

DESENHO TÉCNICO MECÂNICO II (SEM 0565)

Notas de Aulas v.2015

Exercícios

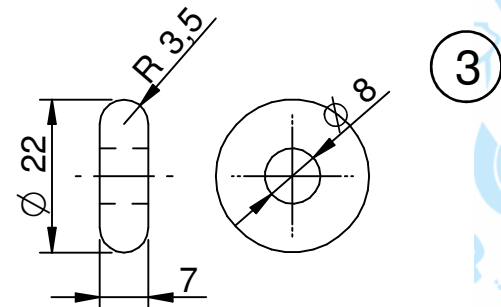
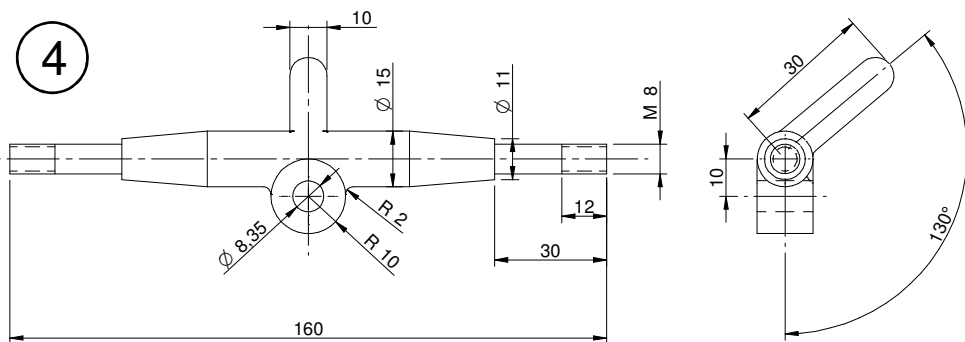
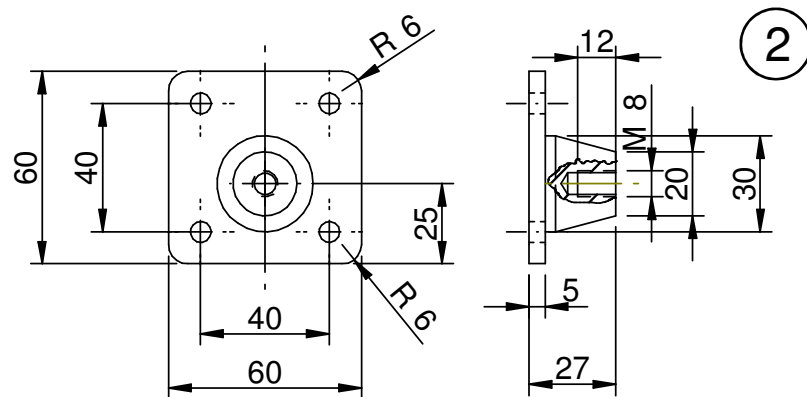
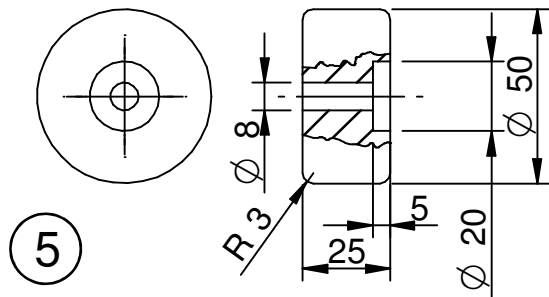
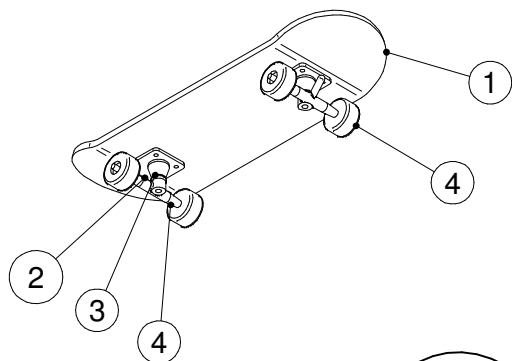
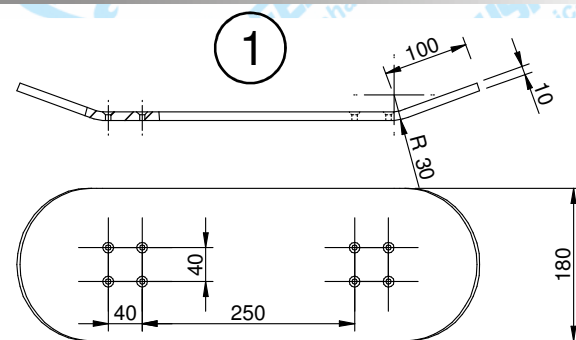
Departamento de Engenharia Mecânica
Escola de Engenharia de São Carlos
Universidade de São Paulo

Prof. Dr. Carlos Alberto Fortulan

Exercício 1: *Skate*

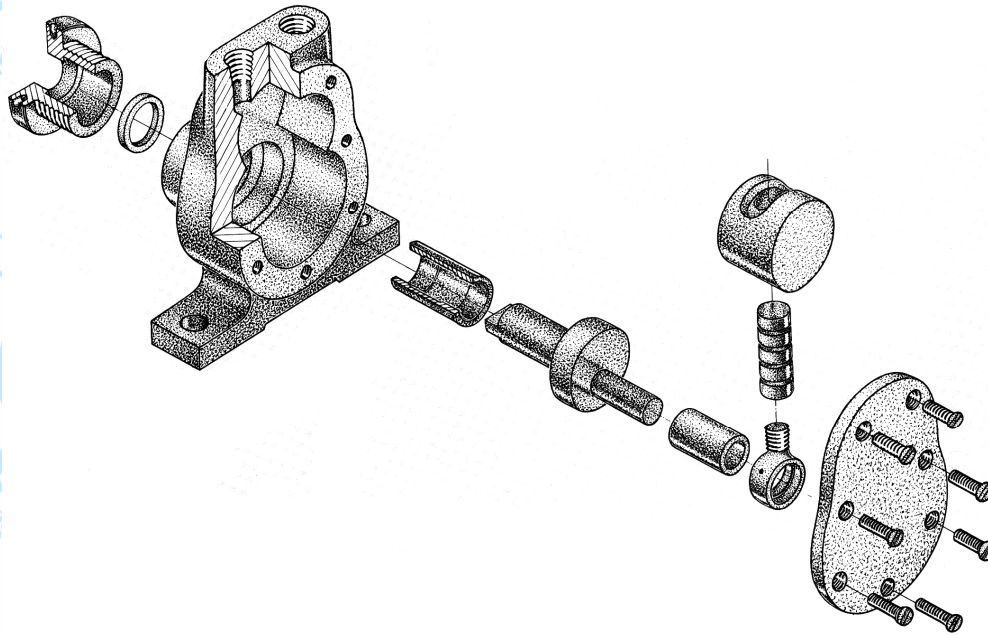
Fazer desenhos 3D e montar

Item	Denominação	Qde.
1	shape	1
2	truck	2
3	amortecedor	2
4	truck-02	2
5	roda	4



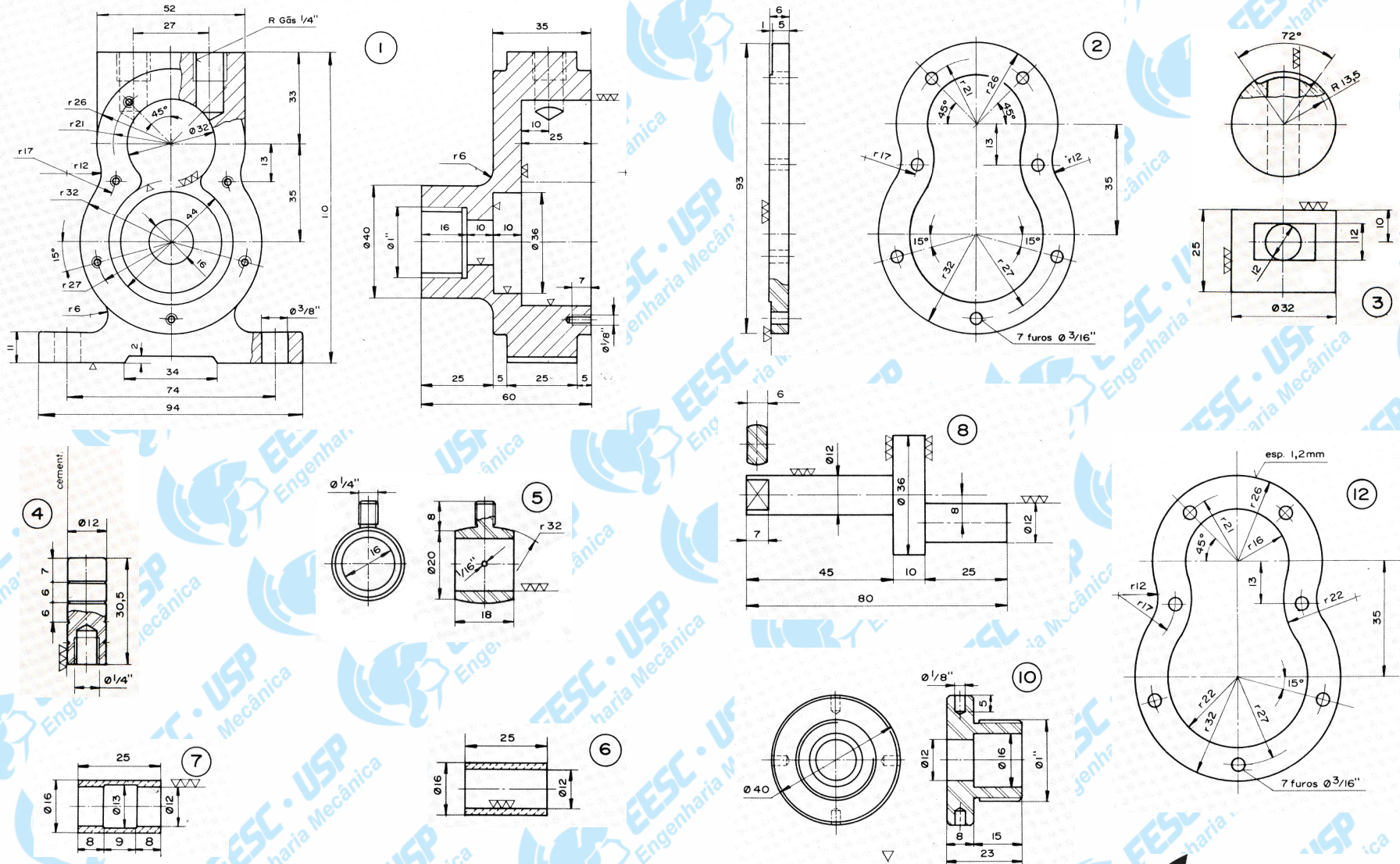
Exercício 2: **Bombinha de óleo**

Fazer desenhos 3D montar e simular



12	Guarnição	1	Couro
11	Paraf. de fenda	7	Aço NB 1020 $\varnothing 1/8" \times 1/2"$
10	Tampão	1	Aço NB 1020
9	Vedação	1	Feltro $\varnothing 16 \times \varnothing 12 \times 2,5$
8	Eixo	1	Aço NB 1030 temp. e cem.
7	Bucha	1	Bronze SAE 660 $\varnothing 12 \times 25$
6	Bucha	1	Bronze SAE 660 $\varnothing 12 \times 25$
5	Colar	1	Aço NB 1030
4	Êmbolo	1	Aço NB 1030 $\varnothing 12 \times 30,5$
3	Bucha	1	Bronze Al – SAE 68 – A
2	Tampa	1	Aço NB 1020
1	Corpo	1	Ferro fundido
Nº	DENOMINAÇÕES	Quant.	MATERIAL E DIMENSÕES

Exercício 2: Desenhos 2D

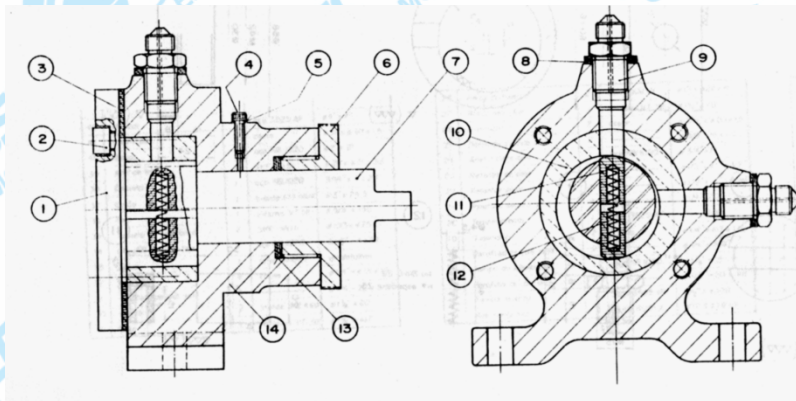
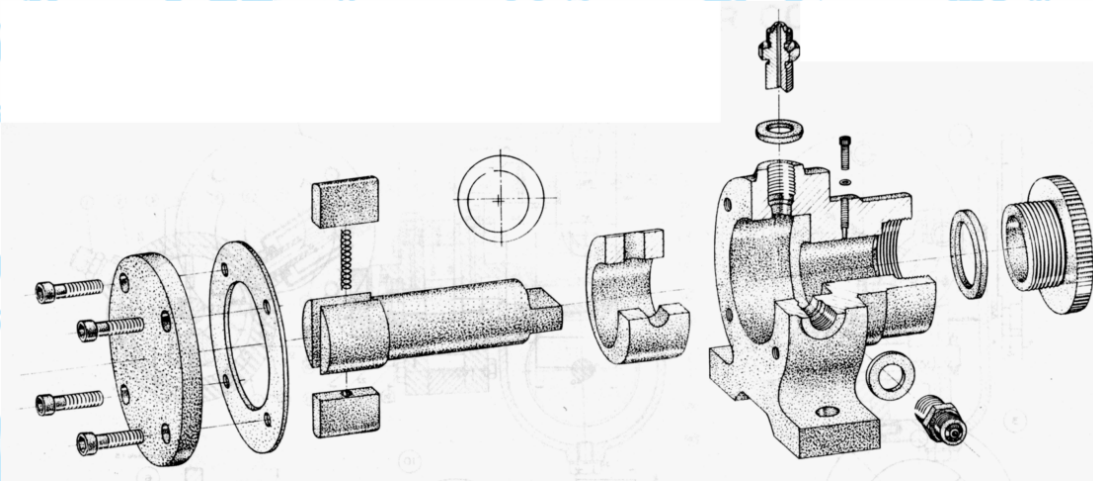


Fonte: Desenhista de Máquinas – Escola Pro-Tec (1983)

DESENHO TÉCNICO MECÂNICO II (SEM 0565) – FORTULAN CA (2015)

Exercício 3: **Compressor de palhetas**

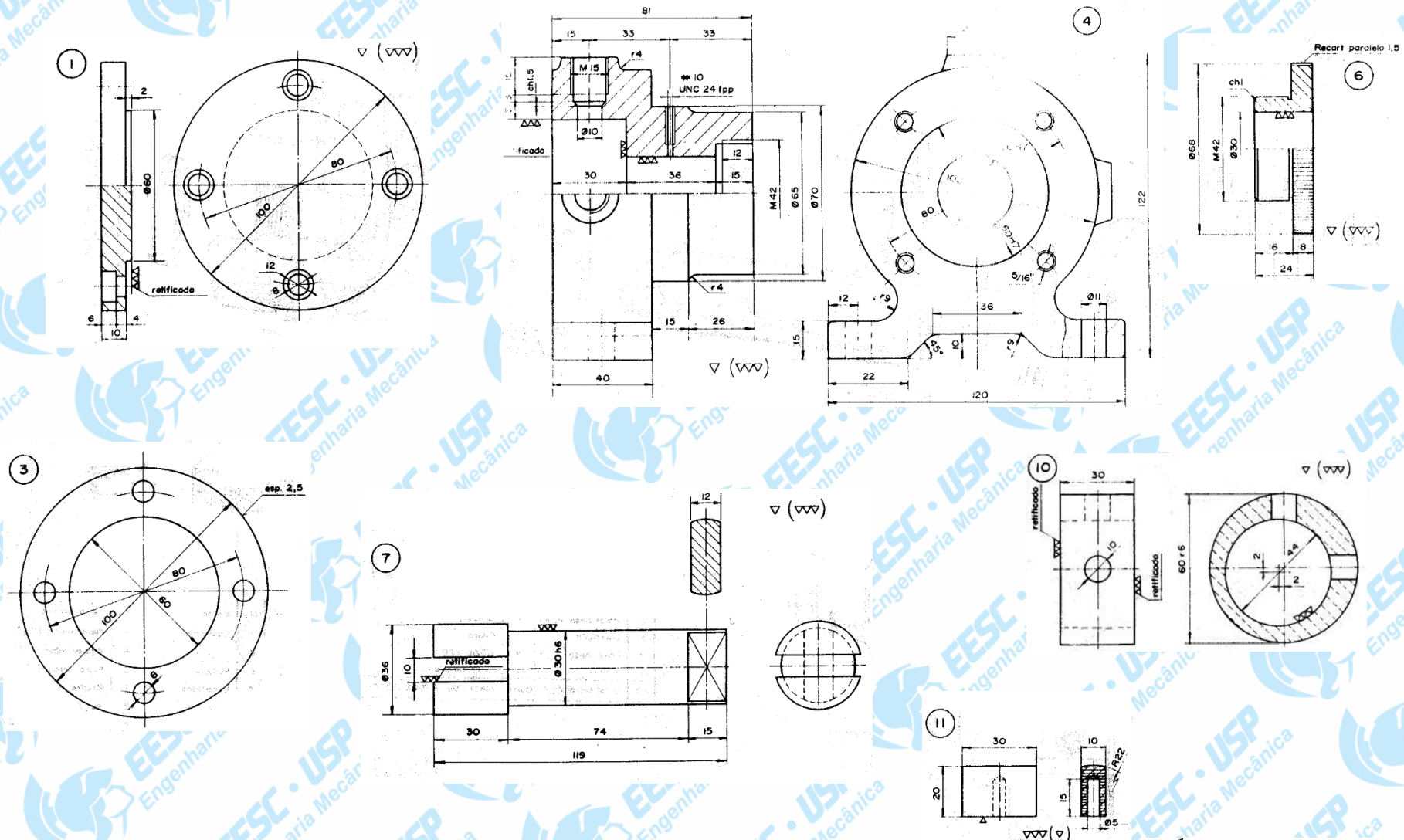
Fazer desenhos 3D montar e simular



14	Corpo	1	Ferro fundido
13	Guarnição	1	Neoprene $\varnothing 40 \times \varnothing 30 \times 4$
12	Mola	1	Aço p/ mola
11	Palheta	2	Fibra Celeron
10	Excêntrico	1	Bronze
9	Bico	2	Aço NB 1010
8	Guarnição	2	Neoprene $\varnothing 24 \times \varnothing 12 \times 2$
7	Eixo	1	Aço NB 1020
6	Pressa estopa	1	Ferro fundido
5	Guarnição	1	Neoprene $\varnothing 5 \times \varnothing 7 \times 1,5$
4	Paraf Allen recart	1	$\# 10 \times 12$
3	Guarnição	1	Couro
2	Paraf Allen	4	$\varnothing 5/16" \times 20$
1	Tampa	1	Ferro fundido
Nº	DENOMINAÇÕES	Quant	MATERIAL E DIMENSÕES

Fonte: Desenhista de Máquinas – Escola Pro-Tec (1983)

Exercício 3: Desenhos 2D

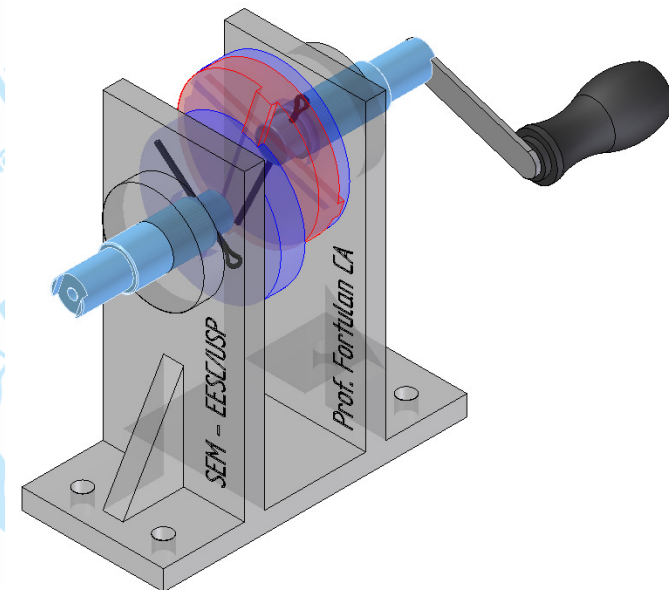
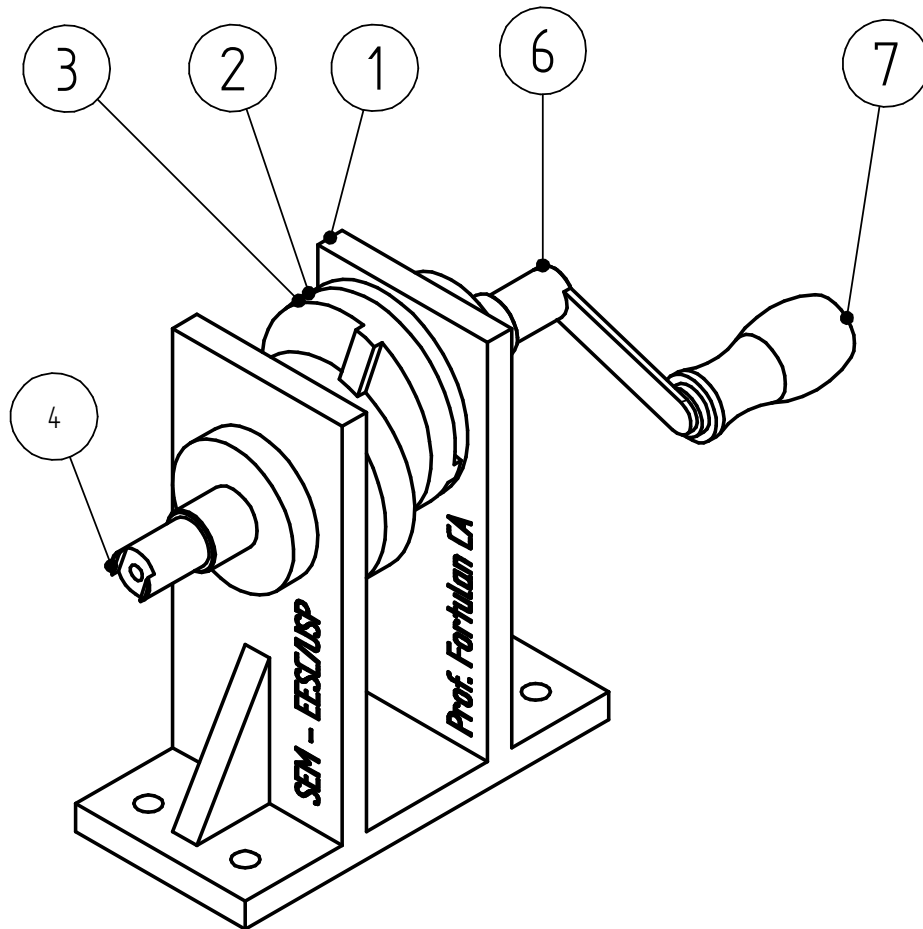


Fonte: Desenhista de Máquinas – Escola Pro-Tec (1983)

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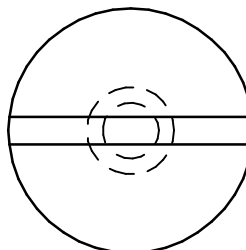
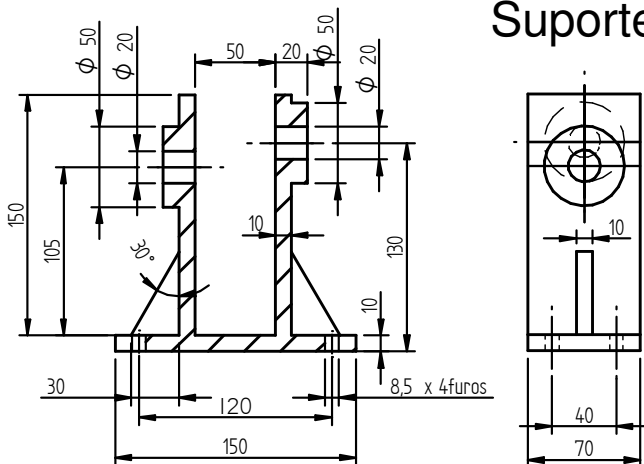
Exercício 3: **Acoplamento Oldham**

Fazer desenhos 3D montar, simular e verificar interferência nula.

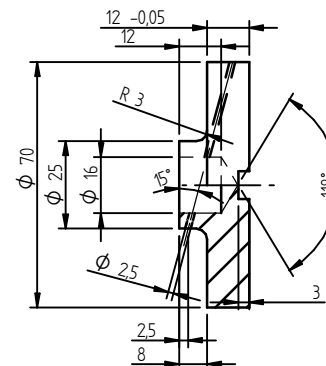


Item	Denominação	Material	Qde
1	suporte	Aço	1
2	polia motora	Aço	2
3	polia movel	Nylon	1
4	eixo motor	Aço	2
5*	cupilha	Aço	2
6	braço	Aço	1
7	manípulo	Madeira	1

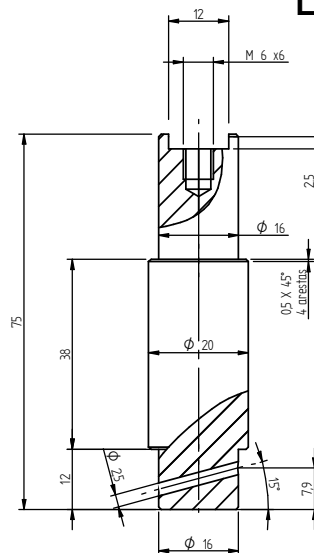
Suporte



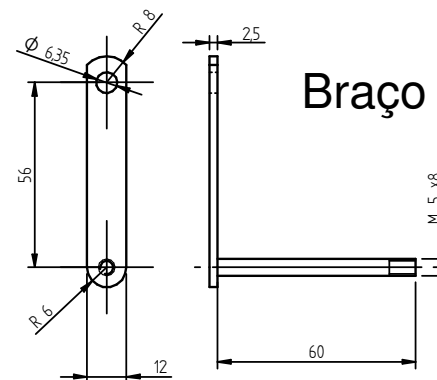
Polia Motora



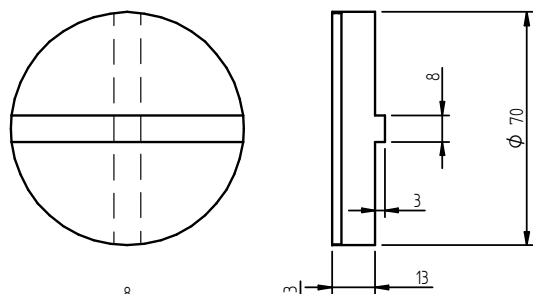
Eixo motor



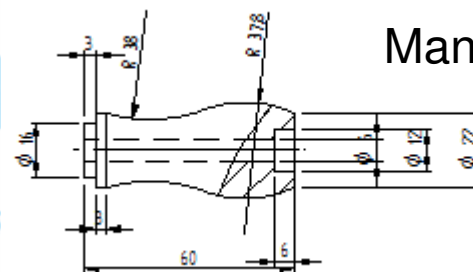
Braço



Polia Móvel



Manípulo



Cupilha

