



By

Maximum Training Solutions, LLC

*EXSPEED*TM High Speed Treadmill Training System

- High Speed Treadmills are now a large part of speed training for athletes of all ages and performance levels.
- Treadmill Training has a very large impact on athletes competing in speed and power sports.
- Treadmill Training is most effective when used as a tool in the overall performance enhancement program for the athlete.



*EXSPEED*TM High Speed Treadmill Training System

- This technology has been used for over 20 years.
- We must keep in mind that technology is important in training, but without proper programming and supervision, technology can be a detriment to our athletes.



EXSPEED[™] Background

- Over 7 years of research and development.
- Developed in a hospital based sports medicine facility specializing in athletic performance enhancement and rehabilitation of athletic injuries.
- Used and evaluated daily by its creators to ensure quality.
- Boasts impressive average results of .17 seconds improvement in a 40-yard dash (have seen up to .48 seconds) over an 8 week program training 14 to 22 year-old athletes.

*EXSPEED*TM Training Principles

- Increased Muscle Activity in the lower extremity, leading to increased power output and improved stride length
 - Numerous research studies have demonstrated the effectiveness of running at elevation at high speeds to increase muscle activity in the glutes, quads, and gastroc/soleus as shown with both EMG and MRI.
 - It has also been shown to have less impact forces than sprinting on flat ground.

*EXSPEED*TM Training Principles

- Improved stride frequency is achieved through the process of overspeed training.
 - Treadmill running at higher speeds than the athlete is capable of running spurs the nervous system to fire at a higher rate to improve both the stance and recovery phases of sprinting.
 - Overspeed training on a treadmill is the most effective and safe means, as it allows the athlete to maintain proper positioning while also forcing the athlete to spend greater time in stance, shortening their time in recovery.

*EXSPEED*TM Training Principles

- Treadmill running is highly effective for improving running mechanics
 - Performing speed training on a treadmill eliminates the need for video analysis as the athlete is running in a stable position and can accept cues easily.
 - Running at elevation is a self-limiting exercise, forcing the athlete to maintain proper positioning with their lower extremities.

*EXSPEED*TM Training Principles

- High Speed Treadmill training has been shown to have large impacts on the athlete's metabolic status.
 - Numerous studies have demonstrated an increase in both oxygen uptake and lactate levels due to the increased recruited muscle mass. Both of these can be used as indications of anaerobic capacity.
 - Intense interval training has been shown to increase the body's buffering capacity, therefore reducing the athlete's fatigue.

EXSpeed[™] Training Principles

- Individualization is the key to any quality performance enhancement program.
- Too many programs have become “cookie cutter” and fail to meet the needs of each individual.
- A quality program starts with an effective evaluation process and then allows for continuous adjustments to account for the ever changing needs of young athletes.
- Treadmill training must be a tool in the overall programming for the athlete.

Why is *EXSPEED*[™] Better?

- *EXSPEED*[™] makes personalization a priority for the athlete and practical for the performance enhancement specialist. All athletes are classified into one of 24 entry level program to allow for individualized attention within a group training setting to fit every athlete's needs and maximize training time, space and profitability.
- By using the treadmill as a tool in the overall strength and conditioning program, the trainer has the ability to utilize their strengths, facilities and understanding of the athlete when designing the program. MTS recommends that ground based speed and agility training take place simultaneously with the treadmill to maximize results and decrease injuries.

Why is *EXSPEED*[™] Better?

- *EXSPEED*[™] is the only available training program that takes the athlete's metabolic needs into account. With a simple graded exercise test, the trainer will be able to accurately predict training volumes and recovery rates as it pertains to heart rate
- *EXSPEED*[™] is the most easily adaptable training model on the market. It provides strict guidelines and information for the trainer, while providing easy adjustments before, during, and after the training session to fit the needs of the athlete, style of the trainer, and requirements of the facility.

EXSPEED[™] Financial Considerations

- *EXSPEED*[™] includes:
 - 2 day Certification Course for unlimited number of facility staff
 - All training programs in both book form and CD-ROM
 - No long term licensing fees to reduce facility's profits
 - 6 months of service and follow up care
 - Effective “jump start” for new facilities



“Exceed Your Limits”

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