

## Using Variable Costs per Unit for Cost Planning with Non-Linear Cost Functions

$x := 0..150$

$x_0 := 100$

$C_f := 6000$

$$C(x) := C_f + 0.2 \cdot x^2$$

$$c_v(x_0) := \frac{C(x_0) - C_f}{x_0}$$

$$C_p(x) := C_f + c_v(x_0) \cdot x$$

Legend:

$x$  = Quantity of output

$x_0$  = Starting point

$C_f$  = Fixed costs

$C$  = Total costs

$c_v$  = Variable costs per unit

$C_p$  = Planned costs

