

MATRIX

ACCELERATE
THE WAY THEY TRAIN

S-Force HIIT Protocols

S **FORCE**
PERFORMANCE TRAINER

S-Force HIIT Protocols

Matrix S-Force HIIT Protocols execute mission-critical objectives necessary to improve athletic acceleration in sprint-running sports.

Designed specifically with the S-Force Performance Trainer in mind, our high-intensity interval training protocols combine our exclusive Sprint 8 program with a variety of interval lengths and HIIT ladders to push your athletes to their absolute limits. Count on these intense protocols to trigger the release of natural human growth hormone, helping your athletes burn fat and build muscle in a way that gives them a real performance edge. Combine these protocols with a range of strength training exercises to maximize the benefits of this hormone release and help your athletes reach their ultimate physical potential.

The improvement in athletic performance occurs in several ways:

1. The protocols directly reprogram the brain and nervous system to recruit the fast-twitch muscle fiber necessary for speed improvement.
2. By recruiting more fast-twitch muscle fiber through correct body positioning and perfected mechanics during sprinting reps, athletes create maximum micro-trauma in the fast-twitch muscle fiber, resulting in a superior adaptation to the training.
3. Recruiting the maximum amount of muscle fiber during the sprinting reps will force the heart and lungs to oxygenate more muscle fiber. This means that athletes will comprehensively condition the aerobic and anaerobic processes of the heart.
4. Since athletic performance in most sprinting sports can be significantly improved by increasing drive-phase performance, the S-Force protocols continually place athletes in ideal acceleration position.
5. Since the main role of the middle-ear is to keep human beings from falling, the sprint reps in the acceleration position progressively reduce the impact of “middle-ear brakes” that cause athletes to run too upright and take more steps than necessary.
6. The hormonal response to the S-Force protocols accomplishes the results of the Matrix-exclusive Sprint 8 program, which two hospital-based studies have shown to increase exercise-induced human growth hormone, significantly enhancing the ability to build muscle and burn fat.
7. Adenosine triphosphate (ATP) produced by the mitochondria in the muscle cells provides enhanced endurance and energy levels for training, practice and competition. New research shows the best way to increase the number of muscle-cell mitochondria is fast-twitch muscle fiber sprint cardio training.

SPRINT 8 HIIT PROTOCOL

Our scientifically validated Sprint 8 program takes HIIT training to the next level to maximize the release of natural human growth hormone, helping athletes burn fat and build muscle at an unprecedented rate.

SPRINT 8 HIIT PROTOCOL			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 3MIN	Vary stride length from quarter, half and full strides		
SPRINT	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
1	0:15	90% EFFORT WITH FULL STRIDE	0:90
2	0:15	100% EFFORT WITH FULL STRIDE	0:90
3	0:15	100% EFFORT WITH FULL STRIDE	0:90
4	0:15	100% EFFORT WITH FULL STRIDE	0:90
5	0:15	100% EFFORT WITH FULL STRIDE	0:90
6	0:15	100% EFFORT WITH FULL STRIDE	0:90
7	0:15	100% EFFORT WITH FULL STRIDE	0:90
8	0:15	100% EFFORT WITH FULL STRIDE	0:60
COOL DOWN: 3 MIN	Finish with proper stretching (hamstrings, glutes, quads and calves)		

10 / 20 / 30 HIIT PROTOCOLS

Our 10 / 20 / 30 HIIT Protocols provide interval variety to keep every workout fresh, engaging and incredibly challenging for your athletes.

HIIT 10 / 1:4			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 0:60	Vary stride length from quarter, half and full strides		
SPRINT INTERVALS	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
DETERMINED BY USER - TYPICALLY 4-8	0:10	MAINTAIN EFFORT AT 90-100%	0:40
COOL DOWN:	Finish with proper stretching (hamstrings, glutes, quads and calves)		

HIIT 20 / 1:4			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 0:60	Vary stride length from quarter, half and full strides		
SPRINT INTERVALS	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
DETERMINED BY USER - TYPICALLY 4-8	0:20	MAINTAIN EFFORT AT 90-100%	1:20
COOL DOWN:	Finish with proper stretching (hamstrings, glutes, quads and calves)		

HIIT 30 / 1:4			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 0:60	Vary stride length from quarter, half and full strides		
SPRINT INTERVALS	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
DETERMINED BY USER - TYPICALLY 4-8	0:30	MAINTAIN EFFORT AT 90-100%	2:00
COOL DOWN:	Finish with proper stretching (hamstrings, glutes, quads and calves)		

HIIT LADDER PROTOCOLS

Our HIIT Ladder Protocols challenge your athletes to gradually increase effort to their absolute limit, then maintain that effort through progressively shorter bursts of exercise until they reach cool-down.

HIIT LADDER 6 / 1:3			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 3MIN	Vary stride length from quarter, half and full strides		
SPRINT	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
1	0:10	FULL SPEED	0:30
2	0:20	FULL SPEED	0:60
3	0:30	FULL SPEED	0:90
4	0:20	FULL SPEED	0:60
5	0:10	FULL SPEED	0:30
6	USER-DEFINED	FULL SPEED AS LONG AS POSSIBLE	DISMOUNT, WALKING
COOL DOWN:	Finish with proper stretching (hamstrings, glutes, quads and calves)		

HIIT LADDER 10 / 1:1			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 3MIN	Vary stride length from quarter, half and full strides		
SPRINT	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
1	0:10	FULL SPEED	0:10
2	0:10	FULL SPEED	0:10
3	0:20	FULL SPEED	0:20
4	0:20	FULL SPEED	0:20
5	0:30	FULL SPEED	0:30
6	0:30	FULL SPEED	0:30
7	0:20	FULL SPEED	0:20
8	0:20	FULL SPEED	0:20
9	0:10	FULL SPEED	0:10
10	0:10	FULL SPEED	DISMOUNT, WALKING
COOL DOWN:	Finish with proper stretching (hamstrings, glutes, quads and calves)		

HIIT LADDER PROTOCOLS Continued

ENDURANCE HIIT			
PROGRAM SPECIFIC	Sprinting should be done in the acceleration position, while the warm-up and active recovery should be done in the upright user position.		
WARM-UP: 3MIN	Vary stride length from quarter, half and full strides		
SPRINT	SPRINT TIME	DESCRIPTION	ACTIVE RECOVERY TIME
1	0:08	FULL SPEED	0:20
2	0:15	FULL SPEED	0:30
3	0:30	FULL SPEED	0:90
4	0:08	FULL SPEED	0:20
5	0:15	FULL SPEED	0:30
6	0:30	FULL SPEED	0:90
7	0:08	FULL SPEED	0:20
8	0:15	FULL SPEED	0:30
9	0:30	FULL SPEED	0:90
10	0:08	FULL SPEED	0:20
11	0:15	FULL SPEED	0:30
12	0:30	FULL SPEED	0:90
COOL DOWN:	Dismount; walking cool down. Finish with proper stretching (hamstrings, glutes, quads and calves)		