# Speed, Agility, and Coordination

Over the past decade, speed, agility, and coordination (SAC) training has become an important component in the development of elite soccer players. At all levels of the game—youth, amateur, and professional—SAC training helps players develop or refine key physical abilities.

SAC training generally focuses on short bursts of running, jumping, and hopping and includes quick changes of direction; patterned footwork around poles, cones, and ladders; and isolated technical training with a ball.

For the youngest players, SAC training is used for macro purposes: to help young players develop better balance, coordination, and overall body awareness and control. The training includes all parts of the body and incorporates a lot of jumping, tumbling, and rolling. The goal with the youngest players is to help them improve their body awareness. Learning how to balance the body when jumping or hopping, as well as learning how to fall, roll, and tumble, is crucial to developing athletic ability.

The elite youth and professional levels use SAC training to isolate specific aspects of the player's physical development. By focusing on the quality, rather than quantity, of repetition, elite coaches use SAC training to improve running technique, balance, acceleration, foot speed, and technique in a soccer-specific setting.

# **Duration and Equipment**

SAC training should be done at the beginning of training sessions when players are fresh and can focus on the quality of their performance without

being hindered by muscle fatigue. Also, there is less risk of soft tissue injuries when players are fresh and muscles are not fatigued. SAC training can also be used, to a lesser extent, as a warm-up before matches. A warm-up consisting of two to four SAC exercises is a dynamic way to help players prepare for a match.

The most common format used in SAC training is a circuit course. Setting up five to eight stations and allowing small groups to go through each station for a set time, usually two to four minutes per station, allow each player the opportunity to get a complete SAC workout.

Certain training equipment is helpful for setting up SAC training. The basics include cones, plastic rods or poles, agility rings, agility ladders, and hurdles. More advanced equipment, usually found at colleges and professional clubs, includes running sleds, running parachutes, agility boxes, speed bands, heart rate monitors, and timing equipment. For the purposes of this book, we focus only on drills that are done with basic equipment. Many coaches who do not have access to, or the budget for, agility poles, agility ladders, and other equipment often find unique and inexpensive ways to create their own equipment—for example, using PVC piping in place of agility poles, or using cones or a rope to make an agility ladder.

The following pages present SAC exercises and ideas that can be combined in a variety of ways to create circuit courses for your players. Some basic considerations are necessary when creating a circuit course. First, are you using the circuit as a warm-up, a main component of practice, or a cooldown? Warm-up and cool-down circuits should not be overly demanding physically, whereas circuits used in the middle of training sessions should be physically taxing.

Next, overloading on one type of exercise, such as jumping or sprinting, is not recommended because it can cause players to become overly fatigued and injured. Having a good balance among three or four types of exercises, and varying the order, is a good starting point.

Finally, consider the duration at each station, as well as the amount of rest between stations. Generally, spending two to three minutes per station is a good starting point, and one to three minutes of rest between stations is a good ratio.

### **Purpose**

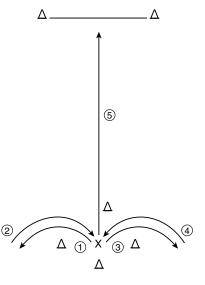
Improve balance, acceleration, and speed.

# **Organization**

Using four cones or poles, make a diamond with 1-yard sides. Place a fifth and sixth cone 10 yards in front of the diamond, with 5 yards between them, creating a finish line. Groups of 5 to 10 players stand in a line behind the southernmost cone. Each player performs the activity and then walks to the end of the line.

#### Procedure

The first player starts in the center of the diamond with his feet together. In quick succession, he jumps with feet together over the cone or pole to his left, back to the center, over the cone or pole to his right, back to the center, and then runs to the cone 10 yards in front of him.



# **Key Points**

- Keep your feet together.
- Use your arms to help balance.
- Land on the front part of the foot.
- Accelerate using the front part of the foot.

#### **Variations**

- **1.** Players perform jumps with their backs to the finishing cone, then turn and run facing forward.
- **2.** Players hop on one foot over the left cone, back to center, over the right cone, back to center, and then run forward. Repeat using opposite foot.
- **3.** Players roll, tumble, or perform a header while running to the finishing line.
- **4.** Each player performs a technical action at the finishing line. Technical actions could include passing to a designated player or taking a goal shot.
- 5. Each player receives the ball from a server (a designated player standing 10 yards past the finish line) and performs a technical action—volley, header, goal shot—at the finish line, then passes the ball back to the server.

### **Purpose**

Improve balance, foot speed, and foot coordination.

### Organization

Secure an agility ladder to the ground or floor. Groups of five to seven players form a line at one end of the ladder. Players go through the ladder performing specific exercises, then walk to the end of the line.

#### **Procedure**

The player steps to the left and just in front of the first rung of the ladder and goes through the ladder performing the following pattern: right foot inside, left foot inside, right foot outside, left foot inside, right foot inside, left foot outside, right foot inside, left foot inside, and so on (a).

### **Key Points**

- Concentrate on the correct pattern before speed.
- Use your arms to help balance.
- Increase foot speed as the pattern becomes easier to perform.

#### **Variations**

- 1. Players go through the same pattern, except backward.
- **2.** Players jump with two feet over the rungs of the ladder.
- 3. Players hop on one foot over the rungs of the ladder.
- 4. Players step over, step back, jump over, and then jump and hop over rungs of ladder (one and two footed). The players can perform the activity facing forward or backward. They go through the entire ladder hopping on two feet, then go through hopping on the right foot only, then on the left foot only.
- **5.** Players run through the ladder, lift their knees high, and allow both feet to touch the ground between each rung as they go through.
- **6.** Players move along either side of the ladder in a right-foot-in, left-foot-in, right-foot-out, left-foot-out, right-foot-in, left-foot-in pattern—two in, two out (forward and back).
- 7. Players start on the right side of the ladder and move through the ladder in a zigzag, right-foot-in, left-foot-in, right-foot-out, left-foot-out, right-foot-in, right-foot-in pattern—two in, two out (*b*).

