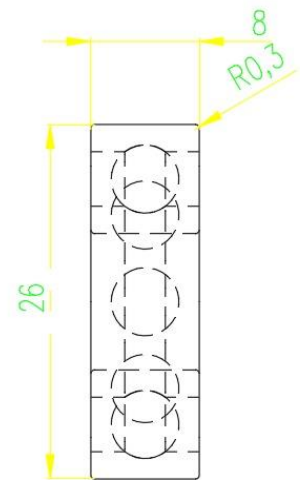
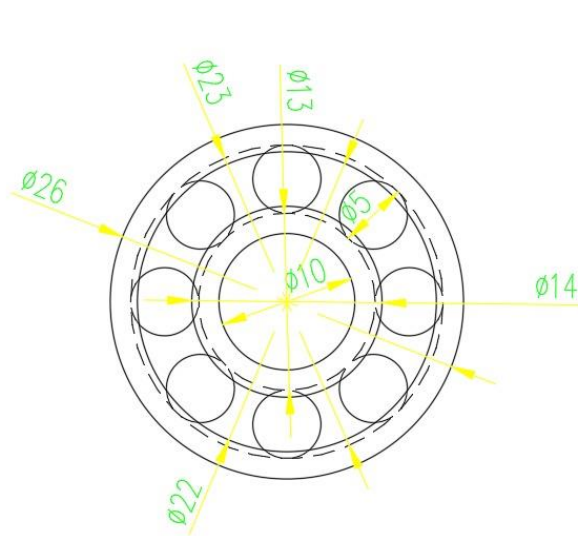
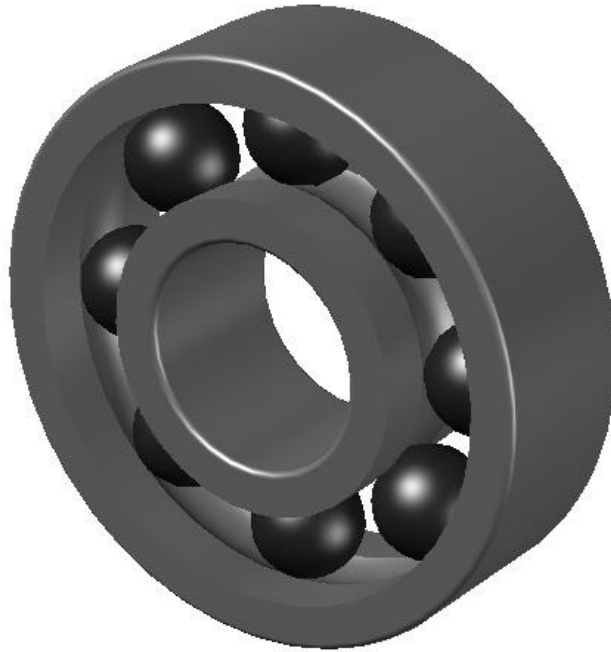
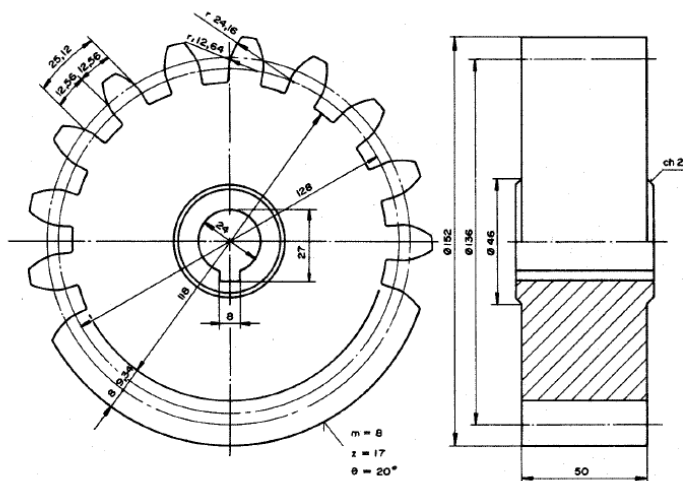


EXEMPLOS - AULA 41

1.



ENGRENAGENS CILÍNDRICAS DE DENTES RETOS



DADOS

módulo $m = 8$ número de dentes $z = 17$

CÁLCULOS PARA O DESENHO

diâmetro primitivo $dp = mz = 136$

passo $P = m\pi = 25,12$

cabeça do dente $a = m = 8$

pé do dente $b = 1,67m = 9,336 \approx 9,34$

espessura $s = \text{vão } v = P/2 = 12,56$

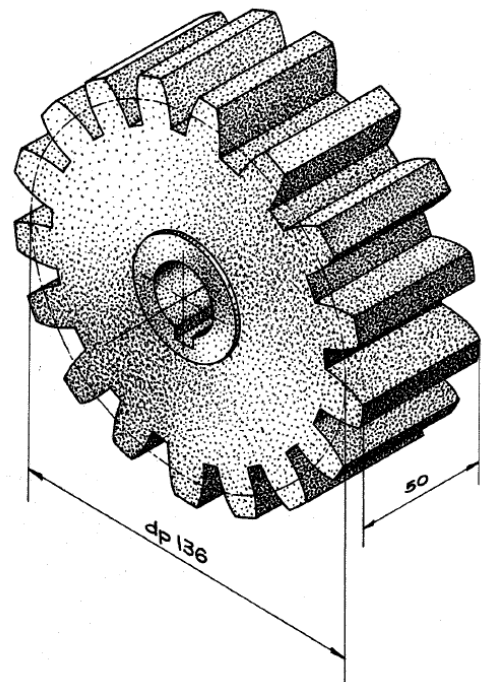
ângulo de pressão $\theta = 14^\circ 30' - 15^\circ - 20^\circ - 22^\circ 30' \therefore \theta = 20^\circ$

diâmetro de base $db = dp \cos \theta = 128$

$r = r_f$ ver pág. 6-105 $r = fm = 3,02 \cdot 8 = 24,16$

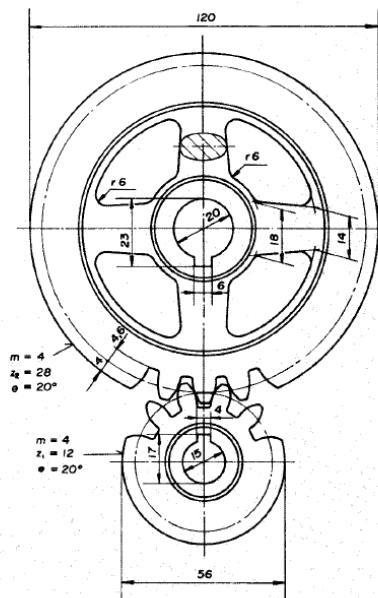
$r_i = f'm = 1,58 \cdot 8 = 12,64$

comprimento do dente $\ell = (6 \div 20)m = 50$



2.

ENGRENAGENS CILÍNDRICAS DE DENTES RETOS



DADOS

módulo $m = 4$ número de dentes do pinhão $z_1 = 12$ da coroa $z_2 = 28$ $\theta = 20^\circ$

CÁLCULOS PARA O DESENHO

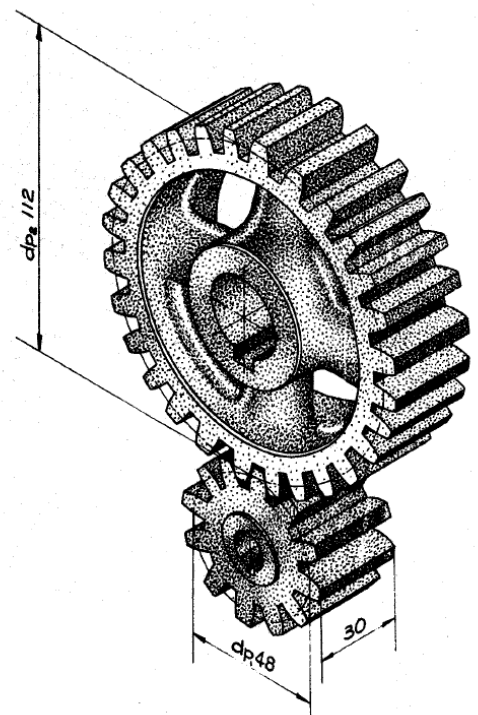
diâm. primitivo do pinhão $dp_1 = mz_1 = 48$

diâm. primitivo da coroa $dp_2 = mz_2 = 112$

cabeça do dente $a = m = 4$

pé do dente $b = 1,67m = 4,668$

comprimento do dente $\ell = (6 \div 20)m = 30$



3.