

**Transition Sequence**

2

4

3

1

Correct Order

1

2

3

4

**Peak Speed Sequence**

1

2

3

4

Correct Order

1

2

3

4

**Peak Speeds**  
Degrees Per Second

710

1048

1177

1573

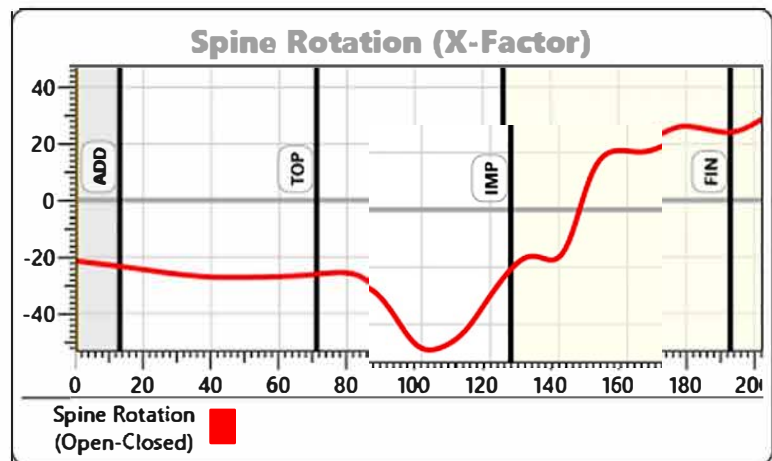
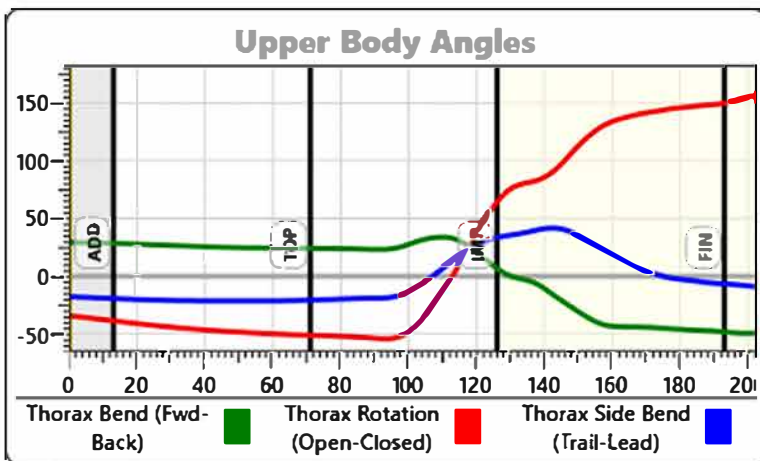
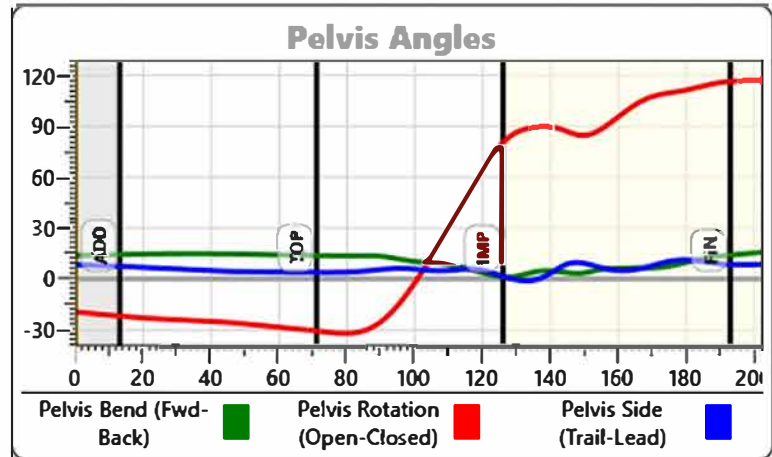
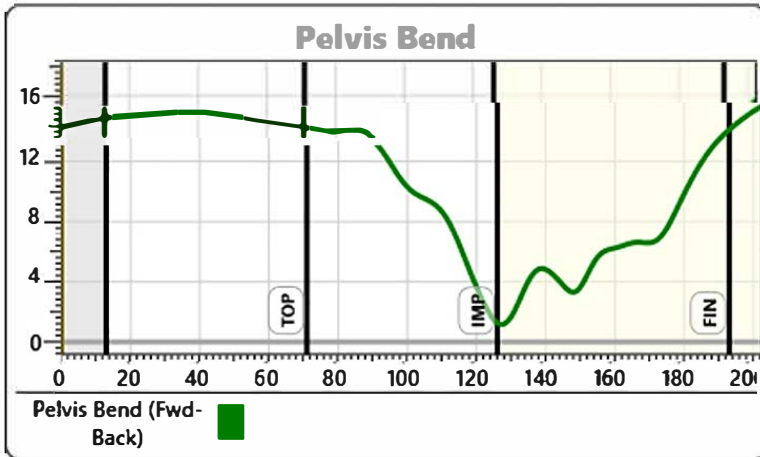
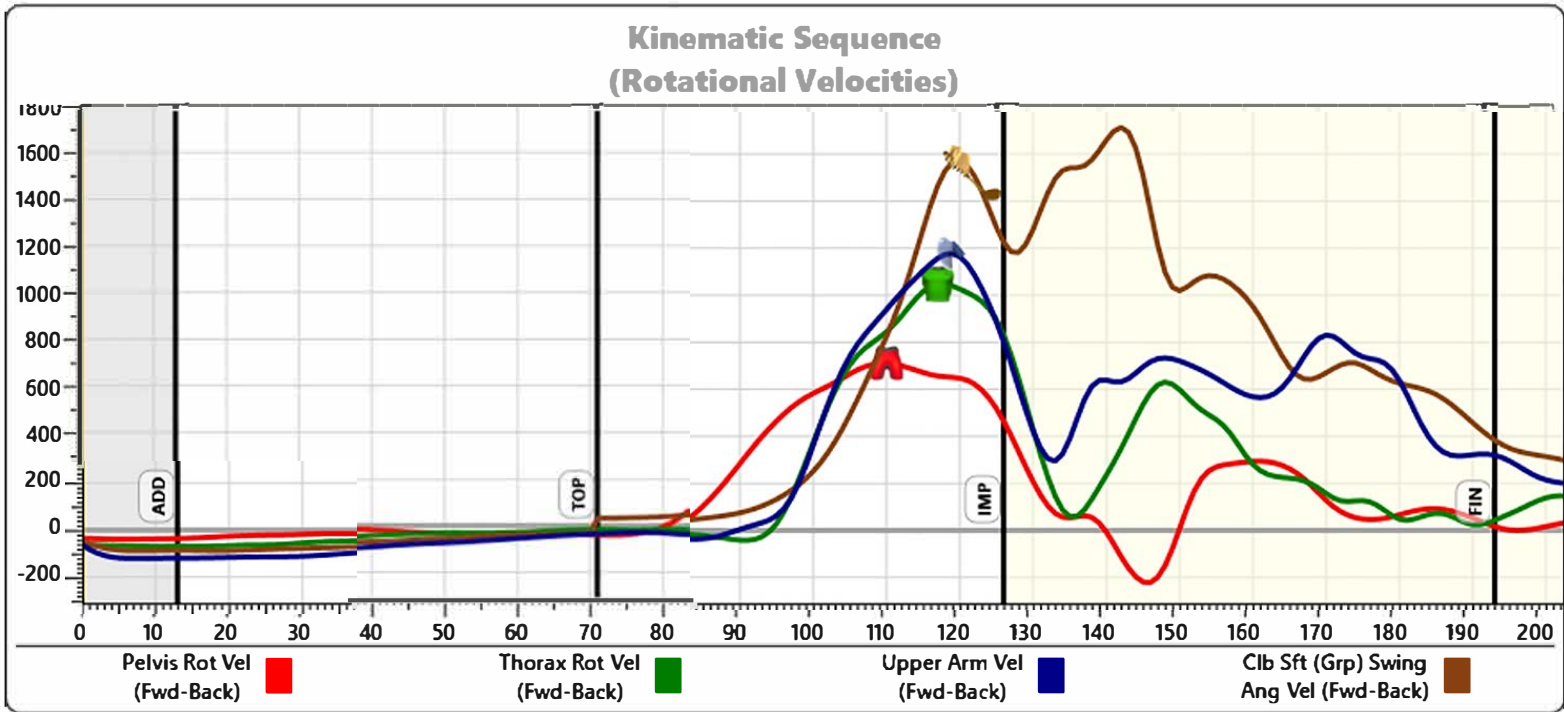
Ranges

420-510

650-720

975-1080

1600-1850



# Motion Analysis Summary

## Motion Analysis:

**Summary:** Review of the hitter's motion analysis indicates an efficient transfer of energy from the initiation of the swing into impact. The sequencing of his body segments from Top to Impact are in the correct order. The order for the efficient transfer of speed to the bat is as follows: 1. Pelvis - Red, 2. Thorax (Torso) - Green, 3. Composite Arm (Lead Arm) - Blue, 4. Bat - Brown. This sequence stays in-tact into the impact position.

The Peak Speed Sequence into the impact position is in the correct order (1. Pelvis - Red, 2. Thorax - Green, 3. Composite Arm - Blue, 4. Bat - Brown). Peak speed of the Pelvis is excellent though areas do exist within the swing where greater efficiency could result in a more consistent and powerful swing. Initially the transition of energy from Pelvis to Thorax could improve with a more proficient Posterior Tilt of the Pelvis. The Side Bend of the pelvis will move from an anterior position in the stance to an increased anterior tilt in the load phase of the swing, and a posterior or negative number into impact. Vin's pelvis moves to approximately a + 4 position at impact. This number moving closer to zero or negative would provide a better translation of the pelvis (lower body) energy into the thorax.

Secondly, greater separation (X-Factor Stretch) between the pelvis and thorax would provide the potential for more speed generation. An average of 40 degrees of separation is a good number. Currently approx. 30 degrees is present. This differentiation is most likely physically based and can be improved once the athlete becomes stronger.

The separation of the composite arm and thorax could improve. The sequencing is correct though the amount of energy translated could be increased. Physical assessments will provide information on if this is physically or mechanically based. Final analysis indicates a greater separation could occur between composite arm and hands/bat. Typically, this finding on the graph indicates the athlete is rolling the hands over and can be corrected with appropriate instruction.

Overall a good kinematic sequence with some areas to improve. Completion of the FCS assessment findings will provide information on whether areas of improvement are required physically or mechanically to improve the speed generation and overall consistency of the swing.