned. This results in a greater level of hygiene control which is an important aspect for employers especially in the food and beverage industry as well as the healthcare industry.

The EZ Dump container also represents a significant cost to benefit equation. When you compare the cost of the product (around \$100) to the potential cost of an injury to the areas at risk (\$5K to \$150K) there seems to be little doubt that the product will prove its worth over time. I also believe that employee satisfaction would be high as my experience has shown that any time an employer provides an employee with a tool to make their job easier they are paid back with gratification and increased productivity.

I would give this product a full endorsement and recommendation to any employer as a tool designed to prevent on the job injuries and maintaining a healthy environment.

Agreed to:
Dr. Tom Renner
Corporate Injury Management Associates

A large, stylized handwritten signature in black ink, appearing to be 'DR. TOM RENNEN', written over a horizontal line.

Date 3/6/14