

02-11-13

Feed Motor Measurements

Elite Model 3

			125 Balls in Hopper		0 Balls in Hopper		RPM
Dial Setting	PWM Duty Cycle (%)	Motor Voltage (V)	Motor Current (A) Note 1	Seconds Per Ball	Motor Current (A)	Seconds Per Ball	
Fastest	100	12.8	0.55-0.80	1.6	0.26	1.5	10
2	92	12.0	0.55-0.80	1.7	0.25	1.6	9.4
4	80	10.6	0.45-0.75	2.1	0.24	1.9	7.9
6	69	9.0	0.45-0.75	2.4	0.23	2.3	6.5
8	59	7.4	0.45-0.75	3.0	0.22	2.8	5.4
10	47	6.4	0.35-0.60	4.3	0.21	3.6	4.1
12	35	4.0	0.35-0.60	6.4	0.19	5.3	2.8
Slowest	24	3.0	0.35-0.60	11.0	0.18	7.7	1.9

Note 1: When hopper is filled with 125 balls, motor current is very inconsistent due to the stirring of the balls.

Note 2: Hopper spec is 160 balls max, but I test with 125 for in-office testing to alleviate balls going over edge and potentially damaging other equipment.