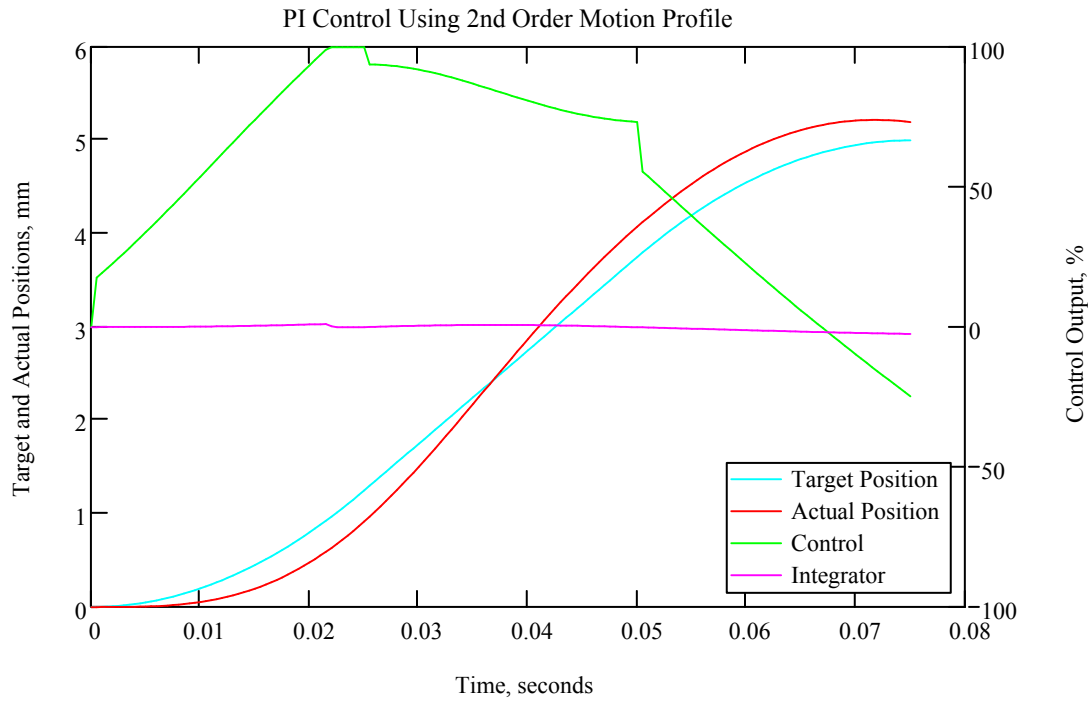


Compare Motion Profiles and Closed Loop Control

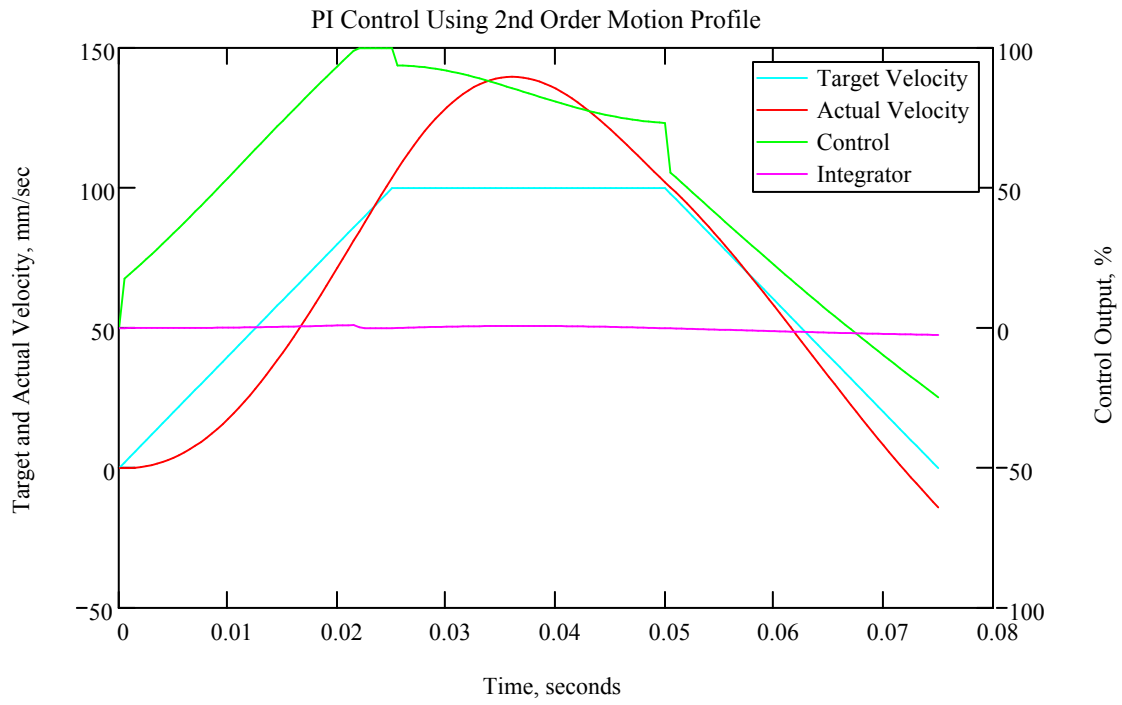
PI with Velocity and Acceleration Feedforwards



$$\sum_n \left[(r_n)_0 - (x_n)_0 \right]^2 = 9.749379$$

$K = 1.2$	$\zeta = 0.333333$	$\omega_n = 125.663706$	Open loop parameters
$K_i = 314.771334$	$K_p = 31.028076$		Closed loop gains
$K_v = 0.833333$	$K_a = 0.004421$		Feedforwards

Compare Motion Profiles and Closed Loop Control



Notice that the velocity lags then over shoots the target when the ramps change.