

Technical Foundations of the Shot Put Beginning to Advanced

Foundational Thoughts – Glide & Rotational Techniques

Thoughts on Teaching the Shot Put

1. No absolutes
2. Style v. Technique
3. Whole athlete
4. Coach the Kid not the event

Key Biomechanical Principles of Throwing

1. Height of Release
2. Angle of Release: 40-42 degrees
3. Speed of Release: By far the most important

The “Lingo” – (for the right handed thrower)

1. Heal-Toe Relationship
2. Separation – Ball Back
3. Weight Back (over the right leg)
4. “X” Position
5. Block
6. Transferring weight
7. Lift
8. Getting over the left –rotation tech
9. Keeping the right side moving
10. Unseat

Glide Technique

The Grip

1. The shot is placed in the hand at the base of the fingers
2. The thumb and pinkie are used to stabilize the shot
3. The ball will be placed on the neck just above the collar bone.
4. Elbow/Hand Position

The Start

1. Dynamic v. Static
2. Setting up the start – hips over the right leg
3. Unseating
4. Use of right and left legs
 - a. “A” position

The Power Position

The power position is the delivery position of the throw.

Key Aspects of the Power Position

1. Heel/Toe Relationship
 2. Weight Distribution
 3. Shoulder/Hip Separation
 4. Block
 5. Lift
1. **Heel/Toe Relationship:**
 2. **Weight Distribution:** The weight of the athlete should be over the right leg
 3. **Shoulder/Hip Separation:** “Win the Race”
 4. **Block:** The left leg and left arm – create the POST.
 5. **Lift:** The aggressive turning of the right leg into the strong left side block will create a lifting action of the body

The Delivery

1. Win the race!
2. Free Arm
3. Head – focal point?
4. Squaring the hips and shoulders
5. Head Up Chest Up
6. Transferring the body weight
 - a. Use of both legs

The Reverse

1. Reverse v. Non-Reverse
2. Linear aspect of switching the feet.
3. Drop & bring it in!

Rotational Technique

The Grip

1. The shot is placed in the hand at the base of the fingers
2. The thumb and pinkie are used to stabilize the shot
3. The ball will be placed on the neck just above the collar bone...a little higher than the Glide
4. Once the ball is placed on the neck, the elbow will be up with the thumb down. Key!

The Set Up

1. Feet should be outside the hips – a good athletic base.
2. A slight bend in the trunk
3. Weight is evenly distributed between the feet.

The Start

1. A unitized left side is established
2. With a unitized left side – a “defensive pivot” is made to 90 degrees.
3. The shoulder and hips should stay level as the athlete moves to “set up the corner”.
4. The path of the right foot should be low and wide
5. Move the “bellybutton” (Center of Mass) – left!

Moving Out of the Back

1. A proper set up the left side out of the back of the ring is a must.
2. Controlling the left side rotation off the corner offers several technical advantages;
 - a. It will allow the athlete to establish early should hip separation
 - b. It will allow the athlete to effectively and efficiently move through the ring.
 - c. It will allow the athlete to properly load the left side
3. As the right leg begins to enter the ring the athlete should be attempting to “sprint”, “spring” or “get of the left leg”.
4. The timing off the left leg will be critical to a proper power position.
5. The path of the right leg is determined at the initiation of the throw.
6. The athlete should attempt to have a focal point down the right sector line or down the mid-line of the landing area.
7. The athlete should have their head up and chest up coming of the corner.
8. The athlete should be thinking of moving down a line through the middle of the ring.

The Flight Phase

1. Once the athlete drives off the left leg there will a momentary flight phase prior to landing in the middle of the ring.
2. The flight phase is created by driving forward off the left leg in conjunction with holding a “knee up, toe up” position of the right leg.
3. Maximizing the flight phase is critical to the continuity of the throw.
4. The athlete should attempt to squeeze the knees achieving a 90 degree angle of the left leg.
5. The right leg should have a sensation of always moving.
6. The right foot should be held in a “dorsi-flexed” position. (sprint position)

The Power Position

The power position is the delivery position of the throw.

Key Aspects of the Power Position

- a. Heel/Toe Relationship
 - b. Weight Distribution
 - c. Shoulder/Hip Separation
 - d. Block
 - e. Lift
1. Heel/Toe Relationship
 2. **Weight Distribution:** The weight of the athlete should be over the right leg – chest over the right leg.
 3. **Shoulder/Hip Separation:** “Win the Race”
 4. **Block:** The left leg and left arm will stop rotating ABRUPTLY.
 5. **Lift:** The aggressive turning of the right left into the strong left side block will create a lifting action of the body – much like the plant of the pole vaulter into the box.

The Delivery

1. The athlete must turn through the finish
2. The head should remain in a neutral position through the lifting action at the toeboard.
3. The athlete should have a sensation of throwing from the “ground up”
4. The last fingers to leave the shot should be the middle finger and index finger.
5. The thumb should be down and elbow up “behind the shot”.
6. The release should be a FLICKING ACTION.
7. The ball should be release beyond the toeboard – in a “Chasing Action” –

The Reverse

1. A true reverse will have the athlete leaving their feet at the point of release
2. Right side action will throw the athlete back into the ring.
3. As the athlete switches his feet he should attempt to lower his center of gravity and move all of his limbs to the center of the ring to avoid fouling the throw.

My Keys

Glide

1. The set up in the back – the start
2. Ball back – weight back
3. Up & Over the left

Rotation

1. Setting up the corner – a must!
2. Early Shoulder/Hip Separation
3. Turn & Lift!
4. Timing the arm strike – up and over!