

WEDNESDAY, MARCH 13 2013 SAFETY PRESENTATION
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Safety in the Woodshop

What do pitching machines and woodworking tools have in common?



Pitching Machine Specifications
Machine Weight: 110 lbs.
Speed Range: 30-100 mph
Fastballs: Yes
Breaking Balls: Yes
Pop Ups: Yes
Line Drives: & Grounders: Yes

Blade Tip Speeds, MPH				
Tool	Bit/Blade Diameter	RPM		
		3450	13000	23000
Router	1"		39	68
Router	2"		77	137
Shaper/Router	4"	41	155	
Table Saw	10"	103		
Radial Arm Saw	12"	123		
Blade Tip Speed in MPH				
At 100 MPH a pitch takes 0.4 seconds to travel 60 feet				
At 100 MPH, wood takes 0.07 seconds or 6 milliseconds to travel 1 foot				
Do you have time to react?				

Wood thrown out of a wood working tool is analogous to a pitching machine. The moving blades accelerate the wood at the speed of the tip speed of the blade.

How can wood be thrown out of tool? Avoid these actions

- Table saw: kickbacks and not controlling the wood between the fence and the blade
- Radial arm saw: used for ripping small pieces of wood
- Router: by pushing wood between the blade and the fence
- Shaper: by pushing wood between the blade and the table

Relative Times to React:

- At 100 MPH a pitch takes 0.4 seconds to travel 60 feet
- At 100 MPH, wood takes 0.007 seconds or 6 milliseconds to travel 1 foot

Do you have time to react?