

DATOS

Calcular la representación simplificada de los dos engranajes

$$Z_1 = 8$$

$$Z_2 = 18$$

$$\text{Módulo} = 2,5$$

Conductor

$$D_p = m \cdot Z$$

$$D_p = 2,5 \cdot 8$$

$$D_p = 20"$$

$$D_e = 25"$$

$$D_e = 15$$

$$D_e = 20 - 2 \cdot 2,5$$

$$P = 31,4$$

$$P = \pi \cdot d$$

$$D_e = d - 2 \cdot m$$

$$\text{Altura de diente.}$$

$$h = 2,1 \cdot h$$

$$h = 5,6$$

Adendum

Dedendum

$$a = m$$

$$b = 1,85 \cdot m$$

$$a = 2,5$$

$$b = 3,12$$

Conducta

$$D_e = m \cdot (Z + 2)$$

$$D_e = 2,5 \cdot (8 + 2)$$

$$D_p = 45$$

Altura del diente

$$h = a + b$$

$$h = 2,5 + 3,12$$

$$h = 5,6$$

Datos

$$Z_1 = 12$$

$$Z_2 = 16$$

$$m = 3$$

Conductor

$$D_p = m \cdot Z$$

$$D_p = 3 \cdot 12$$

$$D_p = 36$$

$$D_e = m \cdot (Z + 2)$$

$$D_e = 3 \cdot (12 + 2)$$

$$D_e = 42$$

$$D_p = d - 2 \cdot m$$

$$D_p = 36 - 2 \cdot 3$$

$$D_p = 30"$$

Adendum

$$a = m$$

$$a = 3$$

Dedendum

$$b = 1,25 \cdot m$$

$$b = 3,75$$

Altura del diente

$$h = a + b$$

$$h = 3 + 3,75$$

$$h = 6,75$$

Conducta

$$D_p = m \cdot Z$$

$$D_p = 3 \cdot 16$$

$$D_p = 48$$

$$D_e = m \cdot (Z + 2)$$

$$D_e = 3 \cdot (16 + 2)$$

$$D_e = 54$$

$$D_p = d - 2 \cdot m$$

$$D_p = 48 - 2 \cdot 3$$

$$D_p = 42$$

Adendum

$$a = m$$

$$a = 3$$

Dedendum

$$b = 1,25 \cdot m$$

$$b = 3,75$$

Escala

$$2:1$$

$$h = 3 + 3,75 = 6,75$$

$$h = a + b$$

Altura de diente

$$D_p = 48$$

$$D_p = 3 \cdot 16$$

$$D_e = m \cdot (Z + 2)$$

$$D_e = 3 \cdot (16 + 2)$$

$$D_e = 54$$

$$D_p = d - 2 \cdot m$$

$$D_p = 48 - 2 \cdot 3$$

$$D_p = 42$$

Adendum

$$a = m$$

$$a = 3$$

Dedendum

$$b = 1,25 \cdot m$$

$$b = 3,75$$

Escala

$$2:1$$

$$h = 3 + 3,75 = 6,75$$

$$h = a + b$$

Altura de diente

$$D_p = 48$$

$$D_p = 3 \cdot 16$$

$$D_e = m \cdot (Z + 2)$$

$$D_e = 3 \cdot (16 + 2)$$

$$D_e = 54$$

$$D_p = d - 2 \cdot m$$

$$D_p = 48 - 2 \cdot 3$$

$$D_p = 42$$

Adendum

$$a = m$$

$$a = 3$$

Dedendum

$$b = 1,25 \cdot m$$

$$b = 3,75$$