

Ultimate Defender



Molder: Sterling Technologies

Designer: Plastics Technology Center

Product Description

This athletic training device creates the most effective way to simulate competition. Now, close that gap during solo practice or while otherwise short personnel; create a challenging experience that mimics opposition like never before. Great technique is the foundation for success and this is proven to mold game-ready form without affecting practice formats. Enable athletes to use "active visualization" for proper mental preparation while physically improving technique. Many players are told to visualize a defender, which is a poor substitute for reality and lacks immediate feedback. Players and coaches can now make key adjustments in practice, rather than waiting until it is too late. Users reported experiencing, while in the game, a déjà vu sensation! Fill the base with ballast if you wish, handles and wheels aid in portability. Next, slide the upper torso into the base. Then, position the arms at the desired angles and put the product into position. Finally, raise it to the desired height to simulate tallness and leaping ability. Now, dribble, juke, pitch, pass, spike, shoot, or kick your way around this formidable obstacle. The variety and quality of drills are only limited by a coach's creativity!



international plastics design competition



Why is the product innovative?

This assembled product is comprised of a single-wall, rotationally molded base that provides support, while mimicking a human form from the waist down. For convenience, wheels and handles offer improved portability so it can be filled with ballast for extra stability. Another molded part is the upper torso, complete with a grimacing face for effect with the younger market. A trapezoidal chest plate protrudes for in-mold labeling options should an organization wish for that level of customization. A "post" feature extends below, assembling into the confines of the base so the overall vertical dimension can vary to better replicate various competitors' heights and leaping ability. Regularly spaced holes running vertically along the post accept a pin to temporarily lock the base and torso together at the desired height. Two, identical arms complete the custom-molded components, all of which are polyethylene. The shoulders feature threaded inserts and a rosette thumb screw is used to affix each arm. Octagonal posts are molded into each shoulder and matching recesses in the arms permit varying, independent arm angles. It's effective training height range is from 60" to 120". Once assembled, the result is not so much a target as an obstruction, for thrown or kicked projectiles, around which players must navigate for improved ability in whatever endeavor they choose. For these reasons, we believe UD is a Market Innovation and winner in the Individual Category for Recreation & Leisure. It is also well suited for the 12th Annual IDSA / Plastics News Design Award, since this product is the epitome of teamwork! It is the brainchild of Bob Crook, a Pennsylvania-based insurance salesman, who prototyped his idea while seeking a solution for methods to more realistically train quarterbacks. His tenacity led to his working with the local SBDC to begin planning next steps toward making his idea a reality. Under their guidance, he presented an early version of UD before Altoona Blair County Development Corporation and was awarded grant money from Ben Franklin Technology Partners as a result. Ben Franklin put him in touch with a member of PennTAP, who in turn pointed Bob in the direction of several others who would become his team: a patent attorney, design / development team, as well as a rotational molder who would handle sourcing of tooling and the necessary hardware. More recently and with the encouragement from his design team, Bob spoke with the Northwest Commission about the potential for developing international business relations. They would connect him with Southern Allegheny Planning and Development Corporation, who has been instrumental in assisting with organizing overseas distribution.