VSK8

Case study:

• **Background**: Roller skating has been popular for decades and has taken on many forms in terms of skate configuration, from clamp-on and integral shoe skates with four wheels known a quad-skates to the more recent in-line skates that have an appeal to all ages and skill levels of roller skaters.

• **Problem**: How to penetrate a market already saturated with every skate style and configuration imaginable with a novel design that would have market appeal for the novice to the aggressive skater alike and eliminate the integral shoe or boot in the process.

• **Solution**: Today's quad and in-line skates all position the wheels below the skate platform elevating the skater with a higher center-of-gravity (cg) which places more stress on the skater's ankles and adds more challenge to beginner skaters and elder skaters returning to the fun and exercise of roller skating. Our design for the Vertical Skate aka VSK8 has a lower cg by placing the wheels outside of the skate platform or what became the monocoque chassis which encapsulates a unique axle and suspension system that provides self-articulating front and rear axles for significantly improved agility and maneuverability for the skater.

• Elimination of the integral shoe or boot is accomplished with an upper leather harness interlocked into the monocoque chassis that overlaps the skater's street shoe for a secure and comfortable fit. The harness is fitted with multiple adjustable straps and latching mechanisms which safely fastens shoe to chassis.

• Each VSK8, for both right and left feet, is proved with imbedded toe and heel brakes offering the skater with a variety of ways to slow or stop skating unlike conventional skates that usually have only one brake attached to the heel of one not both skates.

• An aggressive skater, popularly known as a 'vertical skater', using the standard VSK8 can grind on curbs, pipes, and rails as well as address the vertical walls of skate parks and completion rinks. Fitted to the bottom of the monocoque chassis is a unique grinder plate designed for grinding in line with the wheel direction or perpendicular to it. The self-articulating front and rear axles allow the skater with maximum maneuverability unlike fixed axle designs. The integral suspension system tolerates the extreme stress and load presented when the vertical skater lands after achieving challenging vertical heights. During design/development stages and after production release the VSK8 was tested on the streets, sidewalks and in competitive skate parks by Brian Wainwright, reigning World Champion Vertical Skater.