

## SEATED THROWS-SHOT PUT

### *Throwing Chairs*

Throwing chairs come in a multitude of designs developed by athletes for their particular needs. So how do I decide if I need a throwing chair and what should that chair look like? The International Paralympic Committee (IPC) does have some basic rules pertaining to the construction of chairs—a chair cushion top may not be higher than 75 cm. 75 cm was chosen as that is the typical height of the hips of a thrower. The chair may not have any moving parts or articulating joints. The seat of the chair has to be square or rectangular with a minimum of 30cm (12 inches) in length and width. The seat must be flat or sloped backwards. (The revised Rule 35.1(2014) is at the end of this document).

Some considerations regarding throwing chairs:

1. Can the athlete stand with good balance? Can they shift their weight from the back leg to the front leg and stay balanced?
  - If so, a chair may or may not be needed and the athlete can compete in the ambulatory division.
2. Does the athlete have use of their legs?
  - If yes, the chair will need a place for the athlete to place their feet (either a footplate or a strap to secure the legs to the chair frame or both). This may be advisable even if the athlete can not use their legs to provide a base of support for the throw.
3. Does the athlete have use of their abdominal muscles?
  - If yes, a holding bar is not needed
  - If yes, a leg bar may be needed (a bar that goes over the leg in the seated position) to provide stability
  - If no, the athlete will need support to prevent them from falling out of the throwing chair (a back or holding bar maybe needed). The holding bar will allow an athlete to pull themselves into position for the release of the implement.
4. Is the athlete a “high” leg amputee?
  - If yes, the athlete may need to be seated
5. How the athlete will sit to throw—facing forward, sideways or split seat, will help determine if the seat required is a rectangular or square



## MAJOR IPC RULE CHANGES IN 2014

The athlete has until 12/31/14 to determine if they will be a standing athlete or a seated athlete. After that date, the classifiers will determine whether the athlete can be an ambulatory (standing) or seated thrower.

**Athlete must sit so that both legs are in contact with the seat surface from the back of the knee to the back of the buttock (Ischial Tuberosity).**

- **Sitting position must be maintained throughout the throwing action until throw marked.**
- **Strapping of the legs and hips is encouraged.**
- **The rule changes are being made to minimize the contribution of the legs**
- **Athlete starts trial from stationary seated position**
- **Athlete can not touch straps outside the ring**
- **The throw is considered a failure if athlete moves from the seated position from the time the athlete takes the implement into the starting position of trial until the throw has been marked**

### ***1. Holding the Shot***



The shot is really not held. The shot rest on the base of the fingers with the thumb and the little finger providing the lateral support and the other three fingers spread out over the surface of the shot or together depending on the size of the shot in relationship to the size of the hands or the capability of the hands. Cerebral Palsy athletes and F52 who have limited use of their fingers may actually rest the shot in the palm and on their curled up fingers.

### ***2. Shot against the neck***

In the photograph, you can see that the shot is nestled up against the neck with the thumb down. This is a key teaching point—thumb is down and touches the collarbone. The shot is pressed firmly against the neck just under the jaw. The wrist is “cocked”. As the coach, you will see this position from the front.



Figure 2

### 3. *It's a put, not a throw*

Again, looking at Figure 2, you notice that the elbow is up and that you see a 90 degree angle between the throwing arm and the body. If the elbow drops down, the athlete has a tendency to throw the shot, much like a baseball. A beginning thrower may get some distance doing this, but the possibility for injury is high, plus it is against the rules. The thumb remains down throughout the course of the throw.



### 4. *Flexibility and torque*



Figure 3

The athlete is facing backwards from the direction of the throw. The objective is to use speed and torque (twisting action) along with the transference of weight from back to front to apply force to the shot.

This position is limited by a number of issues for the seated thrower. The rules require contact with the seat from the back of the buttocks to the back of the knee throughout the throw until the official marks the distance.

Athletes that have abdominals will be able to get the shoulder rotation as in figure 3, but must remain in contact with the seat. Flexibility in either case is very important for the seated thrower.

Athletes without abdominals may not be able to get as much shoulder rotation and may look more like the photo. The arm that is in the "read the watch" position (left arm) may actually have to be holding on to the bar, but as you read this start thinking about the height of the holding bar and how to design the chair so that the bar does not interfere with the action of the non-putting arm (left arm the figures above). This requires a great deal of trunk flexibility and strength to get into the proper position.

### 5. *Lead with the elbow*



Ideally, you want the shot to stay back as long as possible. In this sequence you are opening up your chest and starting the throw. The left arm is now leading upwards with the elbow.

Notice that it is almost a straight line from the tip of the left arm to the shot. The body is now facing sideways to the direction of the throw. The shot is still close to the neck. The athlete should be thinking about lifting the shot straight up.

### **6. Start the block**



The left arm started the upper body moving up and now is going to be used to help turn the chest toward the front of the ring. The athlete should feel a real “stretch” of the chest in this position. The right shoulder and the shot are now starting to move—sequence is led with the elbow of the blocking arm (left side), once elbow is at it’s highest position shot follows. In the seated throws, the speed of this action is one of the most critical factors for success.

### **7. Block**

This action is like slamming a door shut. The speed of the left arm builds as you drive the left elbow down and close to the chest. Then like a door jamb is stops the left side and the right side accelerates with the shot.



Or another description--The left arm moves fast and is held in tight to increase the speed and then we want to transfer that speed to the right side of the body and the shot, so we stop the left side. The athlete can think about driving their chest to the left arm or keeping their chest up—pointing toward the sky.

The throw has begun with the shot coming away from the neck. Notice that the throwing arm is still at a 90 degree position to the body.

### **8. Strike**



The body is now facing the direction of the throw, the throw is up and it is very, very explosive action. This is a quick punch with the shot. The thumb is still in a down and the little finger is up. The throwing arm wrist is leading the shot. The chest remains up.

### **9. Finger Flick**

The last action applied to the shot is a finger flick. The wrist is leading the shot until the last minute when the fingers push the shot up and forward with a forceful flick of the fingers.

