

## V-Drive II Paper

Forever the innovator, Verducci will be here, leading the industry to and through the next technical wave. Verducci was first to introduce the power arch extrusion in today's traditional fixed frames. The arch increased strength while allowing radical cutouts, reducing weight and improving the overall performance. After intense research, diligent engineering and practical "road testing" by our world champion Verducci Racing Team, we will be introducing the V-Drive II this Fall

What makes the V-Drive II so innovative? Simple... V-Drive II does exactly what it says – it drives you forward. The more power you apply to the frame the more it gives back. Inline skating is much more aggressive than that of ice-skating. Inline skating requires rapid foot speed, tight pack style skating, extreme passing and the ability for each skater to perform a 300-sprint-trial to an ultra-distance marathon up to 100 Kilometers.

V-Drive II corrects technique, reminding you if your stroke is correct every step of the way. A few of the major differences between the patented V-Drive II and the traditional clap skates are as follows:

1. Pivot point has been optimized to ensure the shoe is closer to the ground when open, thus improving control and strength of the frame
2. Machined in multiple pieces to keep the height of the frame to a minimum
3. Springs are angled to provide maximum closure speed, strength and kinetic energy
4. Countered heel rotation improves the amount of leverage on each skating stroke
5. Better grip due to the amount of force being applied to the ground
6. V-Drive II acts as a fixed frame until the last segment of every stroke (depending on the amount of knee bend)

The underlying expertise in V-Drive II frame design are the engineering highlights that make the machine hum:

### Pivot Point:

Pivoting from the ball optimizes power with efficiency. V-Drive II pivoting point allows the shoe to pivot down verses up, ensuring stability during its open stages.

### Counter Rotation:

Positioning the foot on the V-Drive II in the correct position during its natural position (closed) was a critical decision. Counter rotation naturally sits you back on your heels for optimum grip, power and push. One of the first things to happen during fatigue stages is

straight legs. Counter rotation naturally puts you in the correct skating position, thus conserving energy while improving technique.

V-Drive II's counter rotation also regulates spring tension. It was extremely difficult finding optimum spring tension from the start of the opening to the completion of the opening. Counter rotation allow body weight to open the springs to its maximum, avoiding excess use of brut power.

#### Spring Direction:

After testing every possible spring direction, it became very clear springs must be a specific angle and direction. Direction and angle plays a significant role in propulsion and maintaining generated speeds (your momentum) while minimizing effort.

#### Spring Tension:

The most important part of the push on a V-Drive II is the SNAP at the very end of each stroke. Clap system frames must close faster than they open in order to gain complete mobility, agility and response needed for inline skating/racing. The more snap you give the more you get back!

Spring tension adjusts for each skater's type: from fitness to professional level skater and from fast quick strokes to long, deliberate strokes.

#### Technique Enhancement:

Whether you're a first year skater or a professional level skater, V-Drive II will improve your technique. V-Drive II improves the natural skating position whether you have a stand up technique or a well trained racing technique. As the V-Drive II opens it naturally forces your skates to travel in a straight line, eliminating unnecessary weaving.

Unique to the V-Drive II is its rhythm. Due to the spring tension you will know immediately whether you are a one legged skater or not (and most everyone is), V-Drive II uniquely changes per individual. Depending on the type of skater you are and how much you are snapping at the end of each stroke.

Once you develop your rhythm the V-Drive II takes over, "speaks" to you and tells you whether or not you are maintaining correct technique during a sprint, pace, time trial or just plane cruising session. This pays off most during those fatigue and disoriented stages of training and racing; it's like having a personal trainer.

#### Efficiency Enhancement:

The key to generating maximum speed, power and quickness along with maintaining your momentum for long periods of time (time being 24 seconds to 24 hours and/or off and on for consecutive days) is being able to use as many muscle groups as possible. The

larger the muscle group, the more power you can generate and the quicker you can recover.

V-Drive II allows you to generate more speed with straighter legs, thus distributing power from the upper thighs. However, the more you bend your knees the more your upper thighs kick and the more speed and power you achieve.

V-Drive II allows you to naturally follow through your stroke, (i.e. imagine running with your heels stuck to the ground or not being able to push with your calves while running, walking, cross country skiing or even a golf swing without any follow through). We have all been taught to push through the heel and avoid toe flick at the end of each stroke. V-Drive II enables a complete follow through with a natural stroke, utilizing a larger group of muscles than the standard fixed frame. More muscle groups employed equals more power, longer recovery time, more speed and less fatigue.