

# DISCUS DRILLS AND THROWING PROGRESSIONS

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# Drill #1 Non-Reverse Standing Throw Followed By a Reverse Standing Throw

- 1.) Feet are placed shoulder width apart with the left toe splitting the middle of the right foot.
- 2.) Thrower transfers 80% of bodyweight onto the ball of the right foot, with the torso rigid and hips under the thrower. Right toe should be pointing towards the 11.00 o'clock position in the ring with the back of the ring being 12.00 o'clock. (Show a big right leg)
- 3.) Thrower takes the Discus through a long circular motion that ends at a High Point about the 6.00 O'clock position. (Front of ring).
- 4.) The Discus will swing down to the low point (12.00 o'clock position) where the right foot, right knee, right hip begins its rotational motion. The right leg action is a strong turn and moderate lift at the finish of the throw. The eyes and head is level throughout the throw.
- 5.) The strong drive of the right hip at low point will cause separation between the hips and upper body creating a long whiplash like motion that will end in a release with the shoulders square to the field.
- 6.) The hand is flat at release with the thumb down on the discus. The discus rolls off the index finger causing the discus to spin clockwise. The left arm finishes level and holds the left side square at release. The discus is slapped towards the field rather than being lifted like the finish in the shot.
- 7.) The Non-Reverse Standing throw the right leg stays down in the middle of the ring. The Reverse standing throw that follows the Non-Reverse is the same movements except the right leg will replace the left leg at the front of the ring.

# Drill#2 Non-Reverse $\frac{1}{2}$ Turn or Triple $\frac{1}{2}$ Turn Followed By a Reversed $\frac{1}{2}$ Turn.

- 1.) Starting with the right foot in the middle with the right toe facing towards the left sector line and the left foot starting at the full throw starting position.
- 2.) The right foot will turn as the left pushes off slightly and is driven in a straight line to the power position in the front of the ring.(4 o'clock position)
- 3.) During the turn to the front the right arm is locked back and rises as the turn is performed. When the left foot grounds the discus should be between the 4-6 o'clock position.
- 4.)The discus will roller coaster down from the high point as the legs wait for the discus to arrive at low point. When the discus reaches low point the finish is identical to the standing throw.
- 5.) A triple  $\frac{1}{2}$  turn is simply turning to the front, then turning to the starting position, then turning to the front and making the throw. This drill develops good turning ability and left leg control.
- 6.) The Non-Reverse  $\frac{1}{2}$  turn throw the right leg stays down in the middle of the ring. The Reverse  $\frac{1}{2}$  turn throw that follows the Non-Reverse is the same movements except the right leg will replace the left leg at the front of the ring.

# Drill #3 Non-Reverse Giant Step Followed By A Reversed Giant Step

- 1.) This drill is designed to link the **back ½ of the throw to the front ½** of the throw. Many throwers can do a good stand or ½ turn but cannot come out of the back to get into the ½ position.
- 2.) While taking a straddle position in the back of the ring, the thrower pushes 80% of the bodyweight onto the left foot, knee, and hip. (Everything moves straight left)
- 3.) Right leg pushes off to start a wide leg turn. Left foot and right leg turns in unison until the right foot reaches the 10-11.00 o'clock position.
- 4.) The right leg then drives to the middle of the ring into the ½ turn position as the movement comes to a stop. The right foot is now in the middle with head up and the right leg well ahead of the upper body.
- 5.) After stopping in the middle in the ½ turn position, a normal non-reverse ½ turn throw is performed.
- 6.) The Non-Reverse Giant Step throw the right leg stays down in the middle of the ring. The Reverse Giant Step throw that follows the Non-Reverse is the same movements except the right leg will replace the left leg at the front of the ring.

# Drill #4 Non-Reverse Walking Throw Followed by a Reversed Walking Throw

- 1.) This drill is designed to coordinate the proper sequence of events at a slow motion speed so the thrower can feel all the actions that are happening in a full throw.
- 2.) The cues are **Turn**, (right leg to 10 o'clock position) **Step**, (drive inside of right knee pass the left leg to ½ turn position) **Turn**, (strong ½ turn to the front) **Throw** (finish with a good left side block) in that order. This drill also teaches the Shot Putter to drive across the ring in a straight line at a speed they can handle.
- 3.) This drill trains the legs to work the ring to place the body in a good position to finish the throw.
- 4.) The Non-Reverse Walking Throw the right leg stays down in the middle of the ring. The Reverse Walking Throw that follows the Non-Reverse is the same movements except the right leg will replace the left leg at the front of the ring.

# Drill #5 Touch and Go South African

- 1.) This drill is design to teach a **full speed, full motion** linear drive out of the back of the ring.
- 2.) The thrower turns the right leg to the 10-11 o'clock position then quickly touches and pushes forward off the ground with the right foot towards the direction of the throw. (The foot grounds just long enough to change directions.)
- 3.) This drill will develop the very important **right leg lead into the middle of the ring**. The body will also learn how to change directions and drive from the position they will actually be throwing from out of the back of the ring.
- 4.) Once the touch is made out of the back, this drill is very similar to a South African throw. I do not like the South African Drill by itself because throwers become to attached to the drill and do not learn how to throw the right leg forward out of he back rather then just pushing off the back with the right leg.
- 5.) This drill is also a good blending drill with a full throw or full non-reverse throw.

# Drill #6 Blending into a Full Competition Throw

4 types of Blending that I have found to work

- 1.) Non-Reverse Giant Step followed by a Full throw.
- 2.) Non-Reverse Touch and Go followed by a Full throw.
- 3.) Non-Reverse Full Throw followed by a Full Reversed Throw.
- 4.) Double Turn Throw followed by Full Reversed Throw.

# Drill #7 Double Turn Throw

- 1.) This drill is done to teach balance in the front of the ring and also trains good right side action into the release. Take off and land, take off and land and throw.)
- 2.) Turning into a second full move forces the legs to work into a finishing position. Moving into a second turn is very similar to the action the legs will follow when a proper release is being made.
- 3.) This drill works well at the end of a practice and used as a blending drill. It trains the legs not to lock up and finish smoothly towards the field.

# Example-High School Discus Practice

Drill	Throw #1	Throw #2	Throw #3
Non-Reverse Standing Throw Followed by a Reversed Standing Throw ( 6 throws)	Girls- 3-4lb Power Ball Boys-6-8lb Power Ball	Girls- 1.25k-1.5k Disc Boys- 1.75k-2k disc	Girls- .75k-1k Disc Boys-1.5k-1.62k Disc
Non-Reverse ½ Turn or Triple ½ turn Followed by a Reversed ½ Turn Throw.(6 throws)	Girls- 3-4lb Power Ball Boys-6-8lb Power Ball	Girls- 1.25k-1.5k Disc Boys- 1.75k-2k disc	Girls- .75k-1k Disc Boys-1.5k-1.62k Disc
Non-Reverse Giant Step Followed by a Reversed Giant Step. (6 throws)	Girls- 3-4lb Power Ball Boys-6-8lb Power Ball	Girls- 1.25k-1.5k Disc Boys- 1.75k-2k disc	Girls- .75k-1k Disc Boys-1.5k-1.62k Disc
Non Reverse Walking Throw Followed by a Reversed Walking Throw. (6 throws)	Girls- 3-4lb Power Ball Boys-6-8lb Power Ball	Girls- 1.25k-1.5k Disc Boys- 1.75k-2k disc	Girls- .75k-1k Disc Boys-1.5k-1.62k Disc
Touch and Go South African Throw (6 throws)	Girls- 1k Disc Boys- 1.62k Disc	Girls- 1k Disc Boys- 1.62k Disc	Girls- 1k Disc Boys- 1.62k Disc
<b>Blending into a Full Competition Throw</b> 1.) Non-Reverse Giant Step followed by a Full throw. 2.) Non-Reverse Touch and Go followed by a Full throw. 3.) Non-Reverse Full Throw followed by a Full Reversed Throw. 4.) Double Turn Throw followed by Full Reversed Throw.(6-12 throws)	Girls- 1k Disc Boys- 1.62k Disc	Girls- 1k Disc Boys- 1.62k Disc	Girls- 1k Disc Boys- 1.62k Disc

# Important Mental Concepts of the Discus Throw

- 1.) The discus throw is a rotational event but the coach should stress that the event is a  $\frac{1}{4}$  turn and a sprint. (Think and talk Linear)
- 2.) Right leg decides the direction of the throw. If the right leg is thrown towards the field the body will follow. (Right leg must win the race to the center of the ring)
- 3.) Left leg drive off the back decides the speed across the ring. (Get off the Back Quickly)
- 4.) Right leg must work the ring when contact is made in the middle of the ring. (Working the middle will account for about 90-92% of the throw)
- 5.) Range first, Speed second. Learning to be smooth and long will create more distance than fast, short and choppy. The discus thrower should try to see how far how easy they can throw everyday before they throw hard. (Heavy implements teach this quickly)
- 6.) Slap and Strike a discus out the front. The Discus hates lift. The Discus likes Horizontal energy. The height will come from the angle of the legs at the power position.
- 7.) Stand and Deliver. Many great moves across the ring end in a poor throw because a thrower, rips his head away from the throw and falls to the side. The throwers head should be level with level shoulders and the hips under the body at release.
- 8.) The discus requires patience. There is a lag time when the discus moves from high point to low point. Many throwers "Pull the Trigger " before the low point which usually results in a sector foul to the throwing side.
- 9.) There is a rhythm to good discus throwing. A thrower must find and establish their own personal rhythm.

# Training Tactics for the Discus Throw

- 1.) A folding table on its side blocking the left side of the ring will teach a thrower to drive linear out of the back of the ring.
- 2.) Throwing Cones, Bars, Power balls, Weight balls are all excellent ways for a thrower to feel the drag of the implement so they can learn to move the discus with the separation between the lower body and upper body.
- 3.) Blocking the left side of the throwing sector by closing down the cage door or by putting a barrier such as a table or ladder will teach a thrower to block and finish a throw without throwing the left side away. The discus needs to be struck to the field.
- 4.) Throwers must trust their feet when they throw. A non-throwing full move before a throw is excellent way to set up a throw. Many throwers want to watch their feet which causes a variety of technical problems.
- 5.) Throwers tend to change their technique when it comes time to throw in a meet. This is the fear of fouling. A table at the front of the ring will make the thrower comfortable at the front of the ring.
- 6.) A Discus thrower must learn to throw in all conditions. Tail Winds, Lefty winds, Right handed cross, Right  $\frac{1}{4}$  wind, Headwind, Rain, No wind, Cold, muddy circle, wet circle, rough circle, smooth circle and throw many different implements. I seen my wife make her first Olympic Team in Qualifying in a driving rain. The week before the meet I made her throw 2 days in the rain, this made the difference.

# Athletic Ability of Discus Throwers

- 1.) World Class Discus throwers are big decathletes. This is why many world class decathletes throw the discus so well. The USA has a decathlete that has thrown 186 in the discus which is more than his bodyweight.
- 2.) When I recruit, I look for Shot Putters that can throw the discus or discus throwers that are really shot putters. Discus throwers in most cases make very good weight and hammer throwers. A good shot putter with a poor discus I will not recruit.
- 3.) The type of athlete that makes a world class discus thrower are playing in the NBA. A tall, large frame, long wingspan athlete with great mobility is the type of athlete today that can throw 70 meters without the aid of drugs. However there are always exceptions to any body type for any event.
- 4.) Discus throwers tend to be better all-around athletes than world class shot putters. It is commonplace for World class male discus throwers to run between 4.4 and 4.9 40 yard dash, Standing Long Jump between 10.6 to 12.00 and have vertical jumping ability between 32-40 inches weighing between 250lbs-300lbs.
- 3.) World class women can run between 4.7-5.2 40 yard dash, Standing Long Jump between 9.6-11 feet, and have Vertical Jumping ability between 28-36 inches. Connie Price-Smith could run a 4.73 40 yard dash, Standing Long Jump 10.1, and had a 32 inch Vertical Jump.
- 4.) World Class Male Discus Throwers Strength Levels sit somewhere between 180k-230k for the clean, 130k-180k for the snatch, 300k-350k for a deep back squat, and 180k-250k for the bench press. However Discus throwers tend to be pound for pound just as strong as Shot Putters.
- 5.) World class Female Shot Putters Strength Levels sit somewhere between 125k-160k for the clean, 90k-130k for the snatch, 200k-300k for the squat, and 135k-200k for the Bench. Connie's Strength Levels were 130k x 3 Hang clean, 95K Hang Snatch, 220k back squat, 150k Bench Press and a 230k dead lift at 6.3 212lbs.
- 6.) The Discus is one of the hardest events in track and field to coach. A discus has to be rotational, linear, and release at a specific angle for the wind conditions of the day. There are many factors that can go wrong which makes it such a challenge to coach and predict.
- 7.) Discus throwers in general seemed to be more laid back people than Shot Putters.