

$$initialwidth1 := 21.5 \quad 21.5 \quad (1)$$

$$width := 120 \quad 120 \quad (2)$$

$$t := 6 \quad 6 \quad (3)$$

$$k := \frac{width}{21} \quad \frac{40}{7} \quad (4)$$

$$initialwidth2 := 21.5 \cdot (-0.932383382035580 + 0.924051012569408 k - 0.0826055972634362 k^2) \quad 35.48752366 \quad (5)$$

$$slope := -0.203087262576613 + 0.745446600560169 \cdot k \quad 4.056607598 \quad (6)$$

$$x21 := solve(slope \cdot (x - 21.5) + initialwidth1 = width, x) \quad 45.78137246 \quad (7)$$

$$x22 := solve(slope \cdot (x - 21.5) + initialwidth2 = width, x) \quad 42.33328848 \quad (8)$$

$$A1 := piecewise(x < 21.5, initialwidth1, x \geq 21.5 \text{ and } x < x21, slope \cdot (x - 21.5) + initialwidth1, x \geq x21, width) \quad \left\{ \begin{array}{ll} 21.5 & x < 21.5 \\ 4.056607598 x - 65.71706336 & 21.5 \leq x \text{ and } x < 45.78137246 \\ 120 & 45.78137246 \leq x \end{array} \right. \quad (9)$$

$$A2 := piecewise(x < 21.5, initialwidth2, x \geq 21.5 \text{ and } x < x22, slope \cdot (x - 21.5) + initialwidth2, x \geq x22, width) \quad \left\{ \begin{array}{ll} 35.48752366 & x < 21.5 \\ 4.056607598 x - 51.72953970 & 21.5 \leq x \text{ and } x < 42.33328848 \\ 120 & 42.33328848 \leq x \end{array} \right. \quad (10)$$

$$\#width40 \quad d1 := int\left(\frac{15511.5}{205000 \cdot A1}, x = 0 .. 80\right) \quad 0.1961724989 \quad (11)$$

$$d2 := int\left(\frac{15511.5}{205000 \cdot A2}, x = 0 .. 80\right) \quad 0.2877474829 \quad (12)$$

$$\#width60 \quad d1 := int\left(\frac{26021.8}{205000 \cdot A1}, x = 0 .. 80\right) \quad 0.2760370515 \quad (13)$$

$$d2 := int\left(\frac{26021.8}{205000 \cdot A2}, x = 0 .. 80\right)$$

$$\begin{aligned} & \text{\#width80} & 0.2705535297 & (14) \\ d1 & := \text{int}\left(\frac{33096.8}{205000 \cdot A1}, x = 0 \dots 80\right) \end{aligned}$$

$$\begin{aligned} & 0.2921780309 & (15) \\ d2 & := \text{int}\left(\frac{33096.8}{205000 \cdot A2}, x = 0 \dots 80\right) \end{aligned}$$

$$\begin{aligned} & 0.2156236362 & (16) \\ \text{\#width100} \\ d1 & := \text{int}\left(\frac{39358.8}{205000 \cdot A1}, x = 0 \dots 80\right) \end{aligned}$$

$$\begin{aligned} & 0.3474588685 & (17) \\ d2 & := \text{int}\left(\frac{39358.8}{205000 \cdot A2}, x = 0 \dots 80\right) \end{aligned}$$

$$\begin{aligned} & 0.2564201847 & (18) \\ \text{\#width120} \\ d1 & := \text{int}\left(\frac{42879.2}{205000 \cdot A1}, x = 0 \dots 80\right) \end{aligned}$$

$$\begin{aligned} & 0.3574695603 & (19) \\ d2 & := \text{int}\left(\frac{42879.2}{205000 \cdot A2}, x = 0 \dots 80\right) \\ & 0.2551967977 & (20) \end{aligned}$$