

## Mecanismos – Tabelas para Curvas de Elevação

CURVA	Deslocamento	Velocidade	Aceleração	Jerk
Velocidade Constante	$\frac{h}{\beta}\theta$	$\frac{h}{\beta}$	0	0
Parabólica	$\frac{h}{\beta}\theta^2$ $0 \leq \theta \leq \beta_a$	$\frac{2h}{\beta}\theta$	$\frac{2h}{\beta\beta_a}$	0
	$h - \frac{h}{\beta}\theta^2$ $\beta_a \leq \theta \leq \beta$	$\frac{2h}{\beta}(\beta - \theta)$	$-\frac{2h}{\beta\beta_b}$	0
Dupla Cúbica	$\frac{4h}{\beta^3}\theta^3$ $0 \leq \theta \leq \frac{\beta}{2}$	$\frac{12h}{\beta^3}\theta^2$	$\frac{24h}{\beta^3}\theta$	$\frac{24h}{\beta^3}$
	$h - \frac{4h}{\beta^3}(\beta - \theta)^3$ $\frac{\beta}{2} \leq \theta \leq \beta$	$\frac{12h}{\beta^3}(\beta - \theta)^2$	$-\frac{24h}{\beta^3}(\beta - \theta)$	$\frac{24h}{\beta^3}$
Cúbica	$\frac{3h}{\beta^2}\theta^2 - \frac{2h}{\beta^3}\theta^3$	$\frac{6h}{\beta^2}\theta - \frac{6h}{\beta^3}\theta^2$	$\frac{6h}{\beta^2} - \frac{12h}{\beta^3}\theta$	$\frac{12h}{\beta^3}$
Harmônica Simples	$\frac{h}{2}(1 - \cos \frac{\pi}{\beta}\theta)$	$\frac{h\pi}{2\beta} \sin \frac{\pi}{\beta}\theta$	$\frac{h\pi^2}{2\beta^2} \cos \frac{\pi}{\beta}\theta$	$-\frac{h\pi^3}{2\beta^3} \sin \frac{\pi}{\beta}\theta$
Dupla harmônica	$\frac{h}{2} \left[ \left(1 - \cos \frac{\pi}{\beta}\theta\right) - \frac{1}{4} \left(1 - \cos \frac{2\pi}{\beta}\theta\right) \right]$	$\frac{h\pi}{2\beta} \left[ \sin \frac{\pi}{\beta}\theta - \frac{1}{2} \sin \frac{2\pi}{\beta}\theta \right]$	$\frac{h\pi^2}{2\beta^2} \left[ \cos \frac{\pi}{\beta}\theta - \cos \frac{2\pi}{\beta}\theta \right]$	$\frac{h\pi^3}{2\beta^3} \left[ 2 \sin \frac{2\pi}{\beta}\theta - \sin \frac{\pi}{\beta}\theta \right]$
Cicloidal	$h \left( \frac{\theta}{\beta} - \frac{1}{2\pi} \sin \frac{2\pi}{\beta}\theta \right)$	$\frac{h}{\beta} (1 - \cos \frac{2\pi}{\beta}\theta)$	$\frac{2h\pi}{\beta^2} \sin \frac{2\pi}{\beta}\theta$	$\frac{4h\pi^2}{\beta^3} \cos \frac{2\pi}{\beta}\theta$