Special Strength, Speed & Flexibility for Shot Putting

Balanced Training
- Technique should be developed in unison with speed & strength
- All facets of training are developed together (speed, absolute strength, special strength, flexibility, and technique)
- How much is enough for each parameter?

Balanced Training

Breakdown in terms of time spent training
- 40% Throwing/Throwing Drills
- 35% General Strength/Special Strength
- 15% Running/Sprinting/Jumping
- 10% Agility/Flexibility
It is very important that the heavy implements. These exercises mimic the movement as closely as possible, in terms of acceleration patterns and movement speed. I personally use heavy shots for the stand throw for the spinners, and for the full movement for the gliders. It is very important that the heavy implements do not effect the throwing technique and timing. For this reason I am reluctant to use heavy implements for the rotational technique.
Special Strength Exercises

- Heavy Shots
  - Normal conversion: about 5 feet per every two pounds
  - Most common shots: 18lb for men and 10lb (4.5kg) for women
  - More important for training for gliders than spinners

- Standing Bar Twists
  - Keep at the level that the thrower will be when they are winding up and turning out the back of the ring

- Medicine Ball throws for height with jump in between
  - Use between 5-7kg medicine ball
  - No deceleration phase during extension of body unlike weight room exercises
Special Strength Exercises

- Side slings with medicine ball
- Keep feet off of ground
- Use 4-6kg medicine ball
- Work both sides equally

Special Strength Exercises

- Discus Twists
- Use dumbbell weights that allow you to do the movement comfortably (10-25lbs)
- Work both sides equally

Special Strength Exercises

- Oblique Leg Roll
- Work both sides equally
- Many different variations to this exercise
Special Strength Exercises

- Oblique Leg roll with medicine balls
  - Use 2kg med ball over head and 3kg med ball between legs

Trunk Rotations

- Work both directions equally
- There is usually a weak side and a strong side when you start out

Running, Sprinting & Jumping

- "20 Minutes of Hell"
  - Got it from Jud Logan
  - Run 50, walk 100 for specified period of time
Jump Tests

- **Abalakov Test**
  - A steeper line may imply a greater benefit to further weight training

- **Standing Long Jump**
  - Results will vary based on height of individual.
  - Generally for male international level throwers, jumps over 3.50m are excellent, over 3.30m is very good, and over 3.20m is good.
  - For female throwers, over 3.00m is excellent, over 2.90m is very good, and over 2.80m is good.
  - Examples: Adam Nelson 3.25m, Brad Snyder 3.25m, Brian Miller 2.95m, Teri Steer 2.98m, Lieja Tunks 3.02m

- **Vertical Jump**
  - A very good test to measure training fatigue (overtraining).
  - Sargent Jump using Vertek.
  - For international level male throwers, over 90cm is excellent, over 80cm is very good, and over 75cm is good.
  - For international level female throwers, over 75cm is excellent, over 70cm is very good, and over 65cm is good.
  - Examples: Adam Nelson 94cm, Brad Snyder 82cm, Brent Noon 81cm, Reese Hoffa 75cm, Werner Gunthor told me he could do 110cm, Teri Steer 68cm.
Running, Sprinting & Jumping

- Stair sprints & Jumps
- Hill Sprints
- Short sprints (20m-50m)
- Short sprints with resistance (sleds)
- "Long" Sprints (100m-150m)
- Hurdle Jumps (forward & zig-zag)
- Box Jumps

Special Strength Exercises

- Trunk Rotations around stick
- Perform facing up and facing down
- Both clockwise and counter-clockwise
- Weight vest can be added

Agility & Flexibility

- Hurdle Circuits
- Walk-throughs
- 180-degree walk-throughs
- Over-unders
- Zig-Zag/over-unders
Agility & Flexibility

- Agility Circuit (with bleed into sprint)
- High Knees
- Butt Kicks
- Straight Legs
- Carioca
- Side Shuffle (with arm circles)
- Forward skip (with arm circles)
- A-Skip
- B Skip
- Backward Skip (with arm circles)
- Skip with instep touch
Agility & Flexibility

- One-legged Jumps in Place
- Very advanced jumping drill