



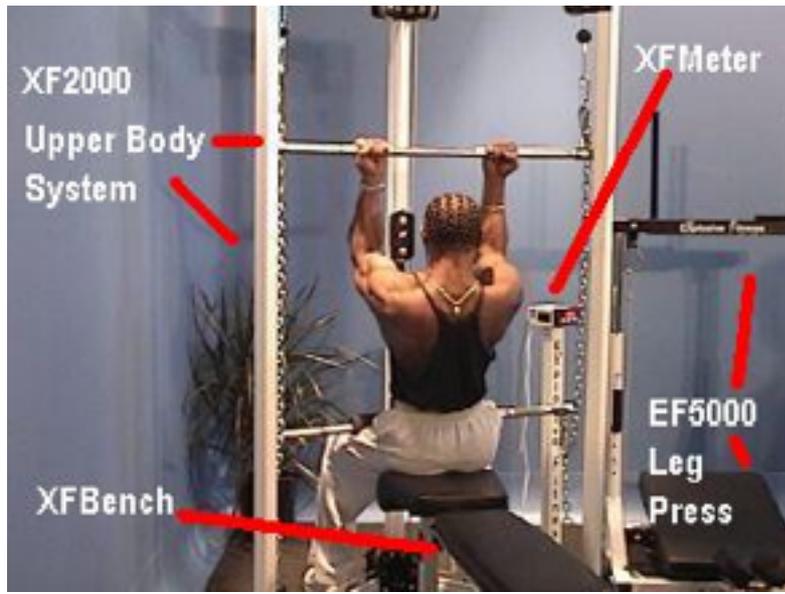
Explosive Fitness (XF) Strength Training Equipment

What is XF? – What is SCT?

Introduction

The purpose of the Explosive Fitness (XF) Strength Training equipment is to provide an easy and very healthy method for strength training. With the XF Training equipment we will provide a time effective, powerful and safe way to maximise strength increase.

The equipment consists of an Upper Body machine, a Lower Body machine (Leg Press), a Bench and a Meter that measures the resistance with high accuracy.



To explain the unique features of our product, we first need to introduce some theoretic concepts around strength training.

Why increase strength?

1. Physical performance strength: A strong body is able to cope extremely well with the daily activities. Walking, climbing stairs, lifting things becomes easier with a stronger body.
2. Constant muscle loss (atrophy): Research indicates that unless we strength train regularly, we lose more than 250g of muscle every year of our lives after the age of 25 (atrophy).
3. Metabolic rate: Higher amounts of muscle increase the metabolism, energy and wellbeing - one pound of muscle burns between 30 and 50 extra calories per day. (The average man, at 150 pounds, has only about 20 pounds of muscle, that is burning between 600 and 1000 calories per day.)
4. Diets: Many people who are on weight loss diets are not aware that often only about 25% of the weight loss is fat. A very low calorie diet can result in 40-50% loss of lean tissue mass (muscle). That means, losing 10 kg of weight can result in reduction of only 2.5kg fat, but 5 kg lean tissue mass (the rest is water)!
5. Sports: Every sport is improved by an increase in strength. Muscles play a major part in all movements in the body, and stronger muscles will deliver more power to every aspect of movement.

Here is an excerpt from an article by Pete Sisco, one of the inventors of Static Contraction Training (SCT – see next chapter) about the advantages of a strong body:

The Health Benefits

It's a generally established medical fact that the benefits of resistance training are a practical fountain of youth. I don't mean that to sound like the wild claims made by nutritional supplement companies, but it really is true. In fact, resistance training honestly delivers the health benefits that those pills never will. Here is a partial list:

Osteoporosis - As we age our bones naturally get more porous and less dense. That makes them more brittle and prone to breaking. Resistance training reverses this process and adds density to bones.

Cholesterol - Exercise lowers LDL (bad) cholesterol and increases HDL (good) cholesterol. These are two key markers of heart disease that are improved by exercise.

Human Growth Hormone - I'm not talking about the synthetic HGH that is constantly advertised over the Internet. Heavy resistance training causes your body to produce more of its own, perfect-for-you natural growth hormone. Increased HGH is known to boost sexual potency, improve your sleep, improve memory, decrease the wrinkles in your skin!

Testosterone: - Resistance training naturally increases levels of testosterone which delays the onset of andropause, also known as male menopause.

Fat Loss: - Adding muscle to your body increases your Basal Metabolic Rate which means you'll naturally burn more calories and lose fat 24 hours a day. Adding just 5 pounds of new muscle will burn off 25 to 30 pounds of fat annually.

More Energy: - Having more muscle means that every activity throughout the day is less taxing. That means having extra energy to enjoy life more.

Look Better: - Resistance training changes the composition of your body in two very positive ways. It increases lean body mass and decreases fat. In short, resistance training makes you look younger and more fit.

How to grow a muscle

Up to now, people who want to effectively grow their muscles all over the body have to go to a gym and lift weights. The recommendation is to do these exercises at least 3 times a week with an effort of an hour per workout. There are many programs on the market that recommend different methods each claiming to deliver the 'best' results. Other intense sports, e.g. running help muscles to grow as well. They usually only concentrate on specific muscles and do not look for a balanced growth of all muscles in the body.

Weight training is often seen as very time consuming, hard and tiring. Instead of having more energy, frequent and extensive training sessions can lead to muscle soreness and injuries (some can become chronic – ask any bodybuilder). Women in particular are afraid of getting 'bulky'. Last but not least, the normal strength training can be very hard on the joints, particularly if the person is not conditioned and engages in lifting heavy weights, or performs high repetition sets.

All this is not necessary any more.

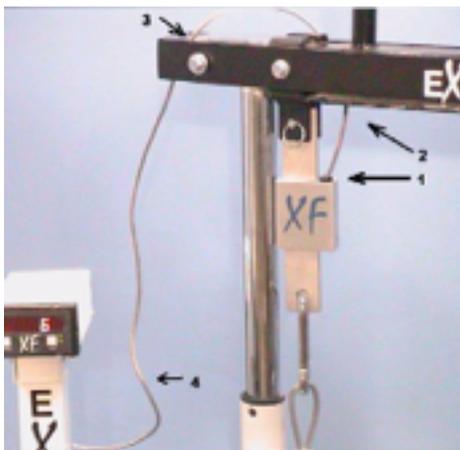
About a decade ago, two guys - Pete Sisco and John R. Little - invented a concept called Static Contraction Training (SCT). They recorded everything they did during their training – number of weights, repetitions, recovery time and so on. Over time they came up with three new pieces of information about muscle growth and effective training – and these are embodied in our XF Strength Training equipment.

1. Muscle growth is created by high intensity and progressive overload, not by duration of work. That means, to grow muscle it is not important to do an exercise with a lot of repetitions (and low weights) – it is far better to use a very high weight over a very short period of time.

People who trained in the highest intensity got the fastest results, and the easiest way to get the highest intensity was to work in the **strongest range of motion**. They determined that making an all out effort in the strongest range of motion produced the greatest effects. 'Strongest range of motion' means operating in the last centimetres of one's reach without going to lockout. This is the range where one can handle the most weight and is least susceptible to injury. Also they found out that it is not necessary to move the trained muscle at all. The highest intensity is to be reached with static contraction – pulling/pushing as hard as possible against a non-movable object (resistance training).

The XF Strength Training equipment is designed to make an all out effort easier than ever to accomplish. It does not involve any weights!

A bar is suspended in a fashion that allows for instantaneous force measurements and adjustment into ideal positioning for different body types and exercises. (Upper Body).



The XF Strength Training equipment uses a 'Meter' that measures the intensity. It remembers the highest number (i.e. the highest weight lifted) of each exercise. This number needs to be written down to keep track of your progress. Each exercise is performed for only about 7 seconds.

Tony Reno: 'You pull against a fixed resistance. There is very little movement. The resistance measures the force you are putting out. You give it all you've got, doing everything in your power to make the

meter read the highest number possible. The meter always tells you what you are currently giving. When you are finished you push a button that tells you your maximum force.'

2. Pete and John found out that the stimulation of development was only half of the puzzle. The second half was to make certain that the rest period (recovery time) between workouts was long enough. They found that **the necessary rest period between workouts grows quickly** as people grow in strength and ability to generate muscle. Pete Sisco: 'Every day is kidney day' – the inner organs are used and trained in each workout, whereas the external muscle training is split into two sets, the upper body and the lower body/back – and to ensure that the next workout you can increase in strength, the muscles and the inner organs have to rest long enough.

The only way to know that one has rested long enough is to compare the metered results from workout to workout to ensure that development was accomplished.

Pete and John established the following links in the chain of muscle building: Stimulate – Recover – Grow

3. The final thing Pete and John did is **test all of the exercises to see which ones produced the greatest intensity**. The result is ten exercises, 5 for the upper body, and 5 for back and legs. These exercises are performed in two separate workouts. The XF Strength Training equipment is designed to accommodate each of these exercises.

The workouts are very quick, 5 exercises per workout, each exercise needs about 7 seconds. Including warm ups and the time to setup the equipment, the complete workout needs about 20 minutes. The workout is very hard, because the muscle gains are only to be achieved if an 'all out effort' was given.

Tony Reno: 'Intensity correlates far more with power than with work. Intensity is about the sudden, massive outpouring of an all out effort. It is about totally giving it everything you have. It is fast, it is very fast. It is, by far, the fastest way to achieve results that you've ever known. But it is not pretty. Intensity is tough, it is pushing at your absolute maximum until you can't push any more, until you totally give out.'

The initial workout frequency is once per week, this will soon change to once per ten days, then to once per fortnight. There are people who train only once per six weeks! An added benefit of working out in the strongest range at maximum effort is that the joints, bones, tendons and ligaments are strengthened as well, as the added forces stimulate growth in those areas.

No exercise program is without risk, and the XF Training system is of such high intensity that it should not be undertaken by someone who has an aneurism, or other condition that could cause injury from major exertion. But for healthy people the lack of weights minimises risks due to falling weights. The lack of motion and the use of strongest range minimises risk of joint injury. The ability to immediately stop the exercise and have the resistance go to zero cuts out the main source of most resistance training accident, the apparatus pushing hard against the exerciser even after the person is no longer able to continue exercising.

To summarise:

Rapid muscle growth is achieved by

- a. high intensity of muscular overload
- b. progressive overload from workout to workout
- c. proper spacing of workouts to avoid over training or under training

Less than one minute of total exercise time, maximum once per week in a very healthy way – with muscle gains of up to 20% for EVERY workout. So far the market cannot offer anything comparable.

The truth of this concept is easy to prove – everybody who is willing to try 4 workouts (doing each set of exercise twice, to compare with previous workout) can convince themselves.

For more details or a free demo session please contact heide@haupa.net

Details can also be found in the following sources:

- Pete Sisco 'Train Smart', e-book (www.PrecisionTraining.com)
- Pete Sisco & John R. Little 'Static Contraction Training'



All pictures by Tony Reno, Explosive Fitness