



A Common Approach for High School Throwers

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Rotational vs Glide

Rotational

- More Horizontal Velocity
- Apply more force over a greater period of time
- Increased speed/momentum- opens the shot to throwers of modest strength and body weight
- I believe all throwers can rotate.. High School Time?
- Greater variations in training for rotation technique compared to the glide technique (e.g., technical drills)
- It is no coincidence that most of the top athletes in the world are using the rotation technique.. 10% vs 20% over power position
- Tension required when gliding can be counterproductive as opposed to the relaxed and more fluent movement of the rotation
- For the glide you need to be a bit "stiff" across the circle



Common Approach

- Coach Common areas in Shot and Discus
- Rhythm, Sequence of the throw, Force application
- Classroom...Physics of throw
- Understanding “Hips” and how important they are for success
- Purpose of Movement across ring- to get to the optimal power position with the shot accelerating continuously throughout the entire movement

Things to look and listen for with the Common Approach

As I go through the different aspects of throwing the shot or discus, pay attention to common—terms, positions, physical force applications, and verbal cues. I think the “common” areas are what makes athletes excel in each throw independently but should also allow for success in both throwing events.



Comparison

Shot	Discus
Hips must lead throw	Hips must lead throw
Ground up	Ground up
Right foot continue to turn	Right foot continue to turn
Must have separation between hips shoulders	Must have separation between hips shoulders
Must get stretch for reflex	Must get stretch for reflex
Must keep weight back on right side	Must keep weight back on right side
Must have rhythm throughout throw	Must have rhythm throughout throw



Shot

- Grip: 3 finger/4 finger
- Neck Placement: Glide or Rotational
- Power Position:
 - Left leg braced against toe board(bucket)
 - Right leg bent and under the hip
 - Right foot turned to 45-90 degrees
 - Up on the balls of feet
 - Shoulders closed, separation from hips
 - Straight line from left foot to head
 - No excessive bend in waist, eyes out of the back of ring

Movement from back of Ring

- Glide or Rotational

Force Application

- Force builds from ground up
 - Right foot
 - Right knee
 - Right hip
 - Right chest
 - Right shoulder
 - Right arm
 - Right hand



This will give a summation of forces into the implement, which should allow you to throw farther.

The Throw and Finish

- From the power position the right foot will continue to turn, the hips will be leading the way to the sector, the left are will sweep wide to maintain separation, and initiate the proper angle of release, when chest is fronting the sector. Left arm is violently brought to rig cage (slam door) so the right side can accelerate. Left side(heel) will brace to elevate the thrower so they can get a long finish on the throw. The thrower will switch feet or shift weight to save the throw.



5 Position Approach to Throwing Shot Put Rotational

Position 1

- Legs slightly bent, weight 60 to 70% percent on the left leg.
- Keep your posture upright, no bending at the waist
- Same rhythm for position each throw

Position 2

- Rotate the body to the South African Position. Open-Pick
- Head up, Posture tall, keep the left arm up and pointed to the direction of the throw. Door Frame

Position 3

- Left foot stays in the direction of the throw.
- Right leg ACTIVELY sweeps around the left leg, to the center of the ring.
- Slightly turn your right foot into the center of the ring, throwing the hip forward.
- Hold the left arm(wrap) and left shoulder tight, the less movement the better.



Position 4

- Hold the core tight with the shoulders back
- Right foot continues to rotate, on the ball of the foot.
- Snap the left leg down, and slam the left Heel to the ground at the front of the ring, not the toe.
- Keep the hips open but shoulders back.

Position 5

- Power Position
- Continue to turn the right foot, it will lead the throw, NEVER STOP turning the foot.
- Hold the left leg plant hard, and block the left arm.
- Don't Rush the Release stay through the throw.



Shot Put

2022 Workout

Outside Ring (cone, stick...left hand...)

Punch the ground with shot

Two hand releases

10 Right Foot(wheel) Lines (Track-Parking Lot-Concrete Slab) 10 South African

Rotation drills-(90,180,270,360...)

Inside Ring

1. Right Foot without shot—10 make sure you look to your Rt. (Focus Point) —stay on the ball of Rt. Foot—rotate right....
2. Right Foot with shot—10
3. Right Foot with shot and throw—10 make sure you punch shot—finish your throw.... non-rev.
4. South African without shot—10 two or three stops
6. South African with shot—10
7. Full throw--10--X Body Open pick sweep 2/3---Always finish your throws---Punch...

Keys to Drills:

Get in the Correct position-- Stay Tall and Relaxed

FINISH ALL THROWS

Keep knees apart

Count rhythm 1.....23

Relax Arms

If you cannot get into correct position —please go back to drills



Shot Put Glide

2022 Workout

Outside Ring (5-10 of each)

1. Toss hand to hand
2. Throw---up and catch with other hand
3. Flip up with hand
4. Roll/catch for hand placement
5. Punch to ground
6. Two hand punch ---step back---finish
7. Walk (3 steps) bend/press

Inside Ring (also Track, Parking Lot, Concrete Slab)

1. Touch (number 5) 5 times
2. Sit down 5 times
3. A-drill 5 times
4. Dry glides 5 times
5. Power throws 5
6. Power step thru 5
7. Full Throws 10-20

Number positions

1. Foot
2. Implement
3. Bend front leg
4. Down
5. Leg up
6. Sit down
7. Pull leg under (keep turning)
8. Finish (Tall---tower of Power)



Weight room

Season

Please load the bar heavy...always have a spotter

Please warm up before lifting.... warm up sets do not count towards sets

* Please rotate together

*** Only to be done on weeks without meets

Please do your abs routine everyday start with 1x15 then increase weekly

Core Strength

1.Side raises

2.Side raise knee bent

3.Froggies

4.Rt-Lt Cross Leg

5.Heels

6.Bent Leg Crunches

7.Ankle touches

8.Bent knee pull over

9.Single leg jackknifes

10.Wrist ups

11.Bicycles

12. Sit-ups

On non-lifting days please do general strength such as: push-ups, sit-ups, crunches, body squats, agility



	Feb 7-Mar 4	Mar 7-Apr 1	Apr 4-Apr 22	Apr 25-May
Monday				
SG high pulls	5x5	5,4,3,2,1	6x3	3,3,2,2,1,1,1
Front Squats	10,8,6,4	5x5	5,4,3,2,1	6x3
Incline Press	10,8,6,4	5x5	5,4,3,2,1	6x3
Flyes	4x12	4x12	4x12	4x12
Lawnmowers	4x12	4x12	4x12	4x12
Wednesday				
Plate Jumps*	4x10	4x10	4x10	4x10
Box Jumps*	4x10	4x10	4x10	4x10
Snatch	5x5	5,4,3,2,1	6x3	3,3,2,2,1,1,1
Split Push Press	5x5	5,4,3,2,1	6x3	3,3,2,2,1,1,1
Friday***				
SG High Pulls	5x5	5,4,3,2,1	6x3	3,3,2,2,1,1,1
Squats	10,8,6,4	5x5	5,4,3,2,1	6x3
DB Incline	4x15	4x12	4x10	4x8
Flyes	4x15	4x12	4x10	4x8
Bar Pulls	4x15	4x12	4x10	4x8

General Coaching Comments

- Perform drills with both your dominant & non dominant sides. This will assure that throwers don't overdevelop one side, creating an imbalance. This also helps the learning process since throwers are forced to learn a skill with their non dominant side.
- Use the more experienced athletes to work with the younger athletes (divide them up in groups). I have found this to be the best method to work with large groups. It teaches leadership and forces the group leaders to really understand the technique
- When working on technique focus on one thing at a time do not confuse athletes with multiple focuses. You as a coach may see many things but you do not need to point them out all at once.
 - It is easier to see what is wrong but more difficult to see the cause. Study & learn
 - Don't be afraid to ask for help. Both in your long term coaching (that's how I learned) or in your day to day coaching. Sometimes you can't see the forest for the trees.
 - For the best results blend drilling with full throws
- **If you want to get good at throwing you need to throw.**



- Your cues and how they interact with each individual athlete
- Front to back Approach
- Basic Physics approach. Applying as much force as possible to implement during the throw
- $\text{Force} = \text{mass} \times \text{acceleration}$ (Slow to fast What is meant by that)
- Only time we can apply force is when both feet are on the ground
- Height of Release
- Stretch reflex in the throw
- I teach no reverse while teaching technique, to apply as much force into implement as possible



FOR ALL THROWERS:
One rule: Always BE POSITIVE

No matter what circumstances life brings your way; deal with it in an adult manner.

Yes, we study video, lift, we drill, we throw, but we have to have you **understand what it takes to throw far.**

You have to be willing to sacrifice to achieve something **AMAZING** that only a very small few will ever have the ability to achieve, or even dream of.

The top Throwers and Coaches are ALWAYS GRINDING!!!!



The BEST always find a way to get it done!!!

Questions?

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