



THE CYBEX FT-450 FUNCTIONAL TRAINER WITH PROGRESSIVE STABILIZATION

The CYBEX FT-450 Functional Trainer with Progressive Stabilization is about to change the way we think about strength training. Functional trainers were thought to have captured the limits of strength training by allowing users to perform cable based movements; but they do not provide a complete solution.

Training has evolved over the years. Ages ago bars and benches and plates and dumbbells with the occasional cable were what made up training devices. Then slowly machines were created that mirrored these stabilized movements. And then Functional Trainers created a new opportunity, the ability to train in a free-form style with cable.

This created a landscape that was completely separated – movements that provide complete stabilization with the ability to use very high loads and non-stabilized movements with limited opportunity to apply meaningful loads. There was no middle ground.

The CYBEX FT-450 Functional Trainer with Progressive Stabilization spans the gap. It's unique patent pending design adds two key features that greatly expand the training capabilities – the Progressive Stabilization Pad and Cable Width Adjustment.

The Progressive Stabilization Pad located at the center of the FT-450 adjusts for height and extension allowing it to be positioned so that it can be used to apply as much or as little stabilization as the user might desire.





Consider a Chest Press. In a selectorized machine, the shoulder blades are fully supported allowing very high loads to be used. With most functional trainers, the load is limited by the user's weight and leaning over to shift their center of gravity which ultimately limits the resistance to something much less than body weight with no effort from the core since it "hangs in the balance." Similarly, if the user attempts to keep the cable horizontal the load is even lower but the core does become somewhat engaged to counteract the load being applied to the upper body. But what if we had the ability to support that user anywhere between the hips and shoulder as they were standing? Applying support at the shoulder will allow higher resistances to be used than in a traditional cable-based functional trainer. Apply support anywhere between the hips and shoulder blades and the resistance can be increased over that used in a traditional functional trainer but now the core can be integrated into the movement to an extraordinary degree since the center of gravity is held stable.



In the image on the left, the pad is just below the shoulder blades providing some core involvement to maintain the shoulder position, but in the image on the right the core is highly involved to maintain the position of the shoulders.

Progressive Stabilization is only part of the equation, the ability to direct the force to perfectly tailor the exercise in another. The CYBEX FT-450 utilizes an innovative arm assembly provides the traditional vertical adjustment and also rotates to provide an effective width adjustment. In the same way that converging and diverging patterns have become a mainstay in selectorized machines, the width adjustment allows these same converging and diverging patterns to be available FT-450.





The following group of images illustrates some movements that take advantage of the narrow pulley spacing and progressive stabilization pad.





The following represent just some of the uses of the wider pulley positions.



No other product in the market place today has the ability to provide for adjustment in the width of the pulleys – this is a KEY FT-450 advantage. Another point of comparison is that the Progressive Stabilization pad of the FT-450 is not present in any “competitive” machine. The closest possible thing would be to use an adjustable bench with a competitive unit. This however would not have the ability to change the level of stabilization and would require more floor space and the investment in the bench itself. The FT-450 provides all of this in the unit itself.



SOME SPECIFICS

There will be two production versions of the FT-450:

Product Number 8800 which will represent the “compact” version.



Product Number 8810 which represents the “tall” version with pull-up bar.



The only difference between the two units is the bolt on cross bar assembly. A kit will also be available to convert a “compact” to “tall”. All other aspects of the machines are identical.



FUNCTIONALITY

- 2:1 lifting ratio
- Two weight stacks each weighing 170 lbs (85 lbs in the cable) with 10 lb bushed plates.
- Rotating adjustable width/height adjustment with tube on tube vertical adjustment:
 - 315 degrees, detented every 45 degrees
 - Width fully “IN” - 15”
 - Width fully “OUT” - 58”
 - Bearing type swivel ends
 - Counterbalanced for easy vertical adjustment.
 - 19 height position spaced 3” apart
- Stabilization Assembly
 - 10 height positions
 - 9 fore/aft positions in 2”
- Integrated attachment storage
- Included attachments
 - 2 strap handles
 - 2 multi-length strap extensions
 - Ankle cuff
 - Rotating arm bar
 - Triceps rope
 - Lat pull bar
- Molded feet covers
- Dimensions:
 - Width: 54” (137 CM)
 - Depth: 45” (114 CM) with stabilization pad horizontal and fully retracted
 - Height: Compact - 77” (196 CM), Tall - 87” (221 CM)
 - Shipping Weight: Compact -866 lbs (393 KG), Tall – 901 lbs (407 KG)