THE TSUNAMI BAR® - THE HOLY GRAIL IN TRAINING FOR ‘POWER’

‘POWER’ of an Athlete = Muscle Force (Strength) × Speed of Movement

POWER (measured in WATTS) = Energy(work) / time = Joules / time = [Newtons x Meters] / time = [Force x Distance] / time = Force (lbf) x Speed (ft/sec).

For Strength and Conditioning Training: Strength of the athlete × Speed of Muscle Contraction = POWER. Training with the Tsunami Bar® is the HOLY GRAIL of Training because an athlete trains for enhanced POWER by training for both 1) Strength and 2) Speed at the same time! Why is this true? Has Research been done? (see below)

In the POWER equation, if we can 1) increase Force (strength) and/or 2) decrease Time (by increasing speed), we increase POWER.

• The unique feature of the Tsunami Bar® is its ability to move or ‘oscillate’ back-n-forth when forces are applied to the center of the bar. The bar exhibits an Oscillatory Amplitude and Oscillatory Frequency which the athlete can control.

• To train for both Increased Strength (Force) and Increased Speed of Muscle Contraction (which can increase speed of movement) the athlete must time their lifting movements such that they exert a ‘force’ against the ‘bar’ as the ‘forces in the oscillating bar’ are increasing against the athlete. In movements such as a ‘bench press’ or ‘squat’ the athlete is trained to exert a force against the flexible barbell as the force of the bar is increasing against the athlete. If the athlete is strong enough and the Tsunami Bar® that is being used is stiff enough, the athlete will be able to increase their speed of movement which will increase the ‘force’ that the athlete must resist (making them stronger) because the oscillation amplitude increases. Plus the oscillation frequency increases which conditions the Prime Mover and Stabilizer muscles to contract at a faster rate. With the muscles contracting faster under an increasing load, this promotes conditioning of the sensory receptors in the muscles enabling faster muscle contraction. IT IS THIS 1) VARIABLE BUT INCREASING ‘FORCE’ EXERTED BY THE ATHLETE PLUS 2) THE RATE OF MUSCLE CONTRACTION THAT ALLOWS THE ATHLETE TO INCREASE THEIR A) STRENGTH AND B) SPEED WHICH PROVIDES THE POTENTIAL TO ENHANCE THE ATHLETE’S POWER.

• Research supports the above statements. Furman University in Greenville, SC conducted Research on the Tsunami Bar® and one of the tests, used by a group of 28 athletes, was the Margaria-Kalamen Stair POWER test (MPT). This test focuses on lower body POWER development. During the 5 week test, the ‘before and after’ testing of the athletes showed a significant improvement in Power development with the group of athletes using the Tsunami Bar® verses the athletes that were trained using a traditional Functional Power Training Program (FTP) using speed lifts with a traditional steel Olympic barbell. The Research Study by Furman University was presented at the 2013 American College of Sports Medicine’s Annual Conference and the abstract is entitled “2495-Improved Functional Power Over a 5-week Period: Comparison of Traditional Training To Tsunami Barbell™ Training”.

• For more information go to www.TsunamiBarbell.com for Training tips, Safety & Use information plus ‘Training Clinic’ dates.

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