

Pitch Speed Comparisons – Baseball vs Fastpitch Softball

** Did you know that at the top pitch speeds in each sport, Fastpitch Softball hitters have less time to decide, react, and implement their swing when compared to their baseball counterparts?

** Take 2 of the top flamethrowers in each sport - for example - Jonathon Papelbon of the Red Sox and Adam Folkard of Patsy's, and match them up against a top hitter from each - Miguel Cabrera of the Tigers and Donnie Hale of the Farm. Cabrera has 0.413 seconds to hit a 4-seam fastball thrown at 100 mph, and Hale has 0.369 seconds to put the barrel on a drop ball coming in at 85 mph. Neither one of those times are very long, but comparatively, Cabrera has about a 10% advantage, in terms of time, to hit.

** At every notch on the velocity dial, Baseball hitters have more time to react than Fastpitch Softball hitters.

** For speeds on the Women's side of the sport, their hitters still have more time than the Men. The extra distance between home plate and pitcher's mound between the Men's and Women's game is offset by the increased velocity that the men are capable of.

** The closest comparison, by reaction time, between Men's fastpitch softball and baseball is a 100 mph pitch in baseball (0.413 seconds to react) and a 75 mph pitch (0.418 seconds to react) in softball. Looking at the results from a variety of the radar guns at softball parks over the years, there are guys who maintain 75 mph for an entire game. The flamethrowers in MLB are typically the closers and only reach triple-digits for one inning at a time.

** There is almost an exact match between reaction times with the Men's game to the Women's game. However, the speed of that pitch for Women is close to the hardest pitch they throw (70 mph – 0.419 seconds), while a 75 mph pitch from the Men (which gives a 0.418 reaction time) is a few notches below the top velocities they can reach.

** Bottom line? When it comes to making quick decisions in the batter's box, the hitters at the ISC are (split) second to none.

The tables below give a range of pitch speeds for each sport. While there are differences in the top speeds in each sport, the generally accepted numbers of 100 mph, 85 mph, and 70 mph are pretty close to the top velocities in each. There will be outliers to the ranges in certain circumstances.

Baseball (60 feet, 6 inches)		Fastpitch Softball–Men(46 feet)		Fastpitch Softball–Women (43 feet)	
Speed of Pitch (MPH)	Reaction time to make contact (seconds)	Speed of Pitch (MPH)	Reaction time to make contact (seconds)	Speed of Pitch (MPH)	Reaction time to make contact (seconds)
60	0.688	60	0.523	45	0.652
70	0.589	65	0.483	50	0.586
80	0.516	70	0.448	55	0.533
90	0.458	75	0.418	60	0.489
95	0.434	80	0.392	65	0.451
100	0.413	85	0.369	70	0.419

NOTE: The formula for reaction times converts the speed of the ball and the distance from the plate, into the amount of time it will take the ball to cross the plate.

The following pitch speeds were gathered during the 2009 ISC World Tournament - we weren't able to get all the pitchers, but most of the big names are on the list. Not a big surprise that Adam Folkard and Sean Whitten top the list. Most hitters and fans would agree that these two are the hardest throwers in the game today. (Please note that these speeds are snapshots from specific instances within the week of the ISC. They are not averages. Also, most radar guns have a +/- of about 2 MPH - one important takeaway from this list is the relative standing from top to bottom.)

<u>First</u>	<u>Last</u>	<u>Team</u>	<u>Drop</u>	<u>Rise</u>	<u>Change</u>
Adam	Folkard	Broken Bow	83	76	64
Sean	Whitten	Midwest Stampede	83	79	60
Lucas	Mata	Aspen	80	74	56
Andrew	Kirkpatrick	Broken Bow	78	72	64
Jeremy	Manley	Pueblo	78	75	60
Grant	Patterson	Kitchener	78	74	54
Don	Scott	Kitchener	78	77	57
Brian	Urquhart	Midland	78	66	53
Mitch	Hardy	Kegel	77	73	43
Todd	Martin	Kitchener	76	74	54
Marty	Grant	Vancouver	76	74	58
Dean	Holoeln	Kitchener	75	74	NA
Frank	Cox	The Farm	76	74	63
Bryan	Newton	NY Gremlins	75	75	51
Darcy	Byrne	Kegel	75	NA	56
Todd	Martin	Kitchener	74	73	
Trevor	Ethier	Aspen	74	72	NA
Rick	Smith	Aspen	74	71	NA
Doug	Gillis	Dolan & Murphy	74	68	51
Sean	Kelly	Midland	74	68	54
Jeff	Farion	Saskatoon Diamondbacks	74	68	NA
Sebastian	Gervasutti	California A's	74	73	60
Bill	Hillhouse	NY Gremlins	73	69	53
Dave	Drotzmann	California A's	73	62	53
Travis	Price	Vancouver	73	68	41
Ward	Gosse	St. Thomas	73	68	55
Ales	Jetmar	Dolan & Murphy	72	69	53
Rob	O'Brien	Dominian Republic	72	71	54
Jeff	Wilson	Ashland Mets	70	68	58