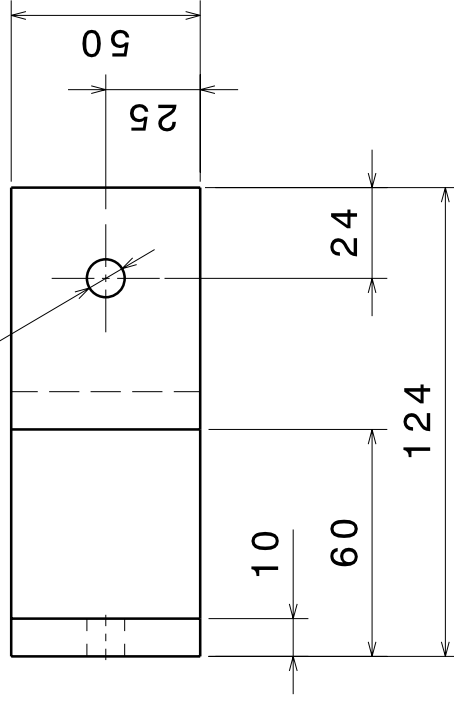
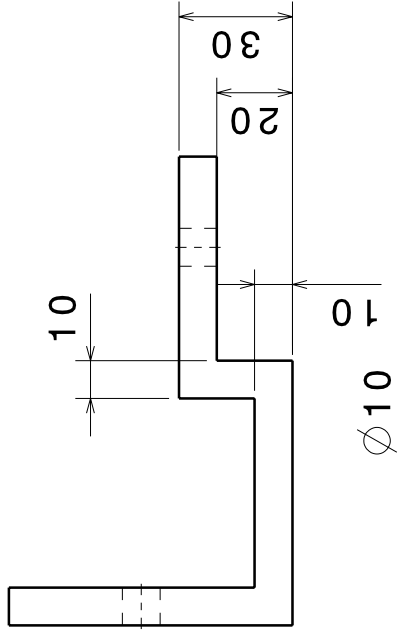
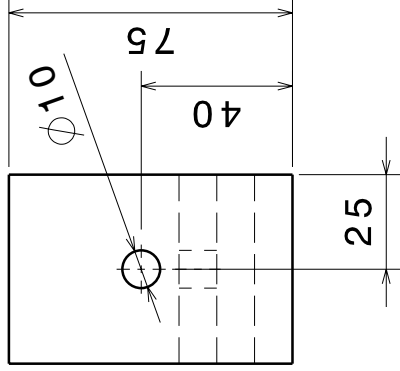
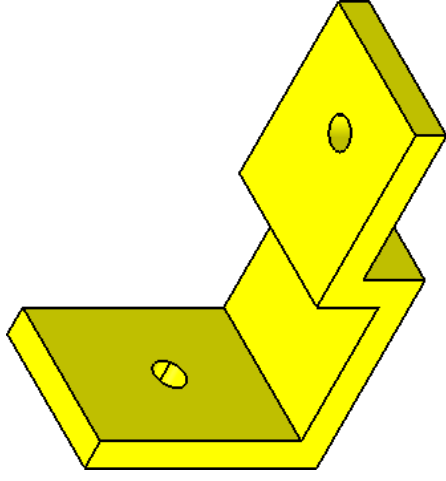


Part Design



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign01



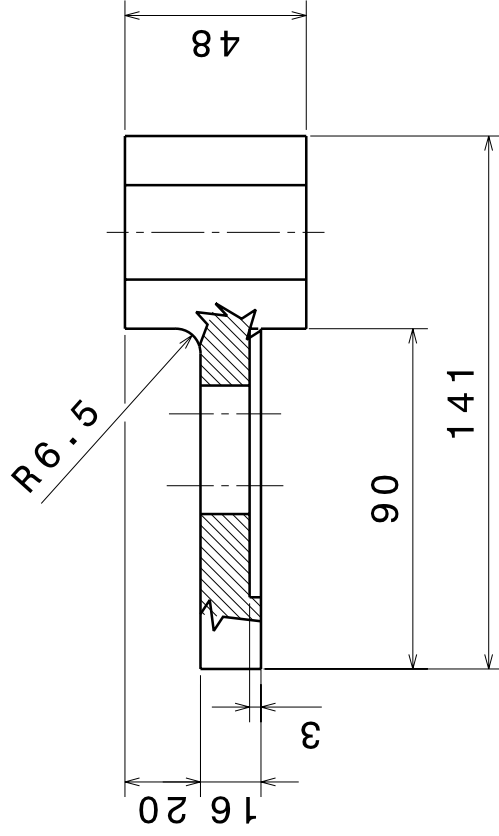
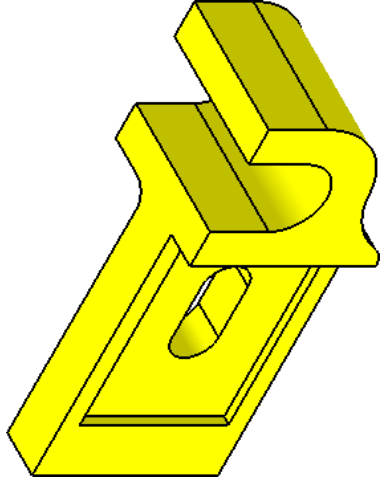
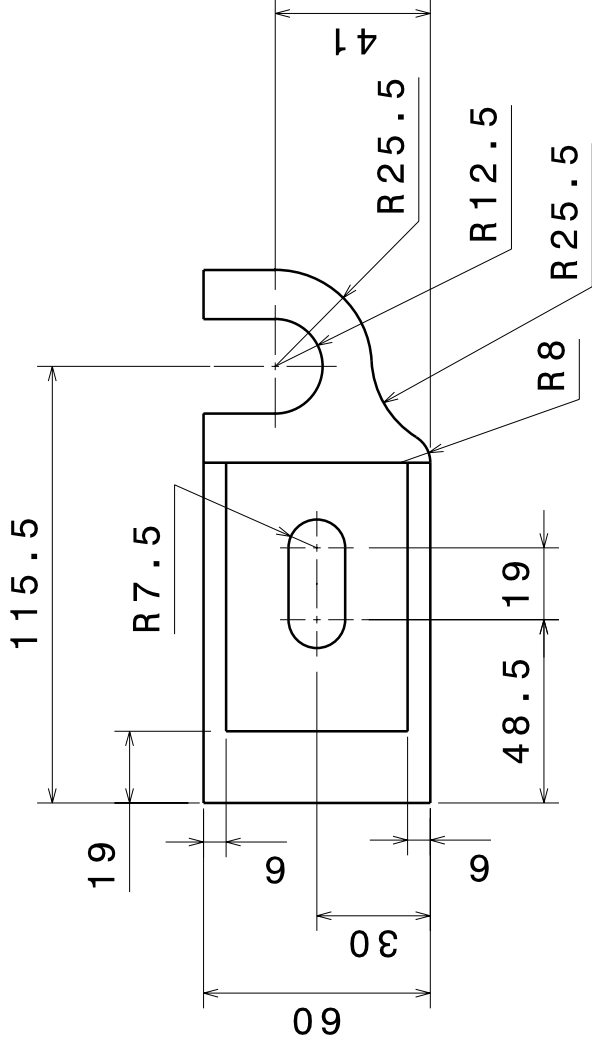
Unidade mm

Escala: 1:2

Data: 18/11/05

Página: 09

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign02



Unidade mm

Escala:

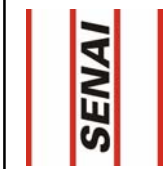
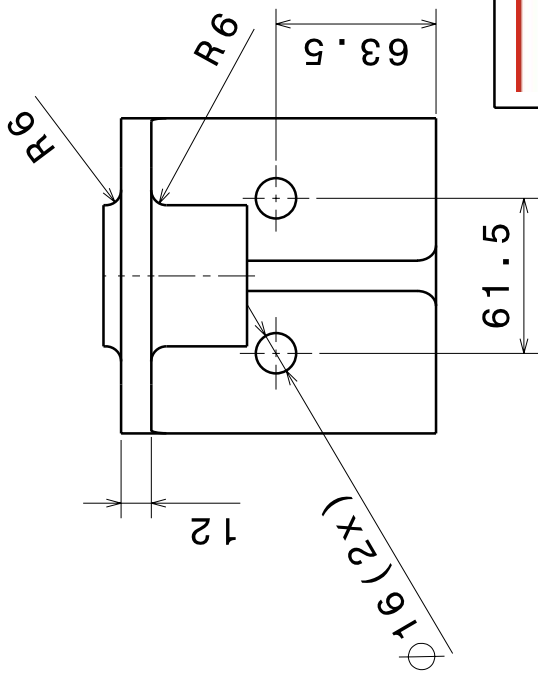
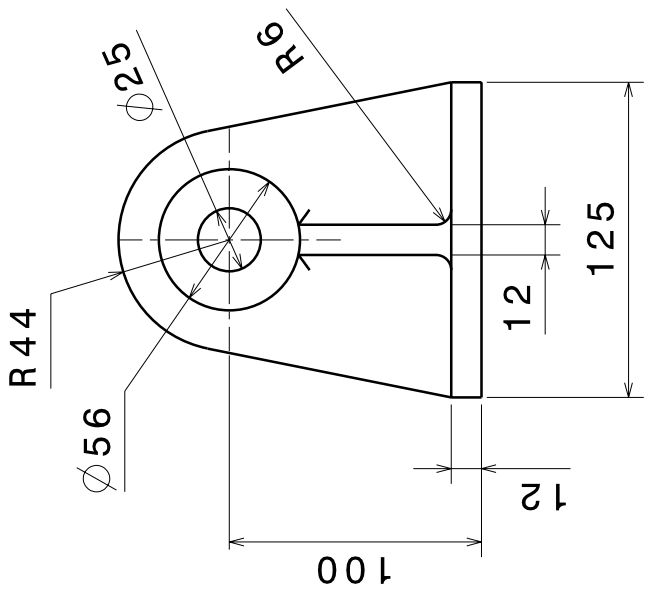
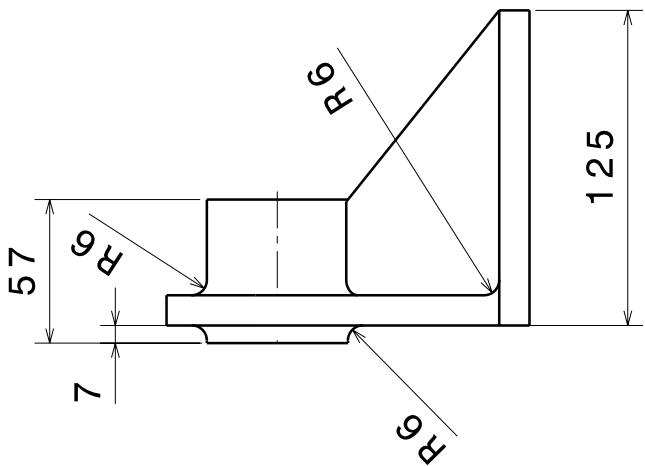
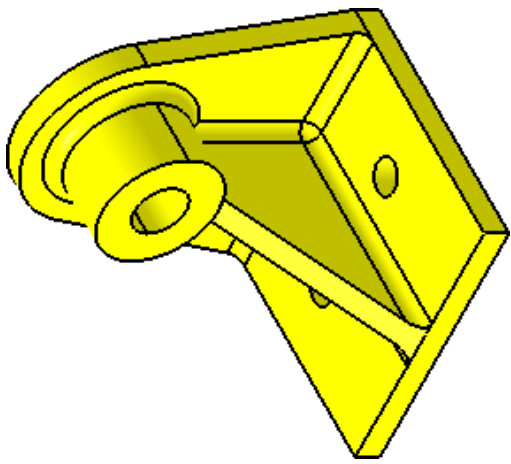
1:2

Data: 18/11/05

Página:

10

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Escola: 1:2

Unidade mm

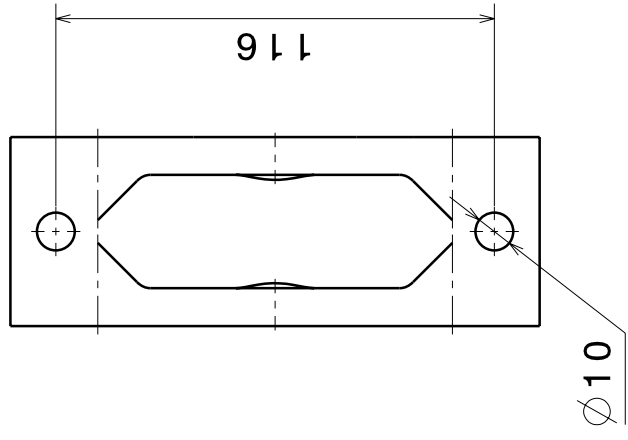
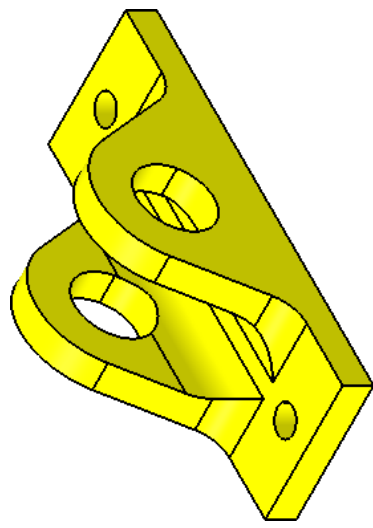
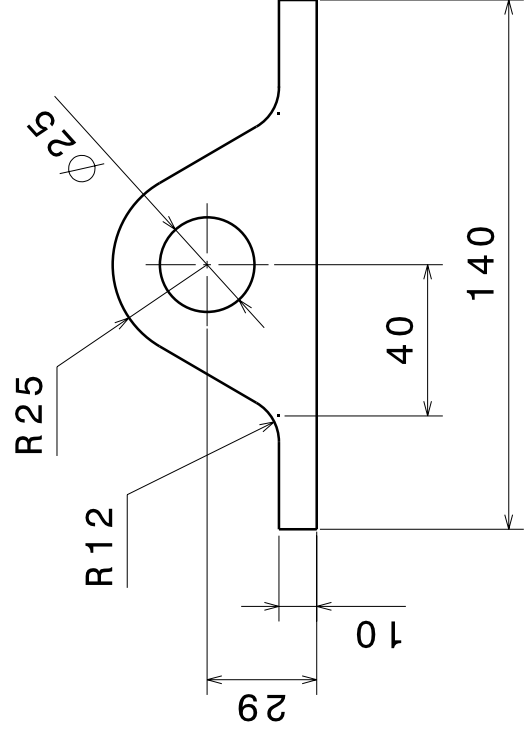
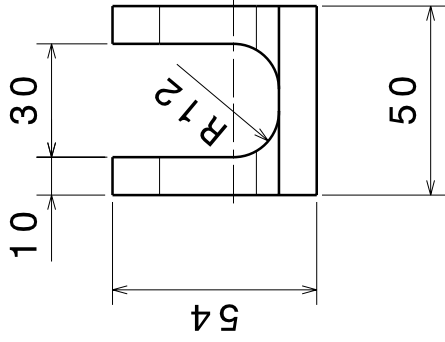
Desenhado por: Ugo Luiz

Página: 11

Desenho: ExPartDesign03

Data: 18/11/05

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign04



Unidade mm

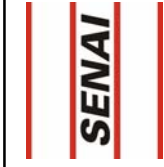
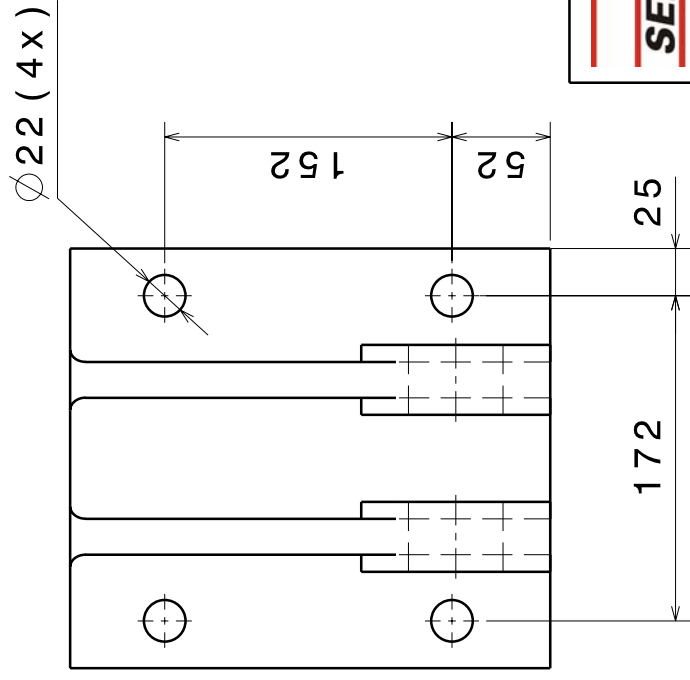
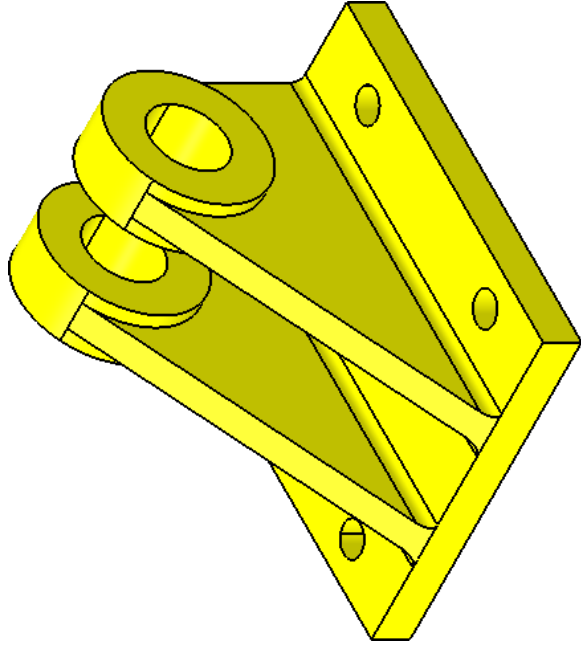
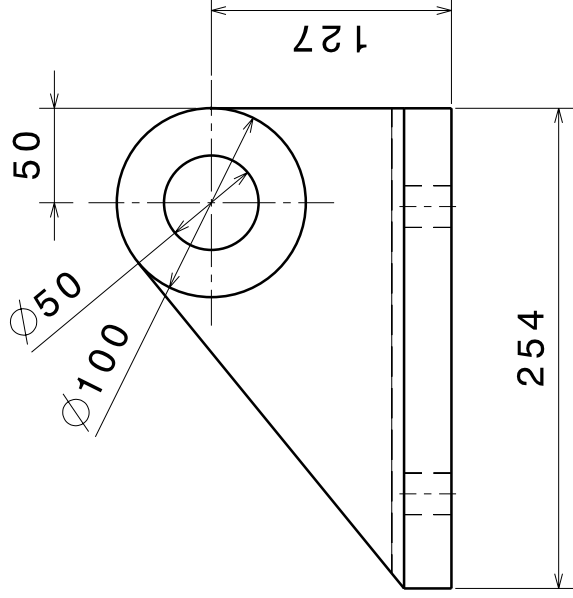
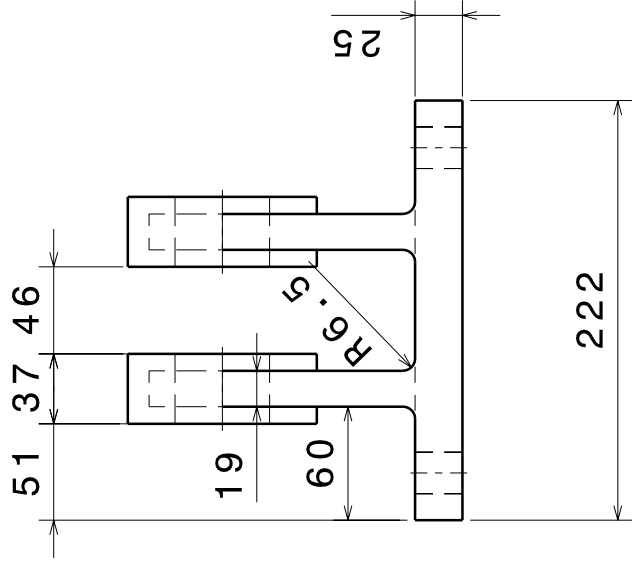
Data: 18/11/05

C.F.P.: 3.02

Escola: 1:2

Página:

12



Escola Senai "Santos Dumont"

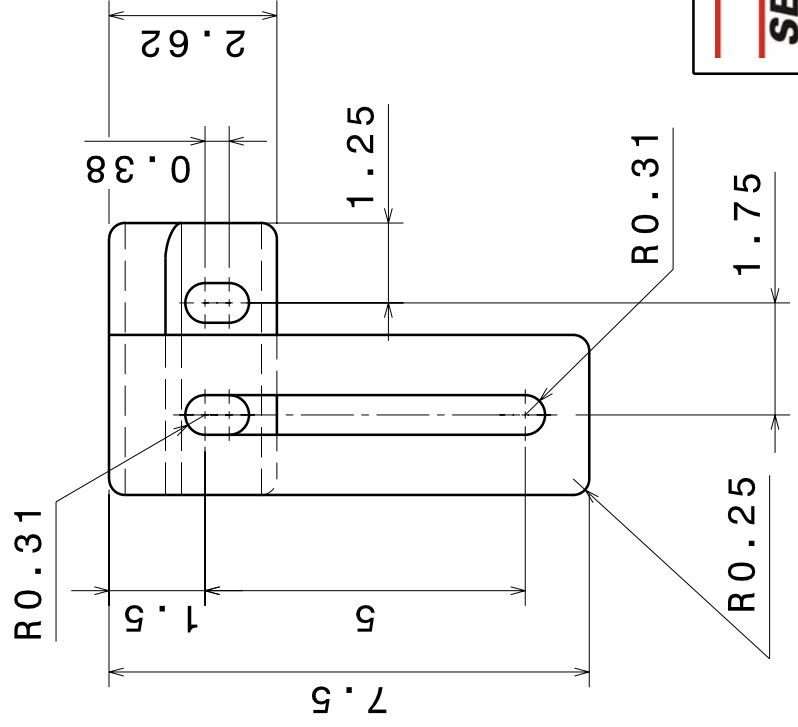
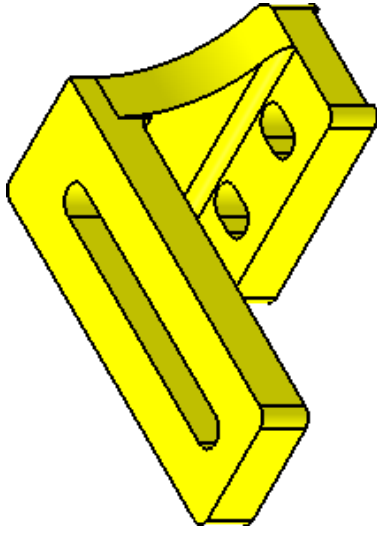
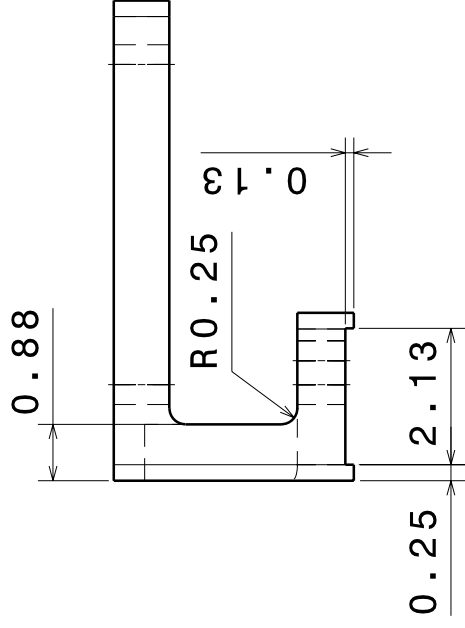
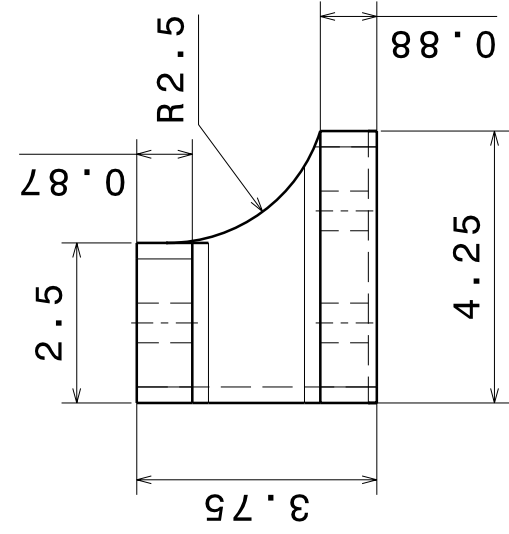
Unidade mm
Escala: 1:2

Desenhado por: Ugo Luiz

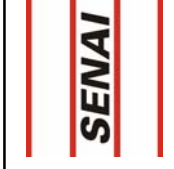
Data: 18/11/05
Página: 13

Desenho: EXPartDesign05

C.F.P.: 3.02



Dimensões em polegadas



Escola Senai "Santos Dumont"

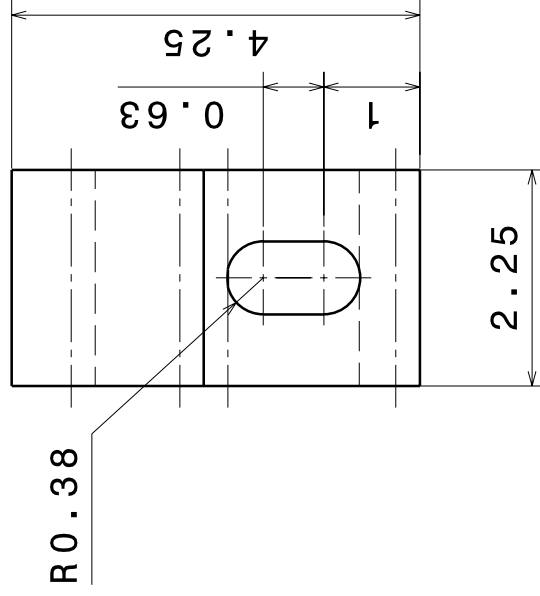
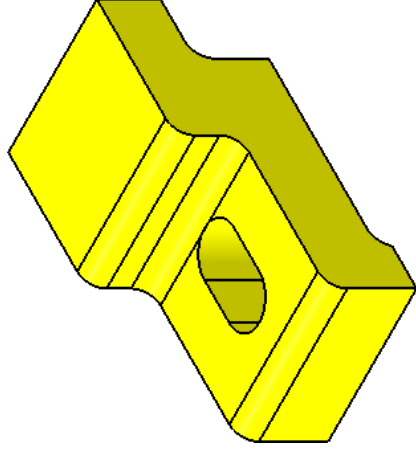
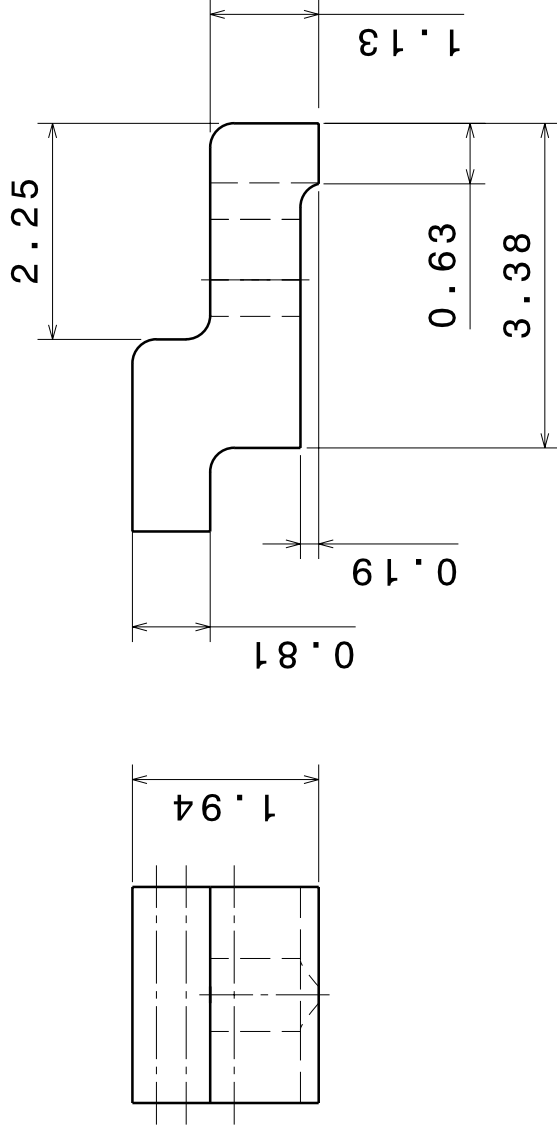
Desenhado por: Ugo Luiz

Desenho: EXPartDesign06

Unidade mm
Escala: 1:2

Data: 18/11/05
Página:

C.F.P.: 3.02
14



Todos raios não indicados 0,25"

Dimensões em polegadas



Escola Senai "Santos Dumont"

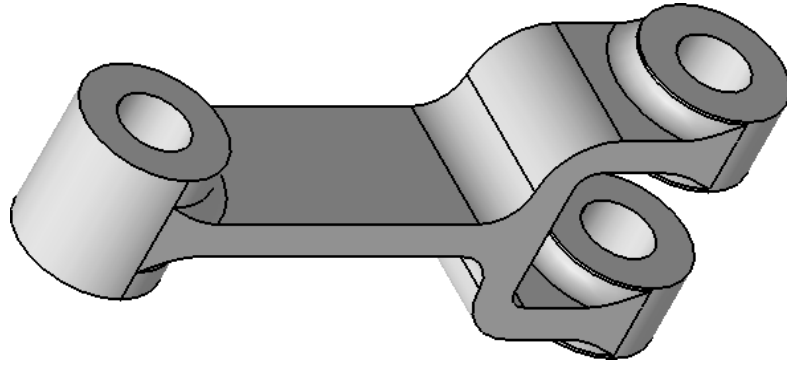
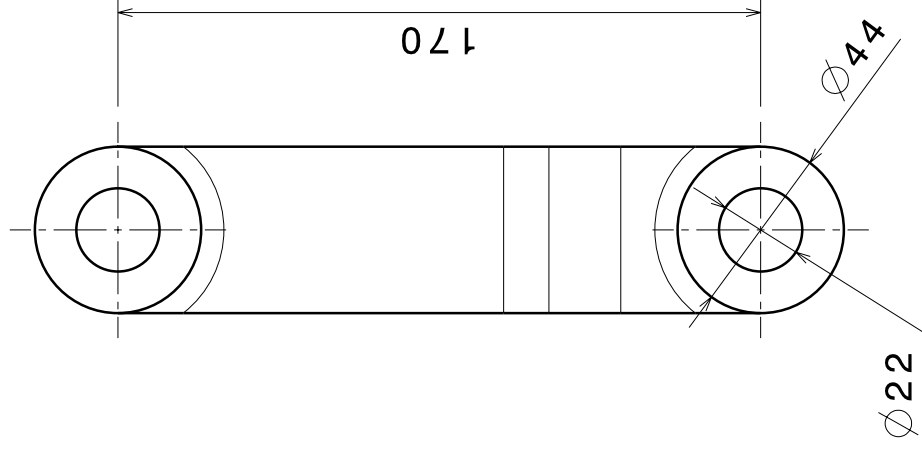
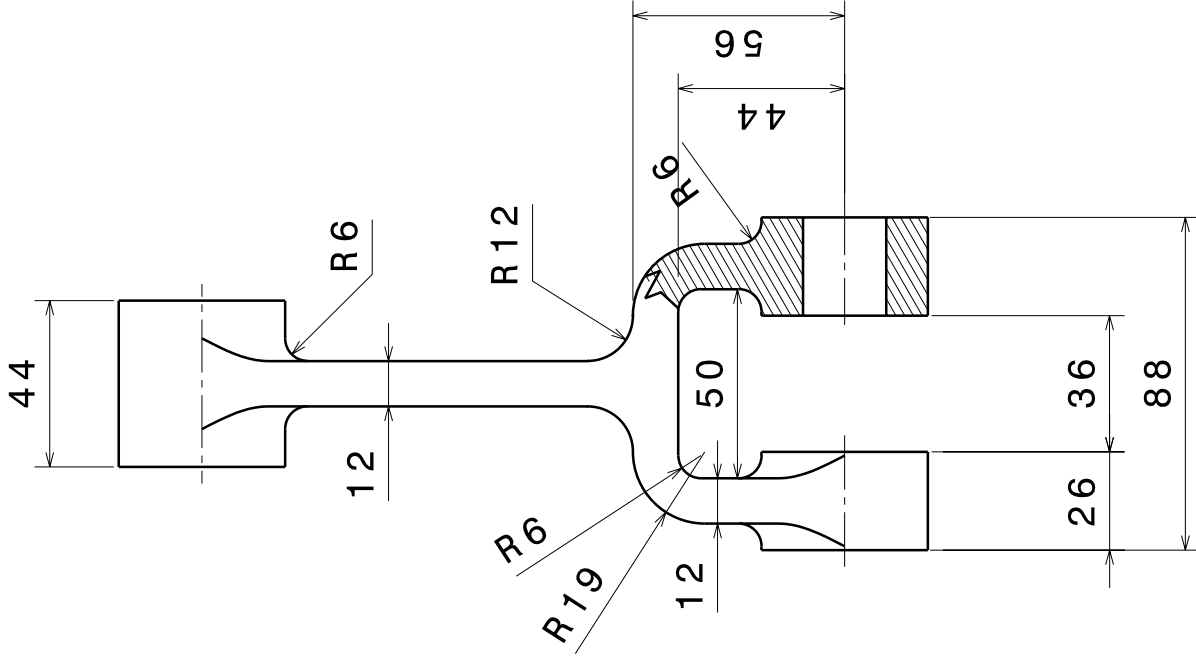
Unidade mm
Escala: 1:2

Desenhado por: Ugo Luiz

Data: 18/11/05
Página: 15

Desenho: EXPartDesign07

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign08

Unidade mm

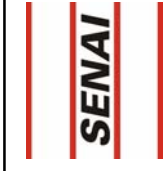
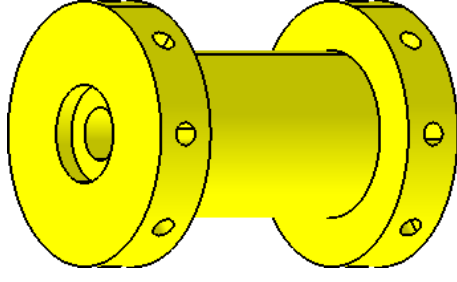
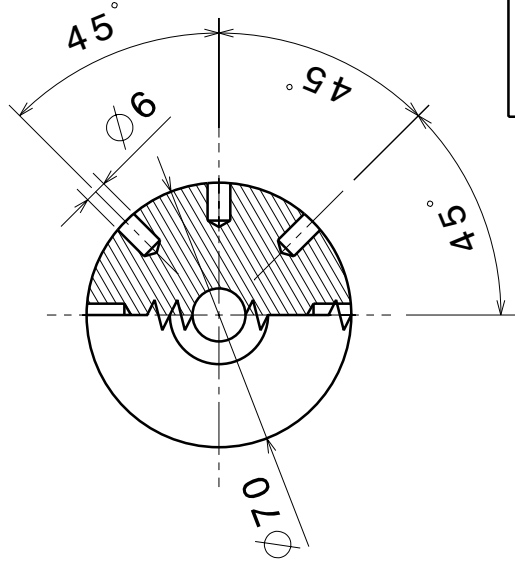
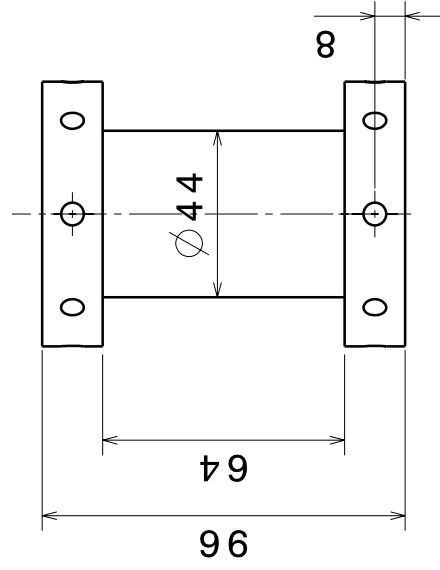
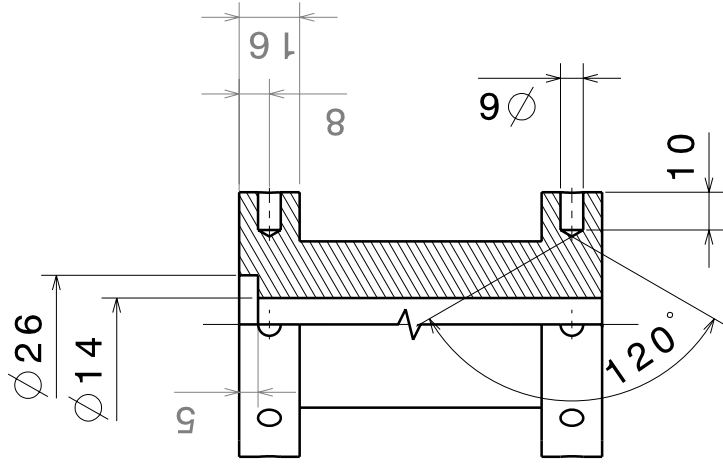
Data: 18/11/05

C.F.P.: 3.02

Escola: 1:2

Página:

16



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: ExPartDesign09



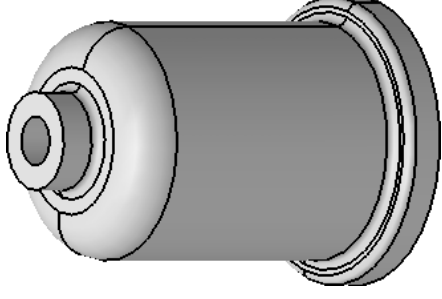
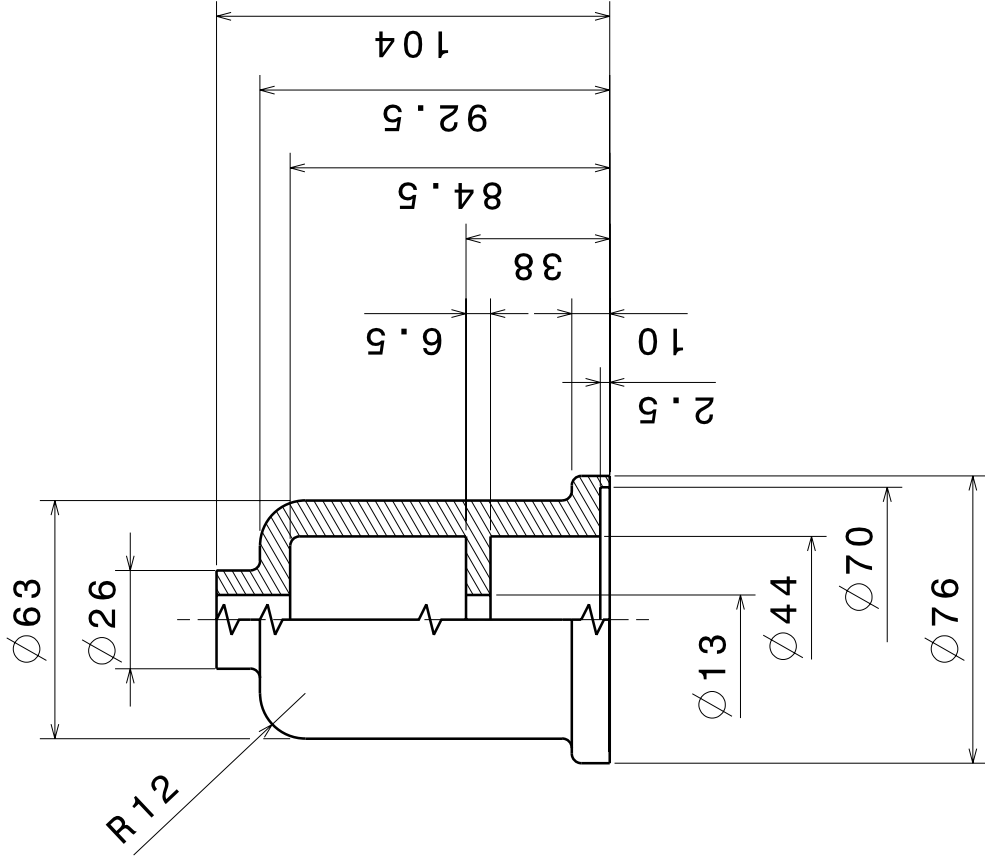
Unidade mm

Escala: 1:2

Data: 18/11/05

Página: 17

C.F.P.: 3.02



Todos raios não indicados 2,5 mm



Escola Senai "Santos Dumont"

Unidade mm

Escola: 1:2

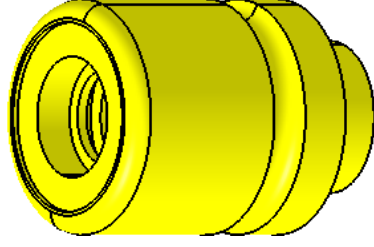
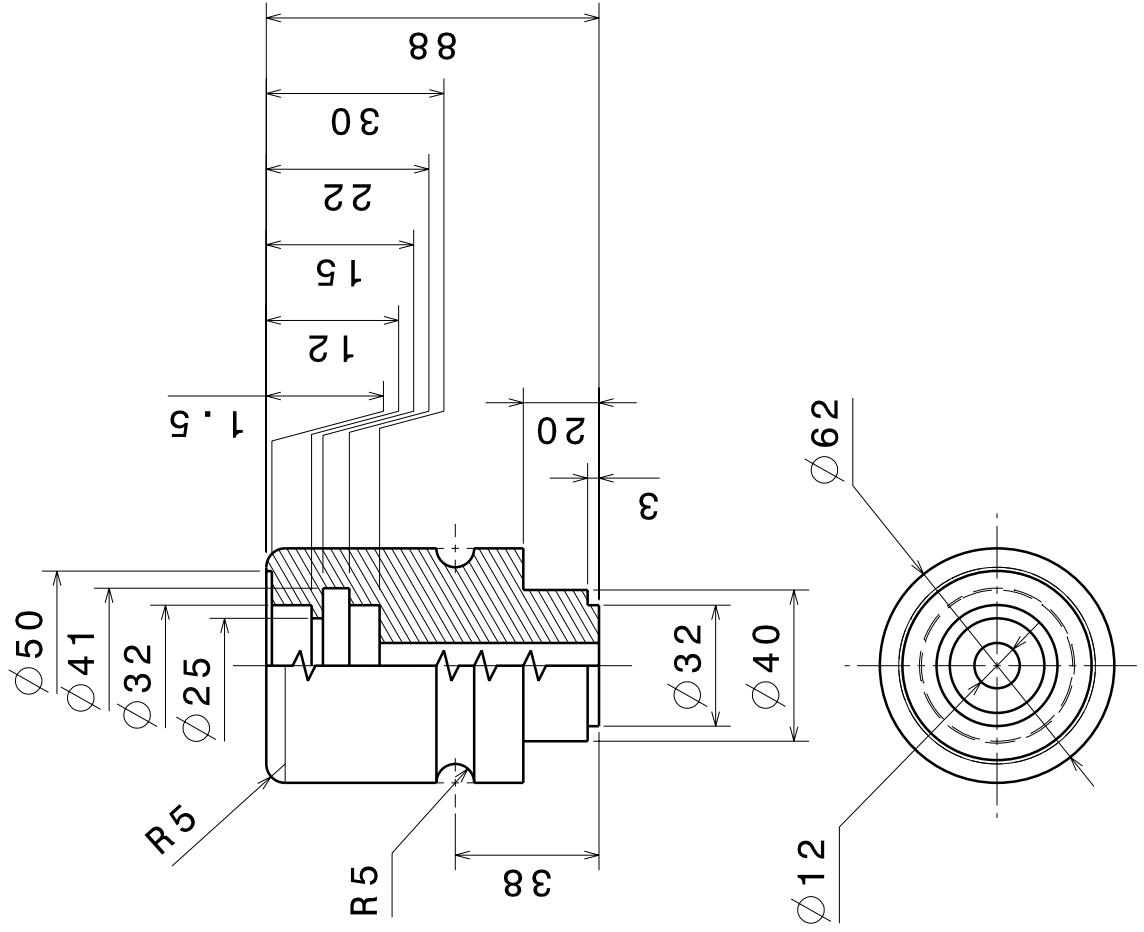
Desenhado por: Ugo Luiz

Página: 18

Desenho: EXPartDesign10

Data: 18/11/05

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign11

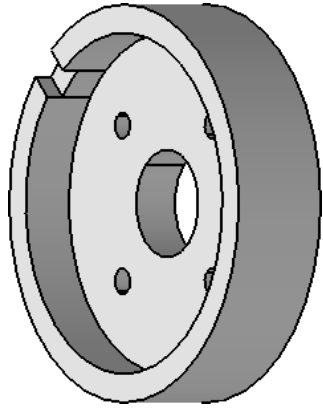
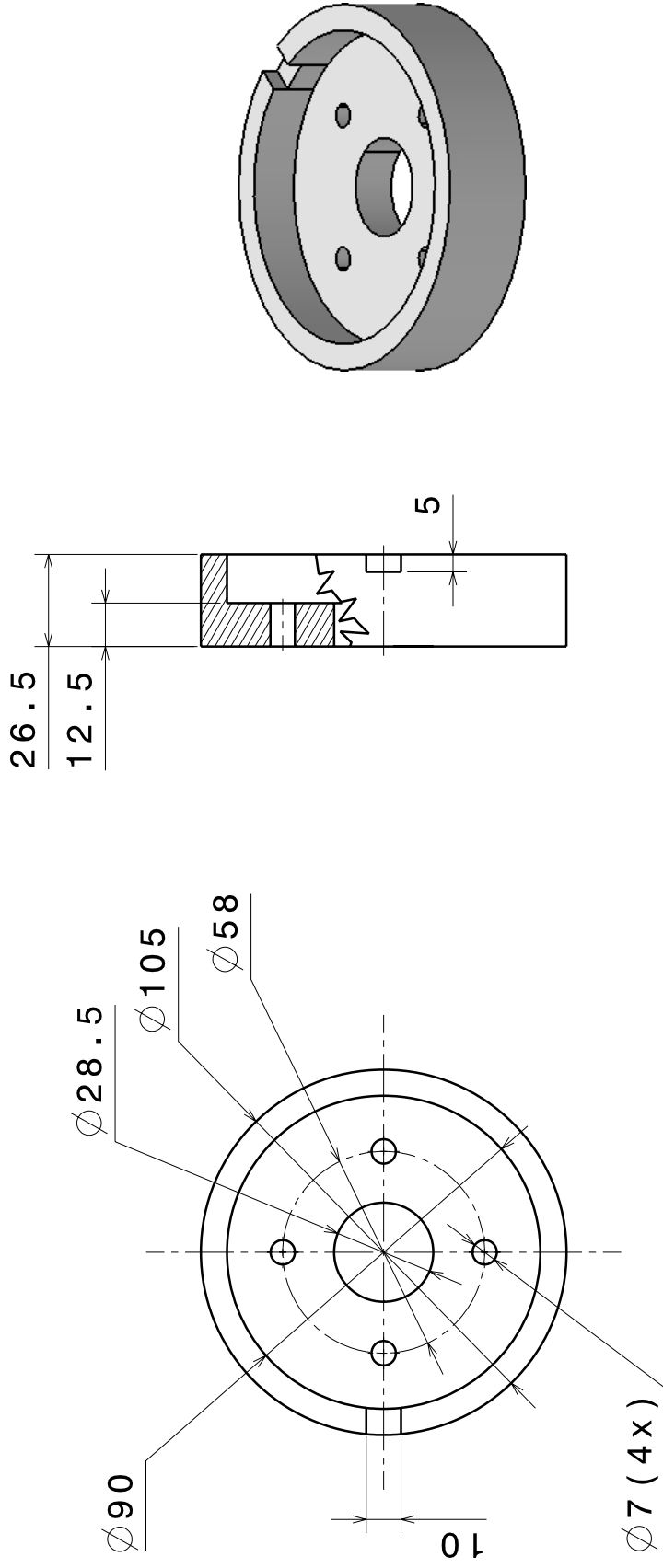
Unidade mm

Escola: 1:2

Data: 18/11/05

Página: 19

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign12



Unidade mm

Data: 18/11/05

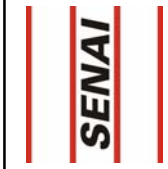
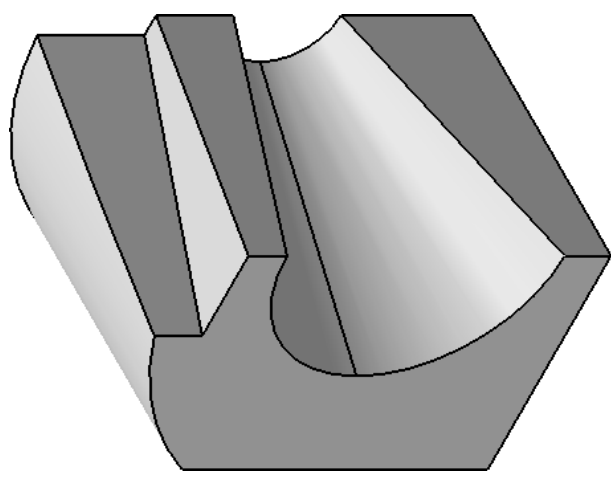
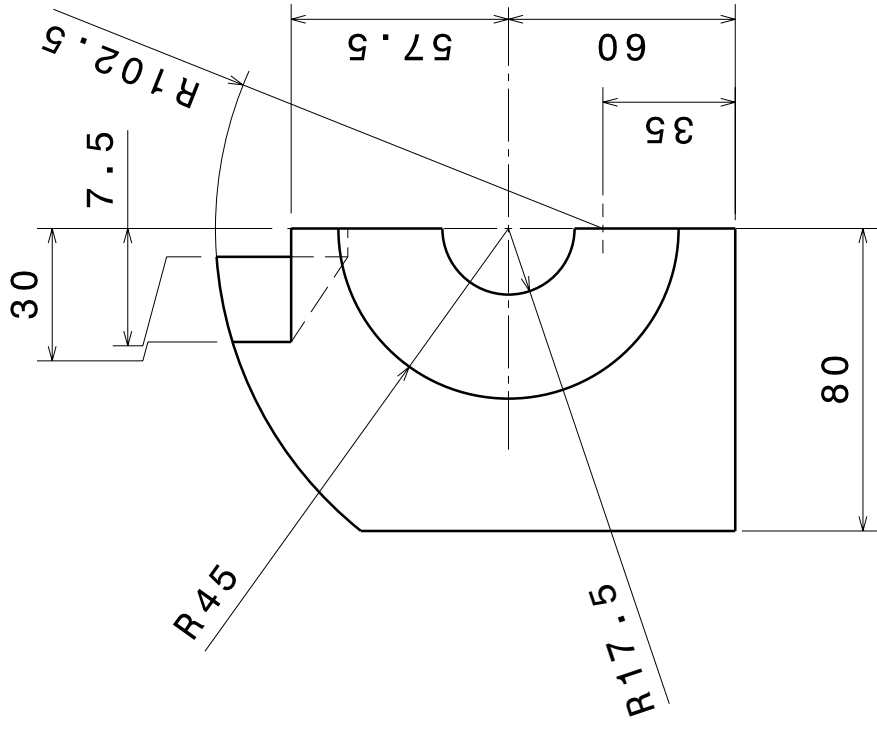
C.F.P.: 3.02

Escala:

1:2

Página:

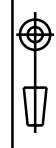
20



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign13



Unidade mm

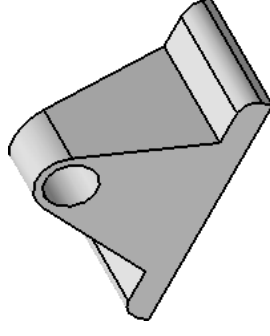
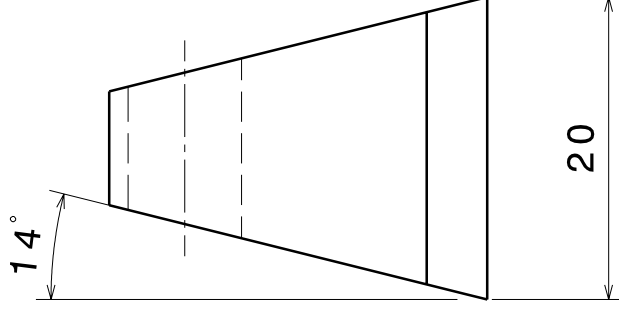
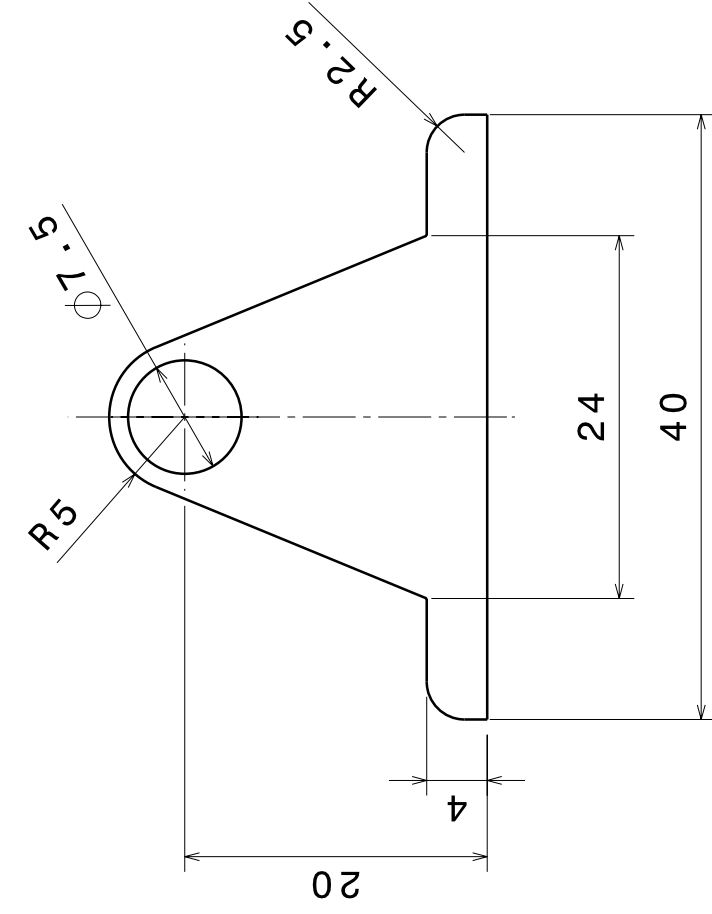
Data: 18/11/05

C.F.P.: 3.02

Escola: 1:2

Página:

21



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign14



Unidade mm

Data: 18/11/05

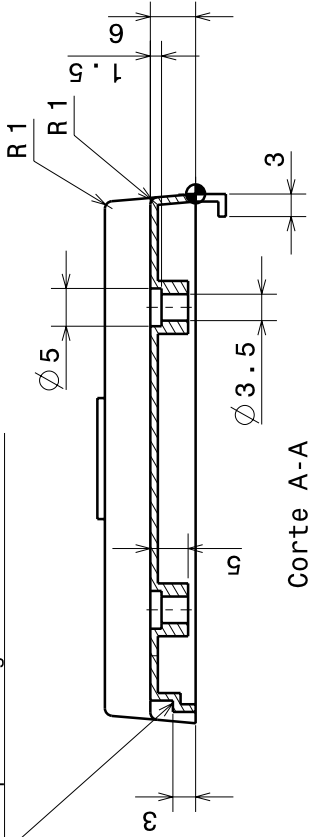
C.F.P.: 3.02

Escola: 1:2

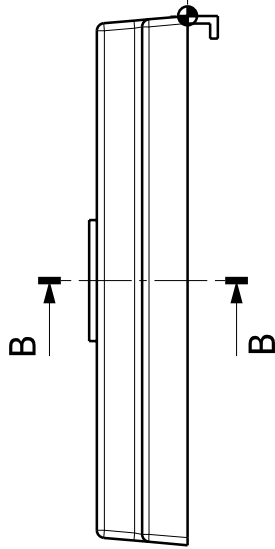
Página:

22

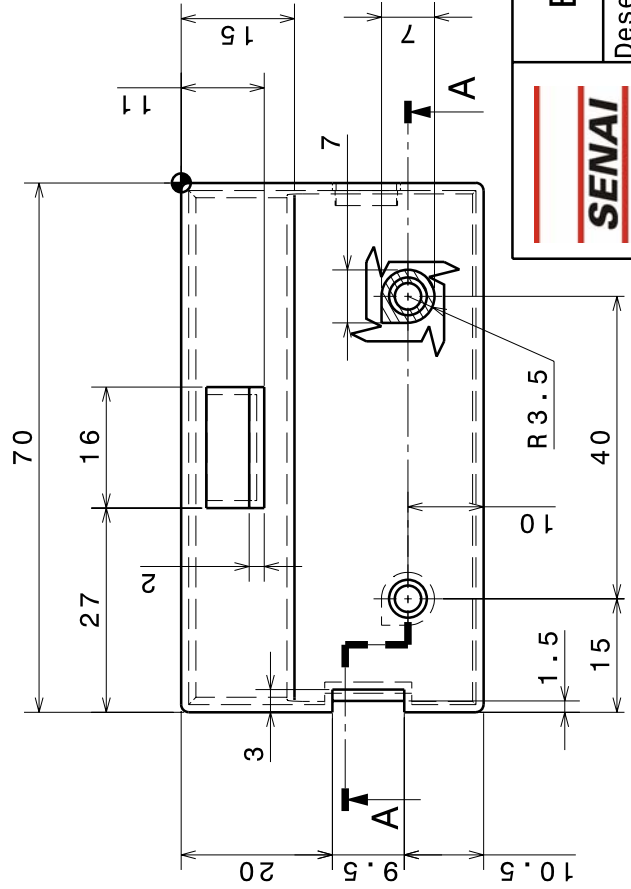
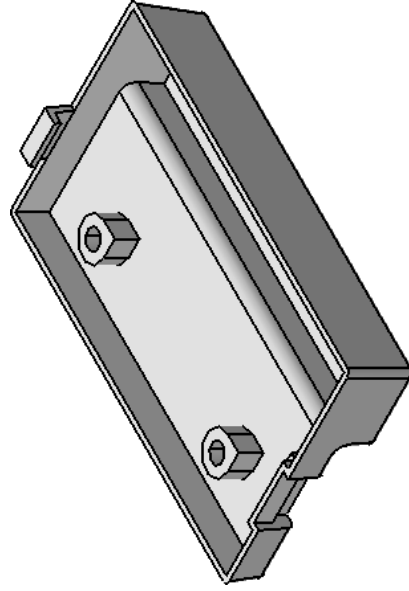
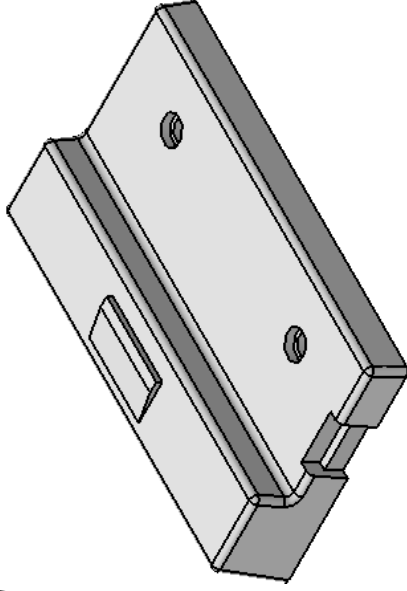
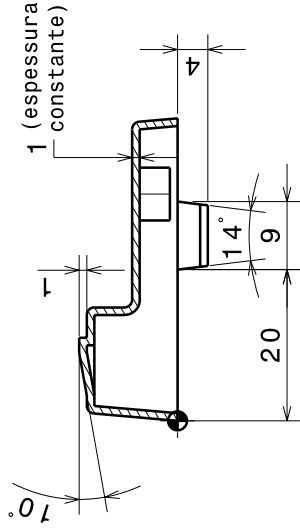
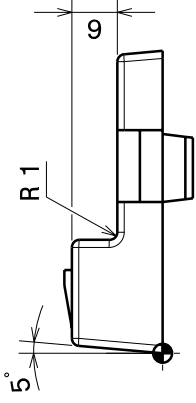
Não aplicar ângulo neste rebaixo



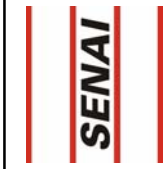
Corte A-A



Corte B-B



Referência Coordenada: 0,0,0
 Todos os raios não indicados adotar 1mm



Escola Senai "Santos Dumont"

Desenhado por: Fabiana Passador

Desenho: EXPartDesign15

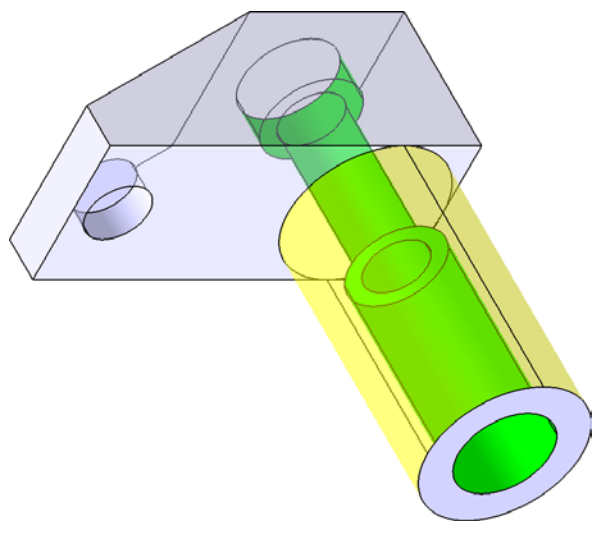
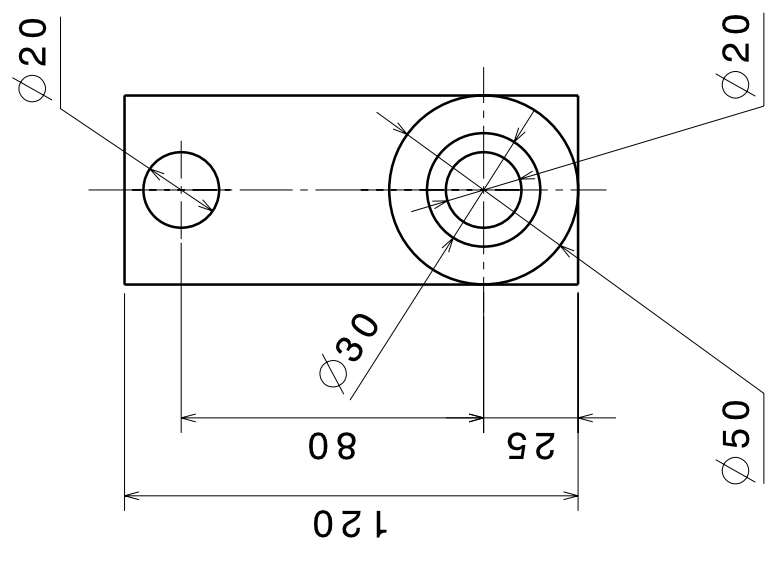
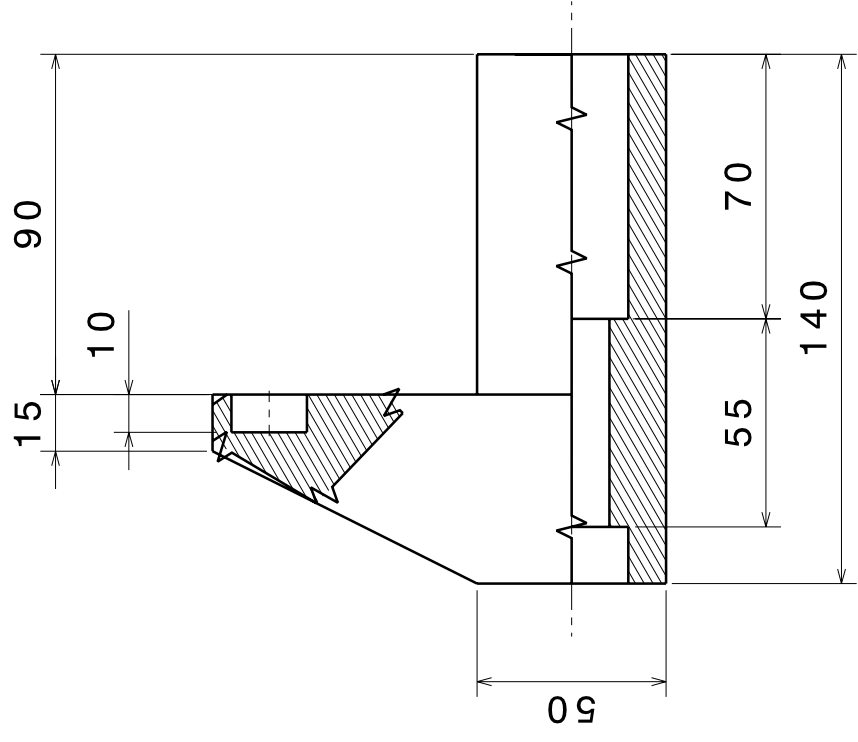
Unidade mm

Escola: 1:1

Data: 11/12/05

Página: 23

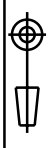
C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: ExPartDesign16



Unidade mm

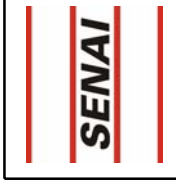
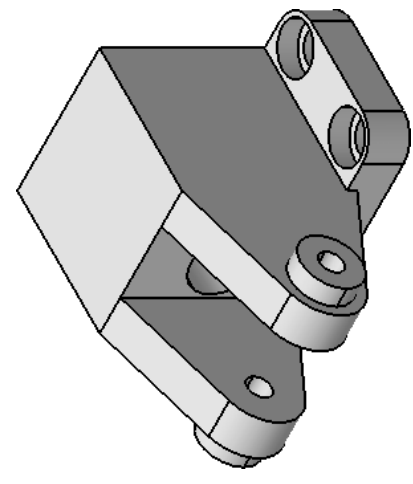
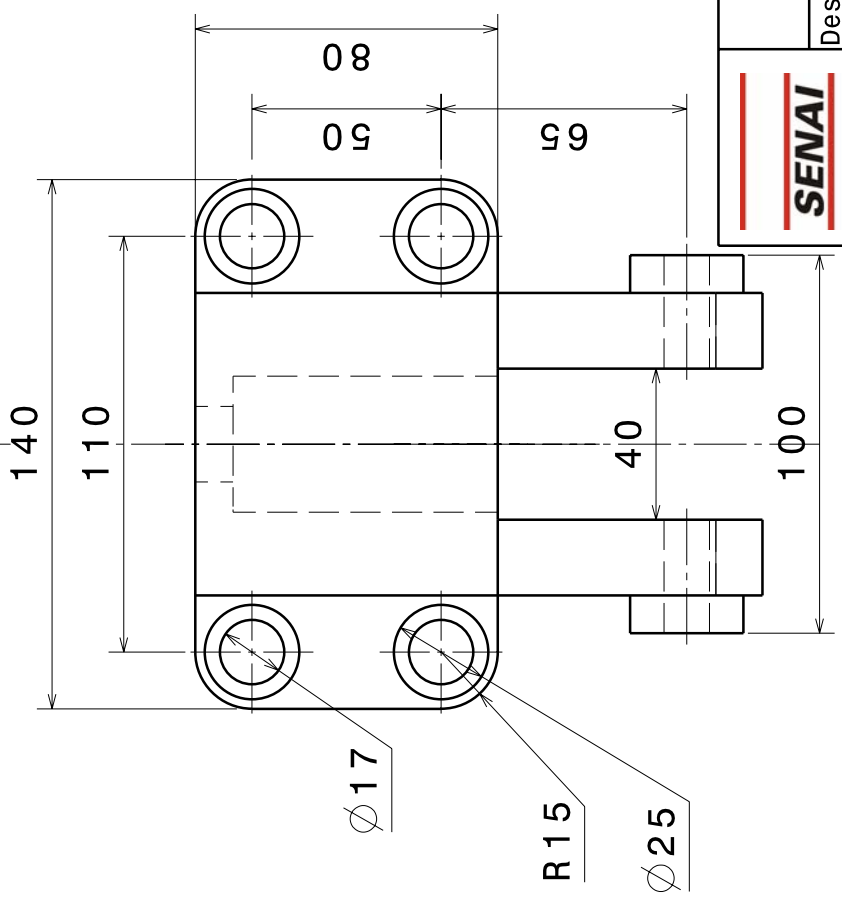
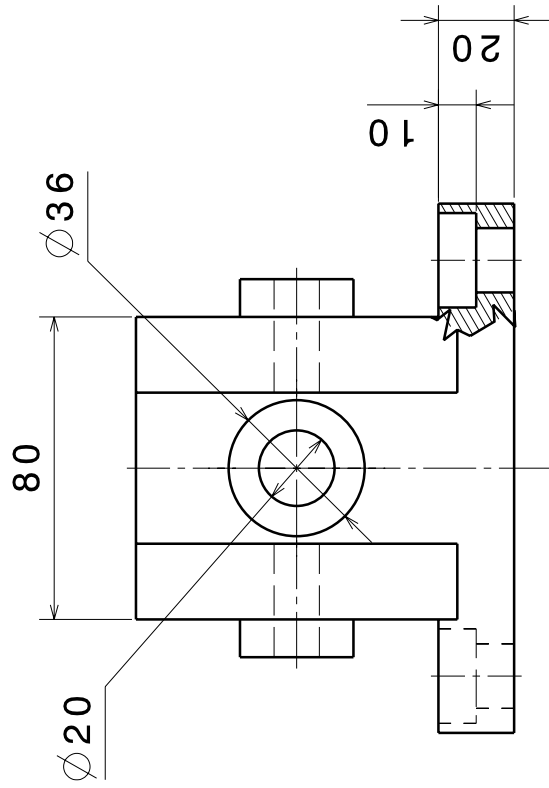
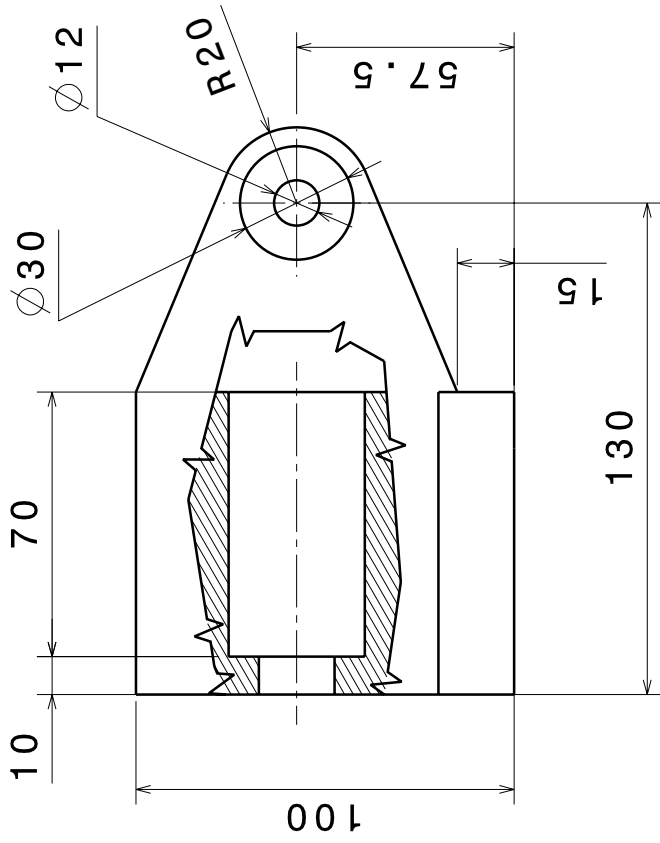
Data: 27/10/05

C.F.P.: 3.02

Escala: 1:2

Página:

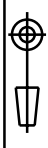
24



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign17



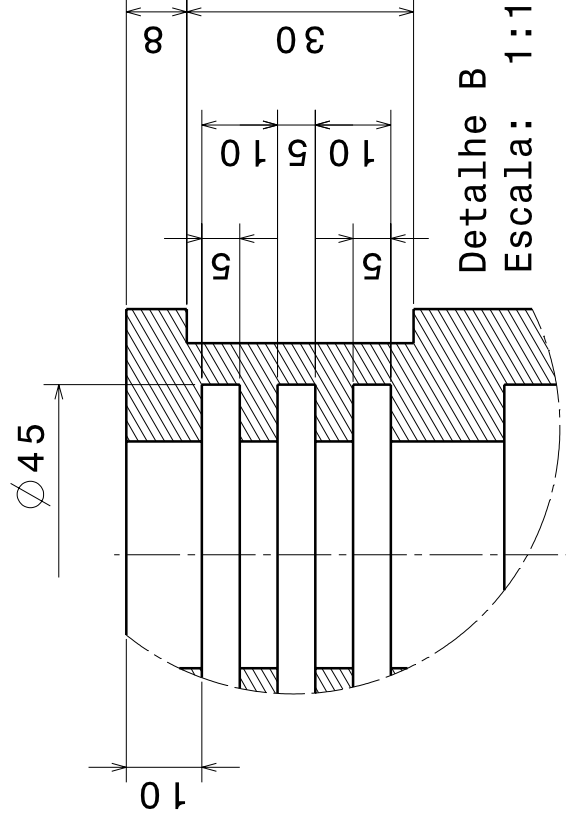
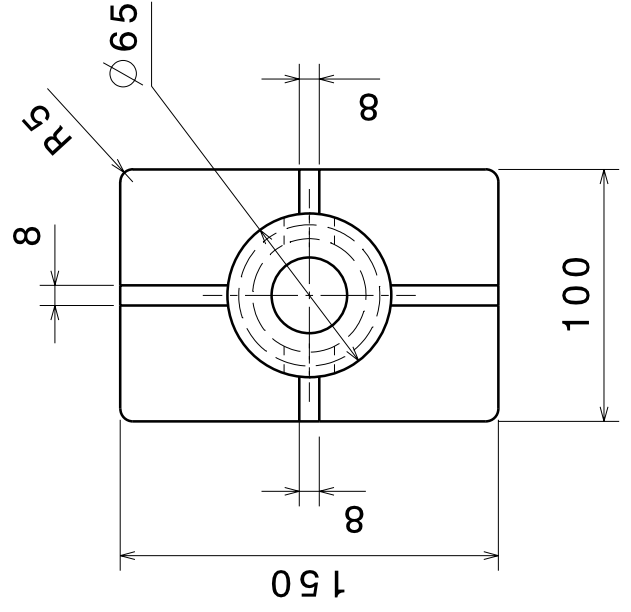
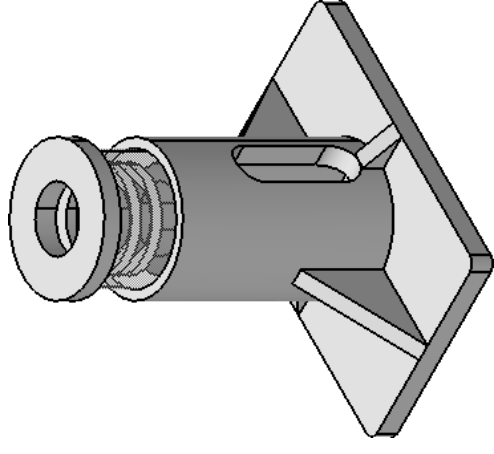
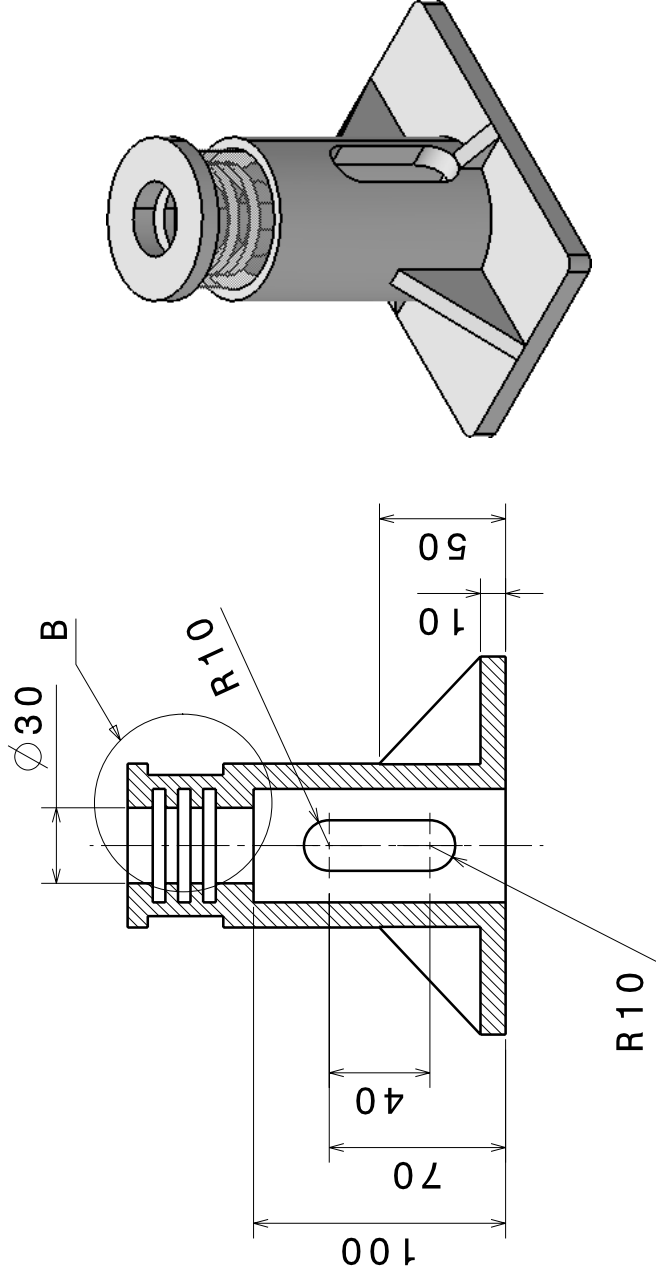
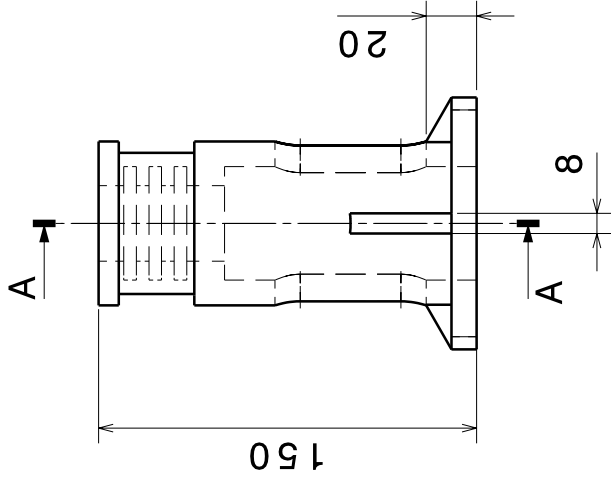
Unidade mm

Escala: 1:2

Data: 12/11/05

Página: 25

C.F.P.: 3.02



Detalhe B
Escala: 1:1



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign18



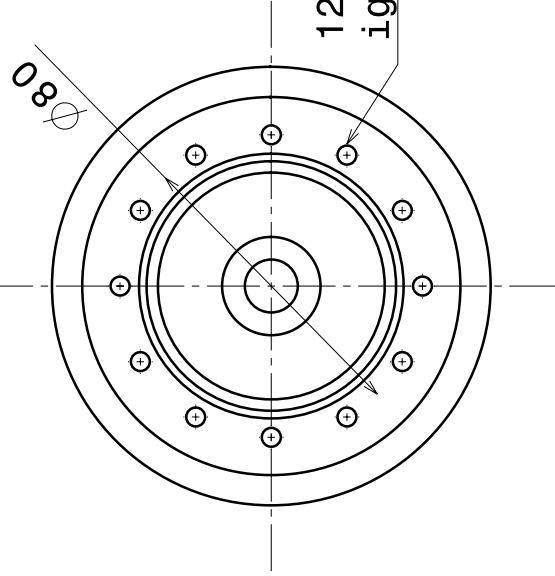
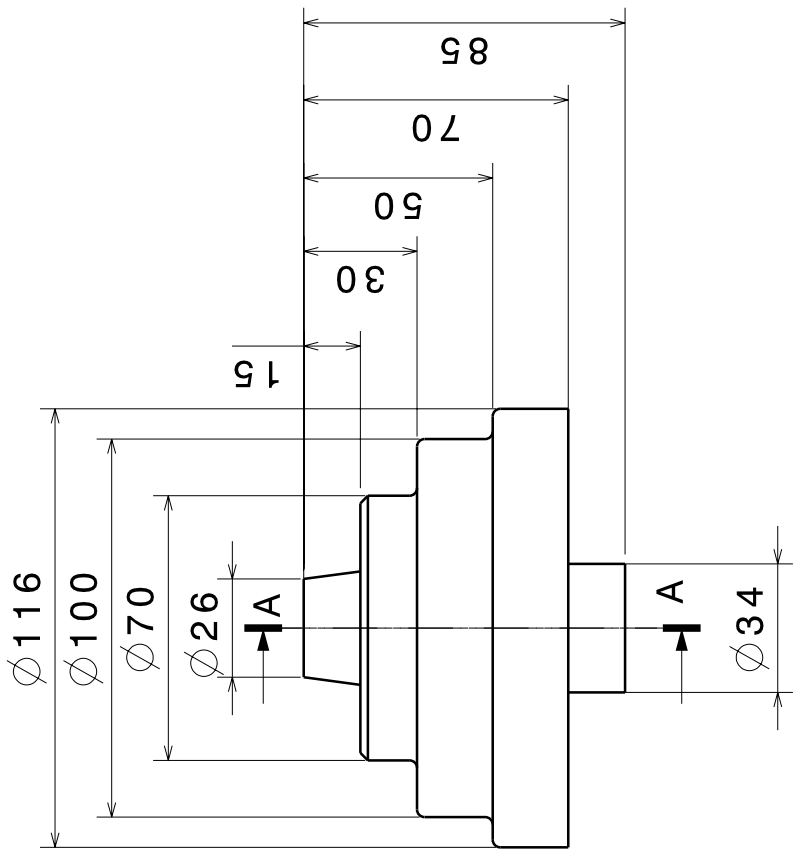
Unidade mm

Escala: 1:2

Data: 12/11/05

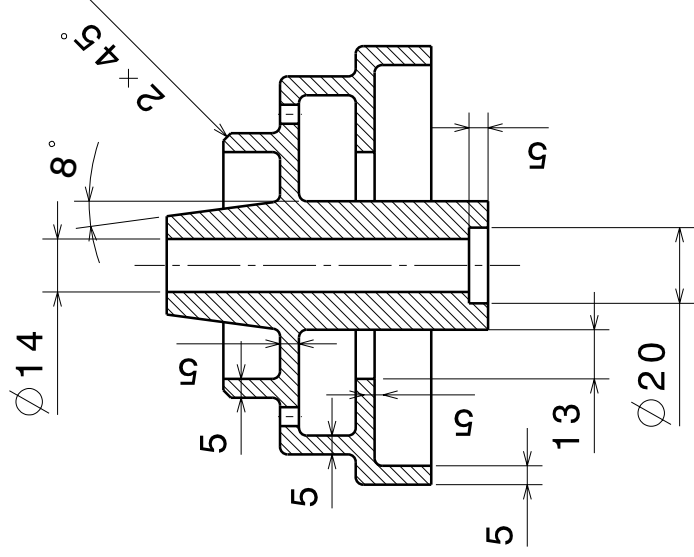
Página: 26

C.F.P.: 3.02

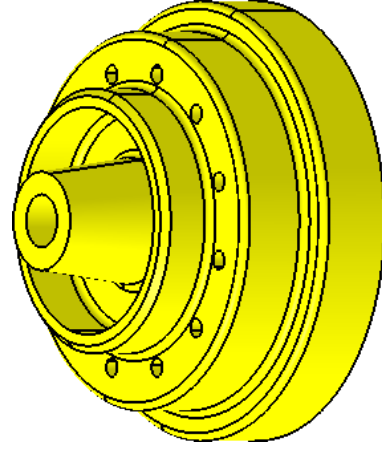


12 furos de ϕ 5 mm
igualmente espaçados.

* Todos os raios não indicados 2 mm



Corte A-A
Escala: 1:2



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign19



Escala:

1:1

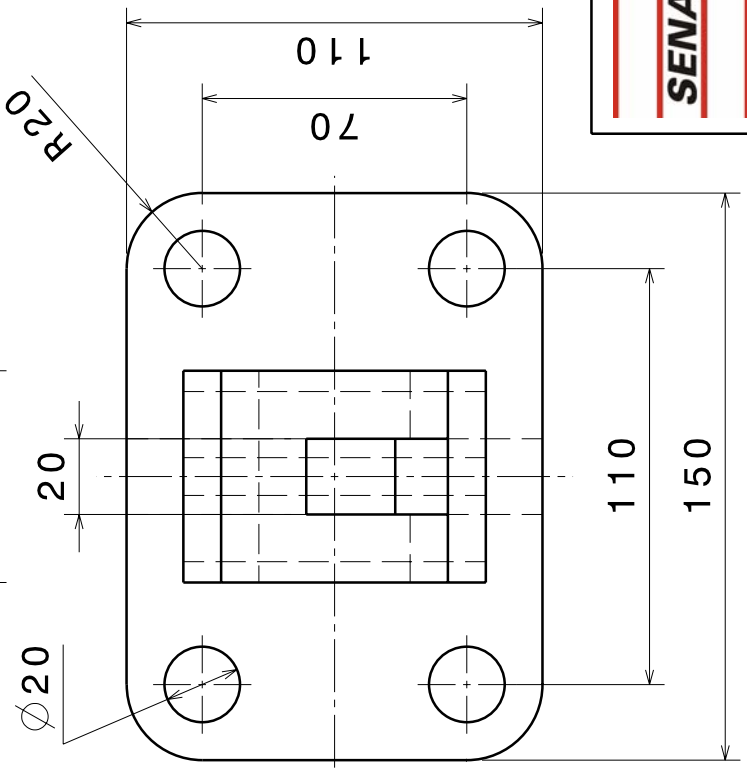
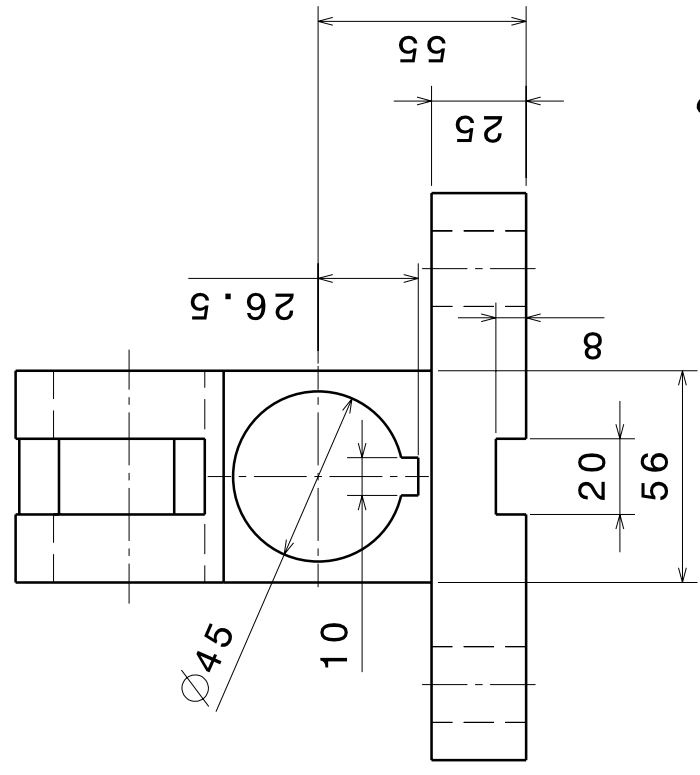
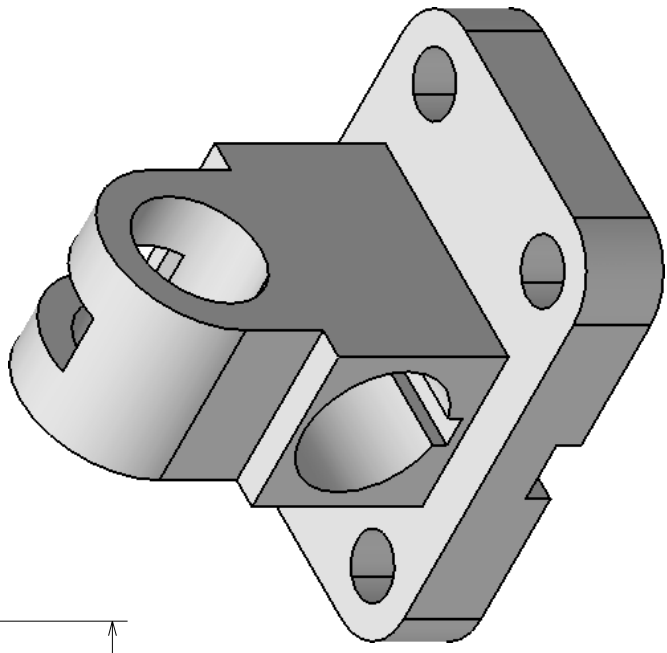
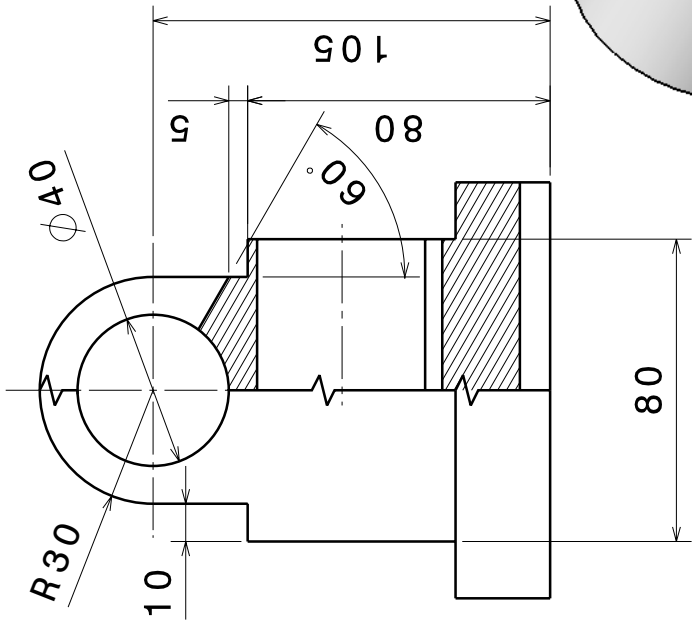
Unidade mm

Data: 12/11/05

Página:

27

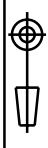
C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign20



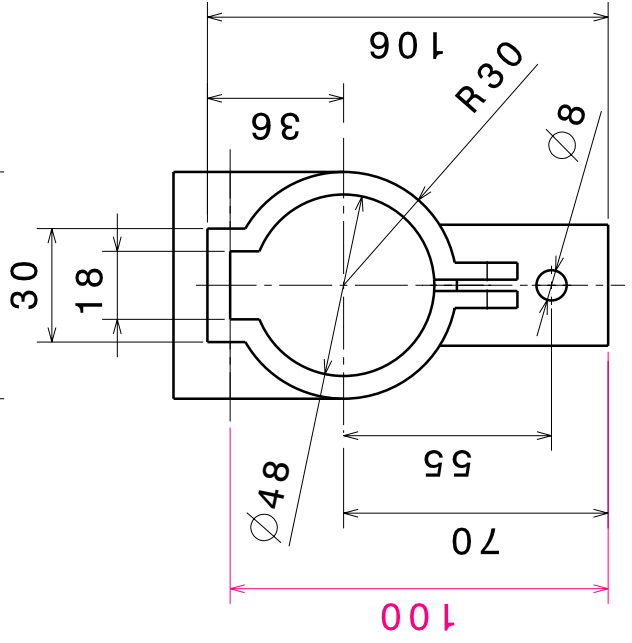
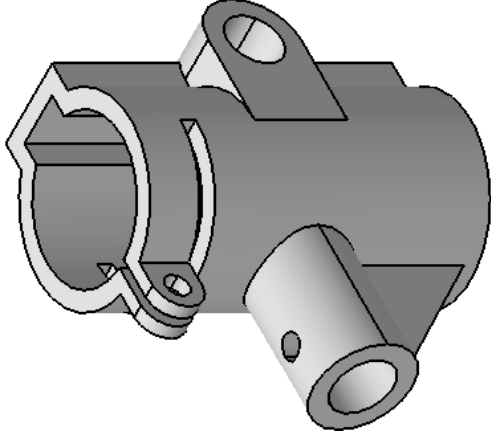
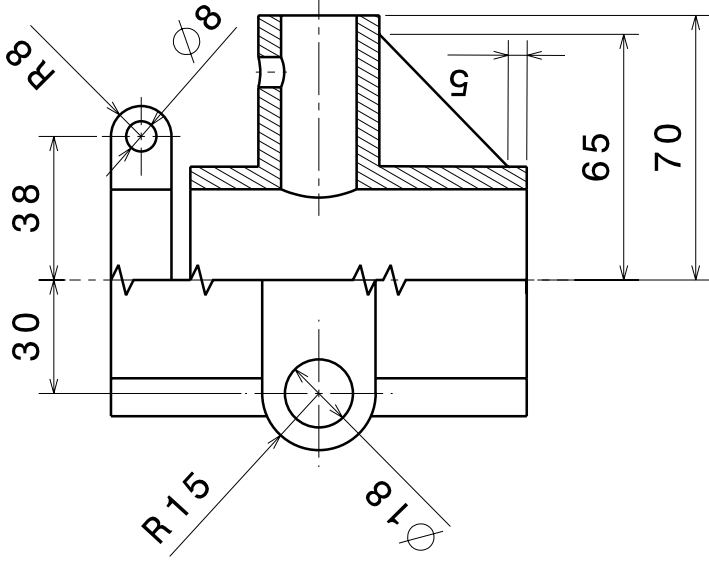
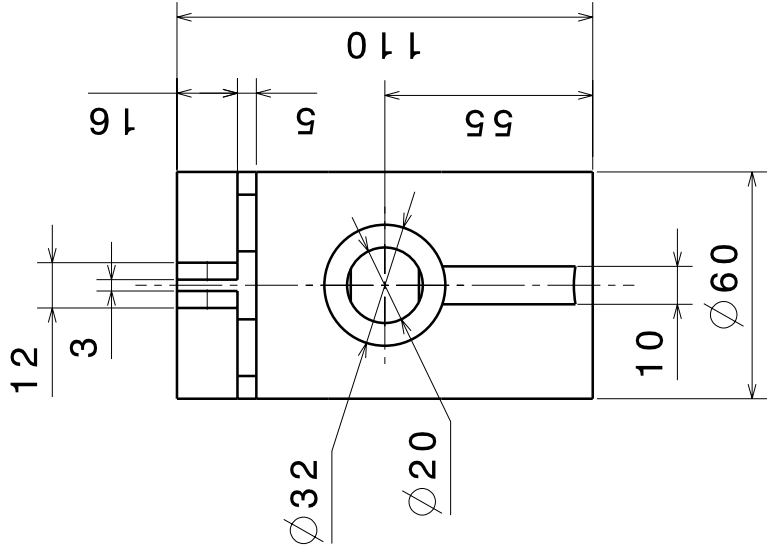
Escola: 1:2

Unidade mm

Data: 12/11/05

Página: 28

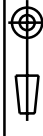
C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign21



Unidade mm

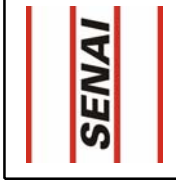
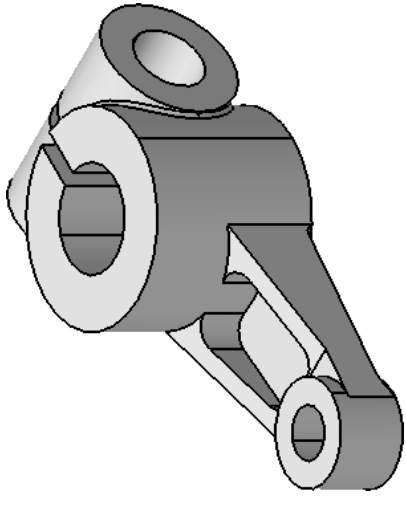
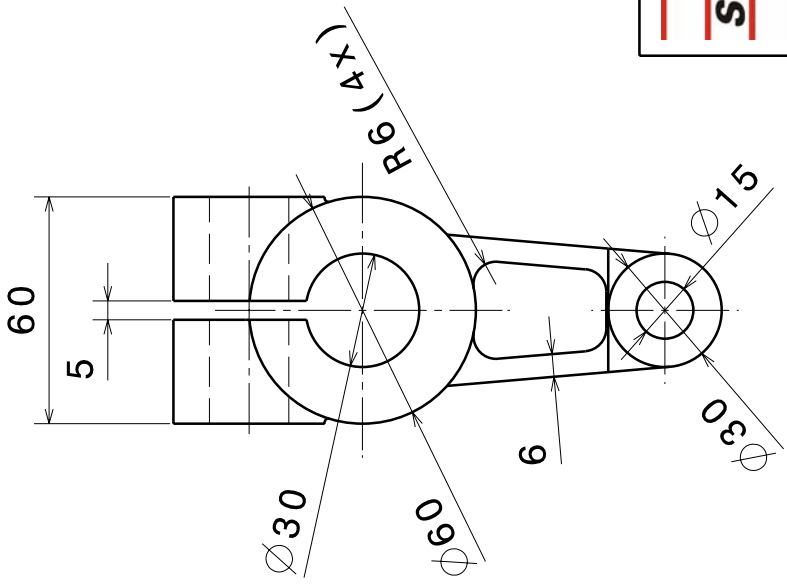
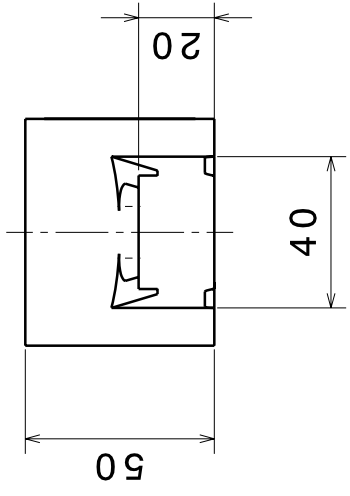
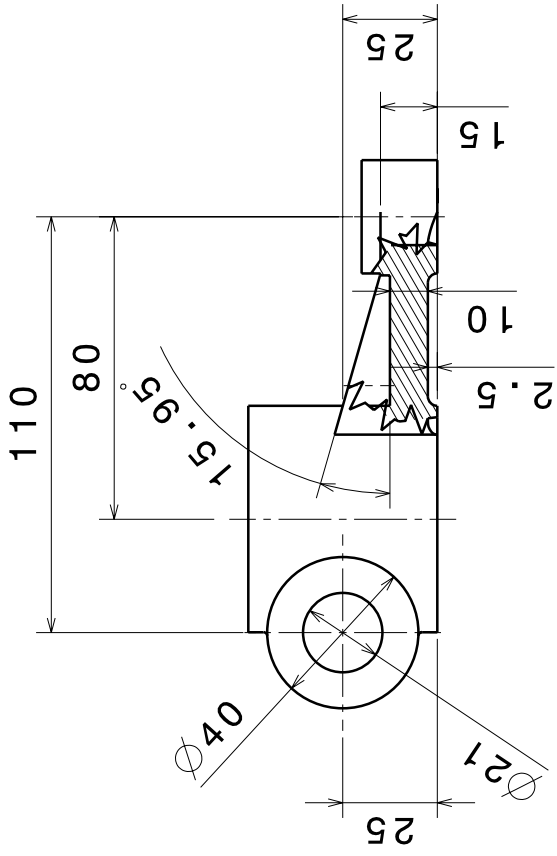
Data: 12/11/05

C.F.P.: 3.02

Escala: 1:2

Página:

29



Escola Senai "Santos Dumont"

Escala: 1:2

Desenhado por: Ugo Luiz

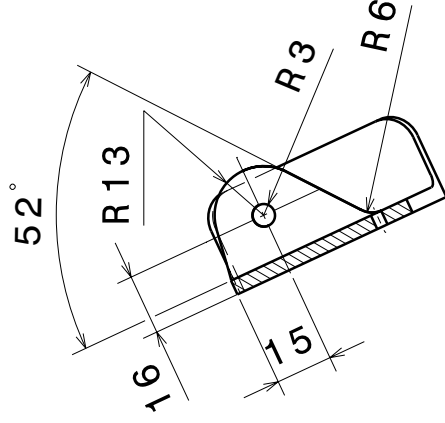
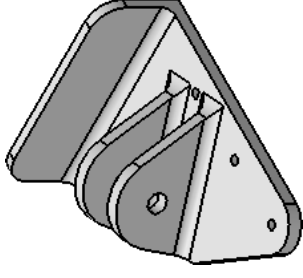
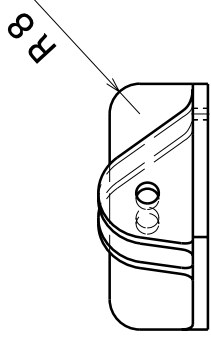
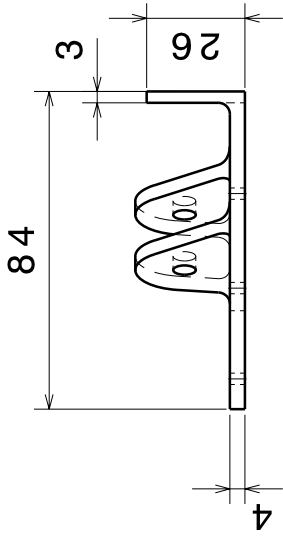
Unidade mm

Página: 30

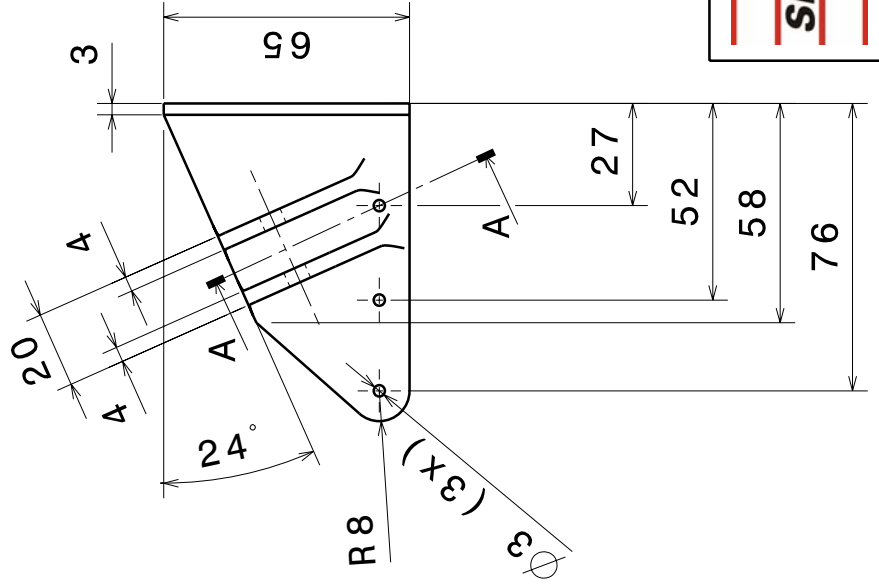
Desenho: EXPartDesign22

Data: 12/11/05

C.F.P.: 3.02



Secção A-A



Escola Senai "Santos Dumont"

Unidade mm

Escola: 1:2

Desenhado por: Ugo Luiz

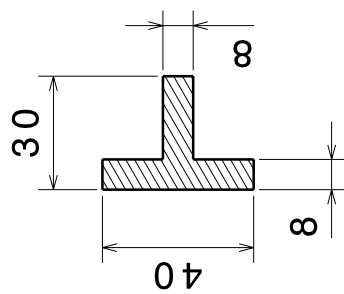
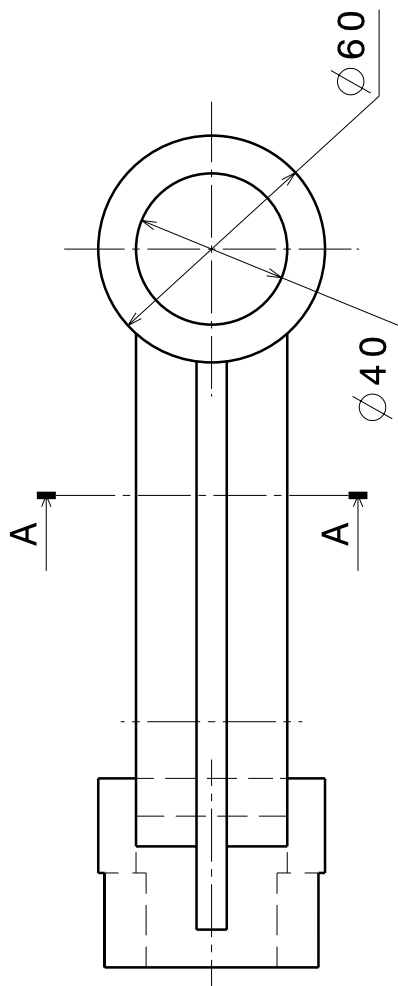
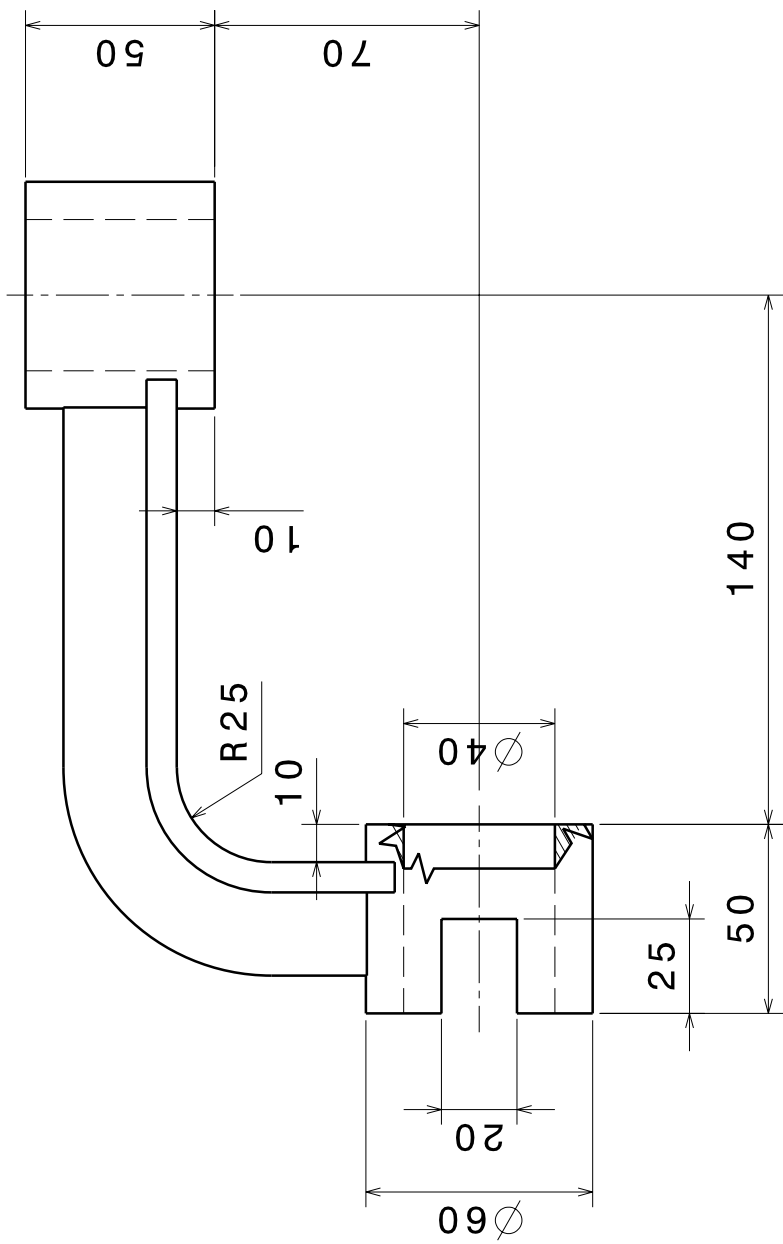
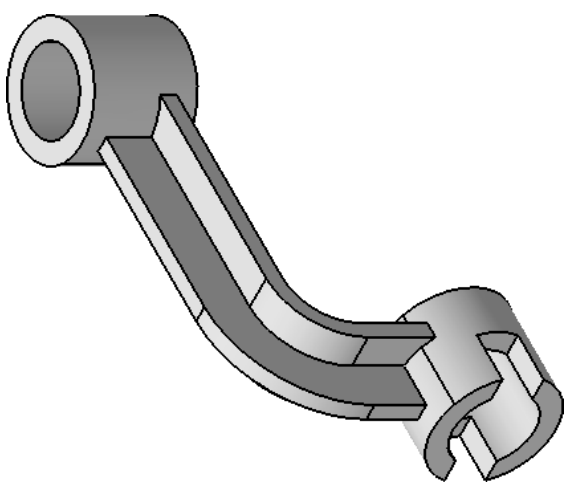
Data: 27/10/05

Página:

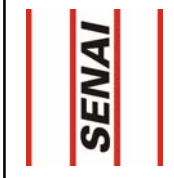
Desenho: EXPartDesign23

C.F.P.: 3.02

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Secção A-A



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: ExPartDesign24



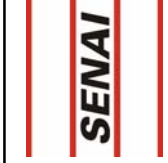
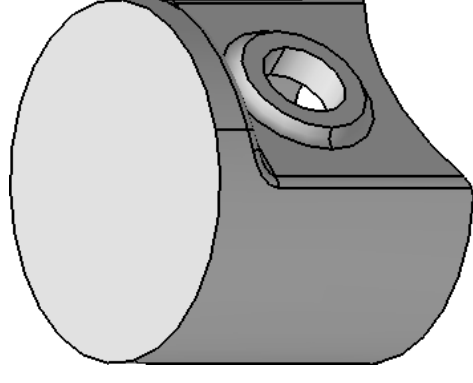
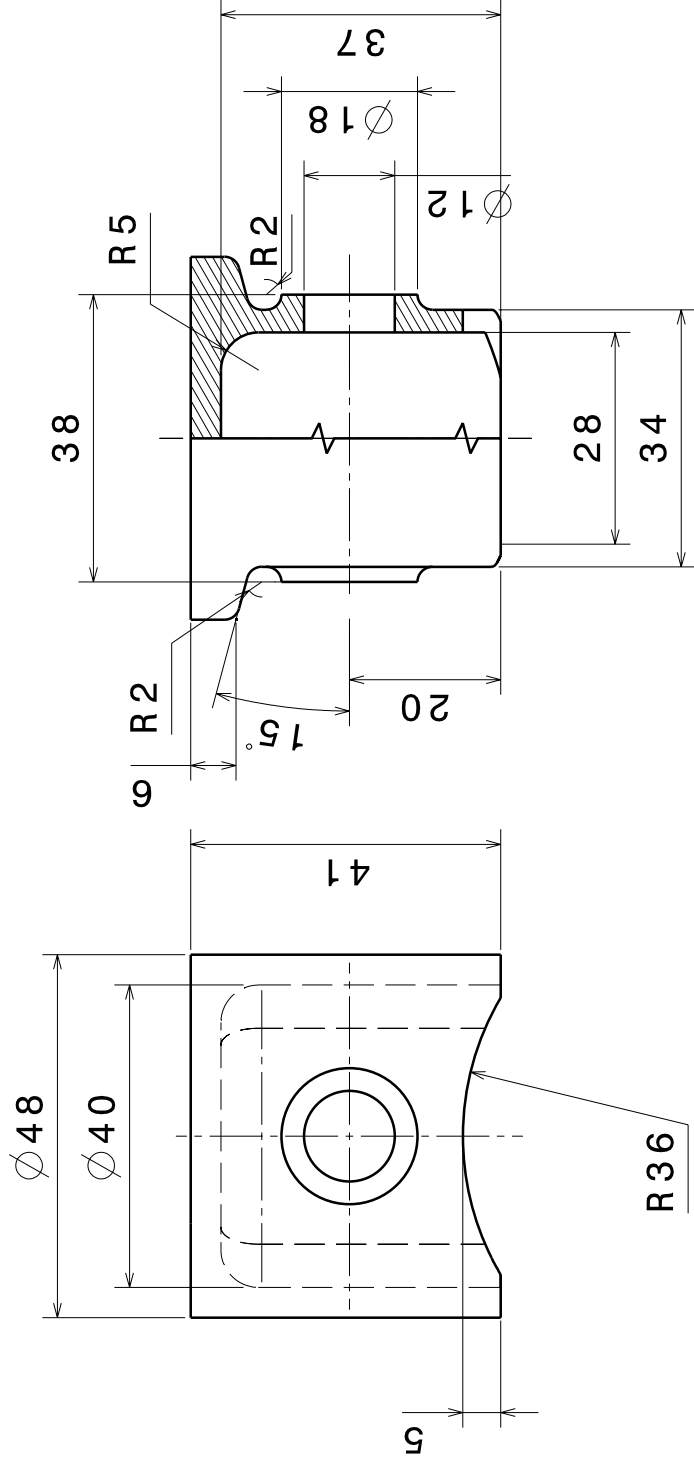
Unidade mm

Escala: 1:2

Data: 27/10/05

Página: 32

C.F.P.: 3.02



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: ExPartDesign25

Escola:

1:1

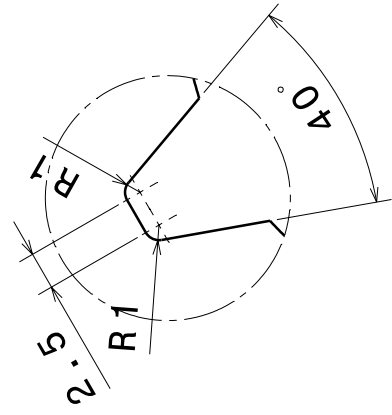


Unidade mm

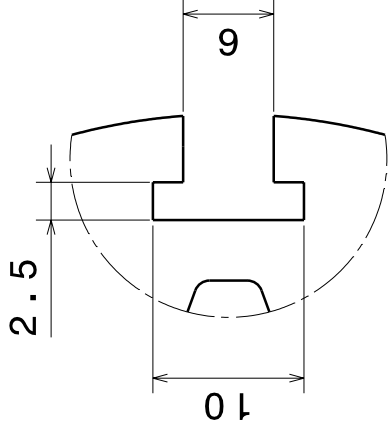
Data: 27/10/05

Página: 33

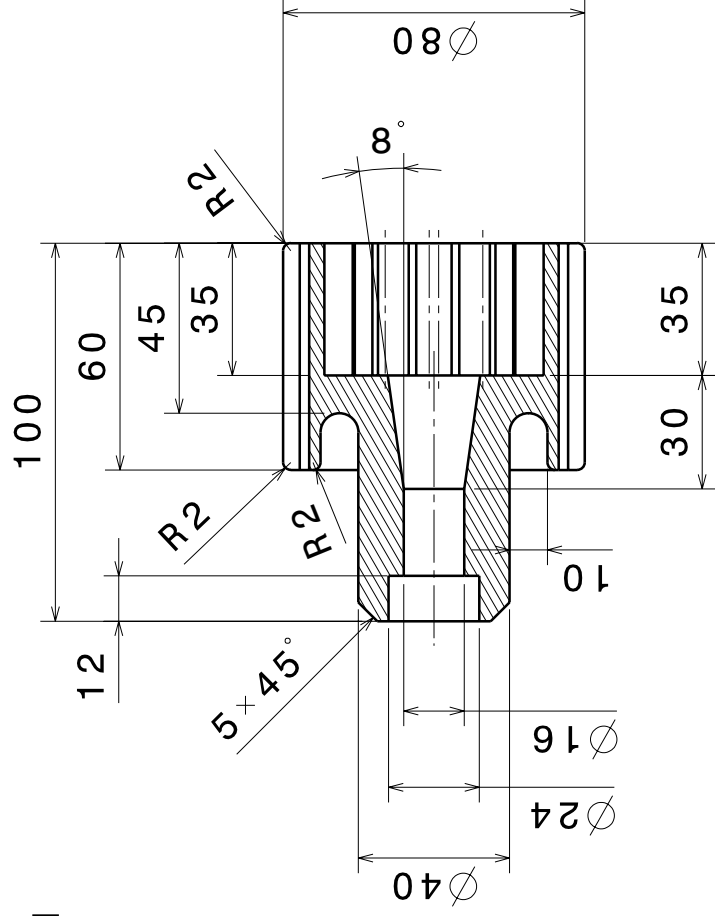
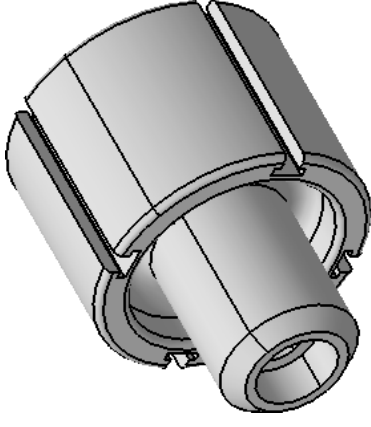
C.F.P.: 3.02



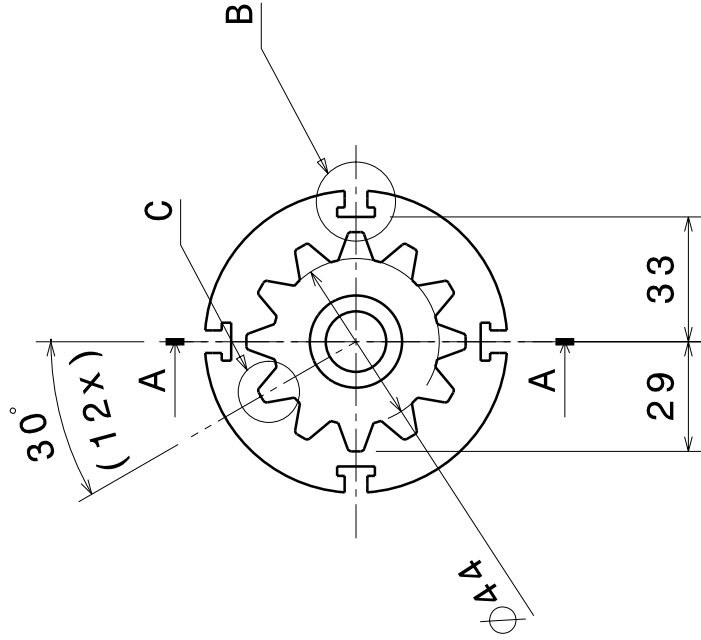
Detalhe C
Escala: 2:1



Detalhe B
Escala: 2:1



Secção A-A



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign26



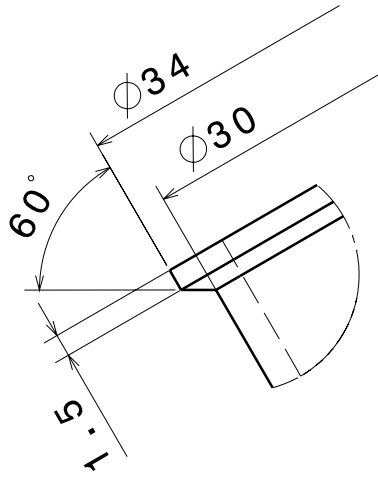
Escala:
1:2

Unidade mm

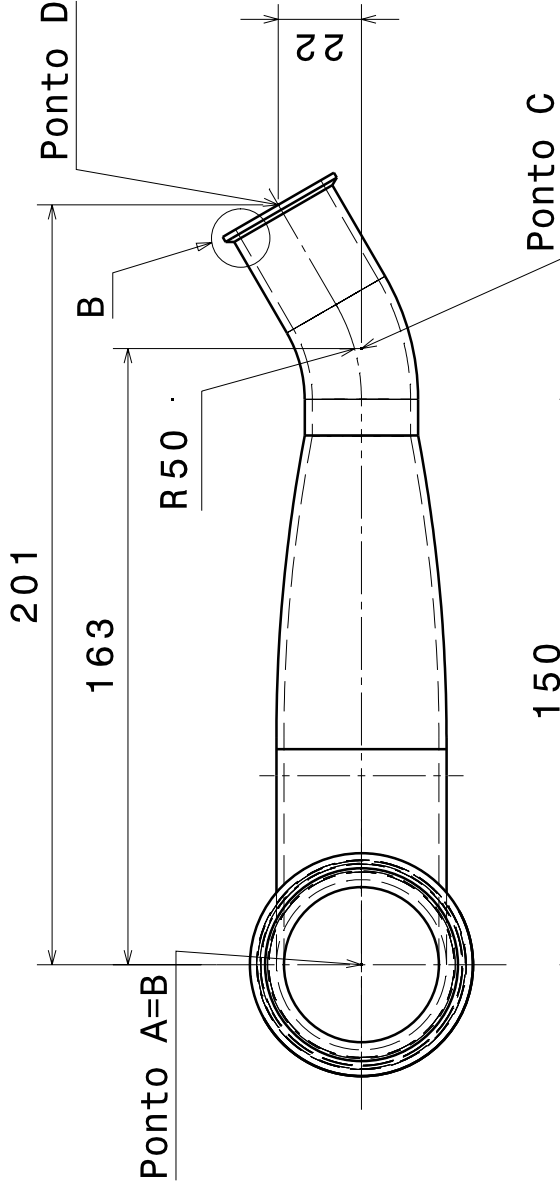
Data: 27/10/05

Página:
34

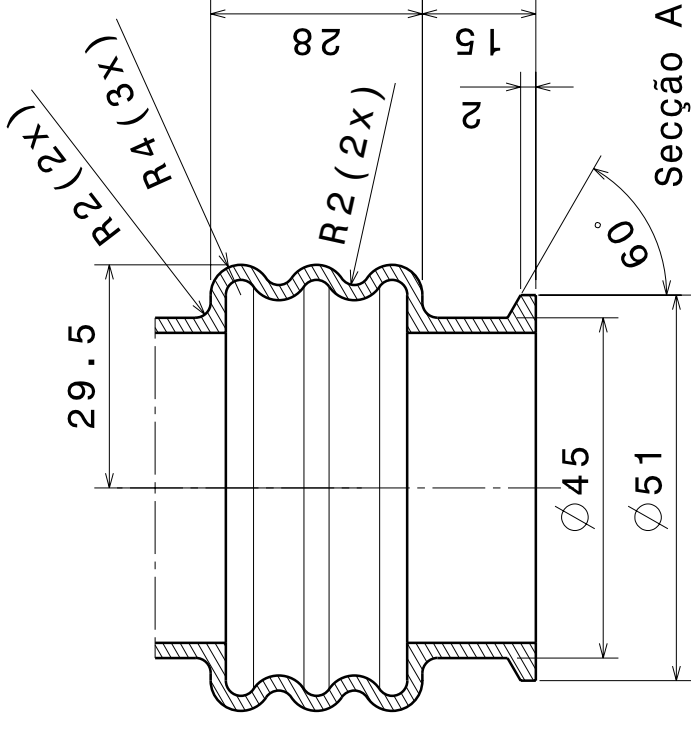
C.F.P.: 3.02



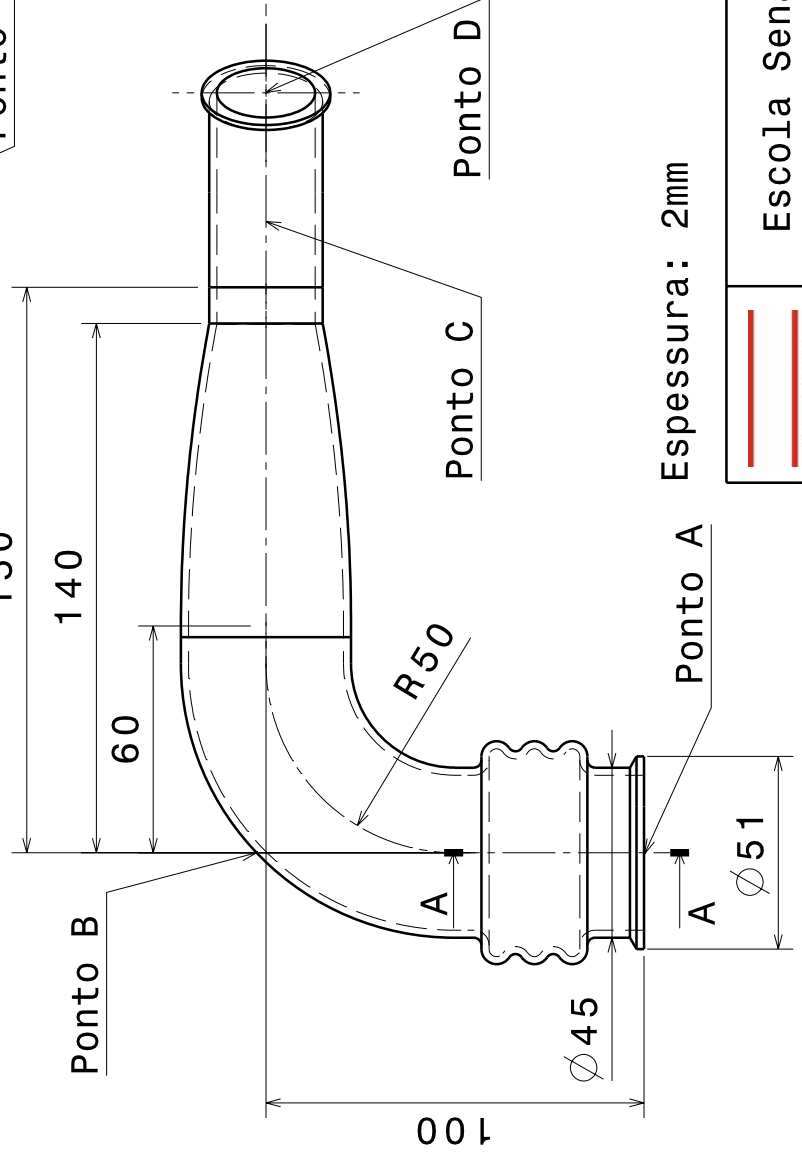
Detalhe B
Escala: 2:1



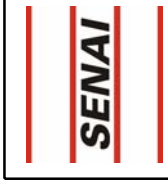
Ponto C



Secção A-A
Escala 1:1



EspeSSura: 2mm



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign27

Unidade mm

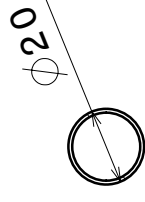
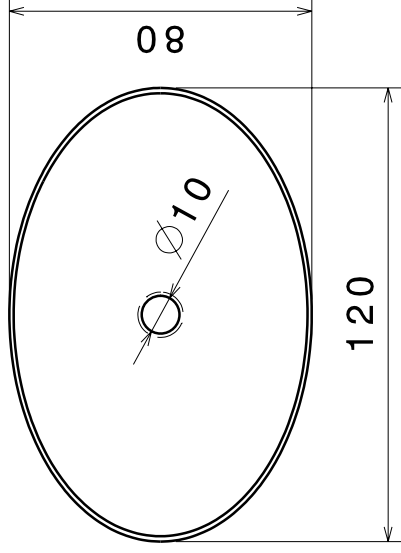
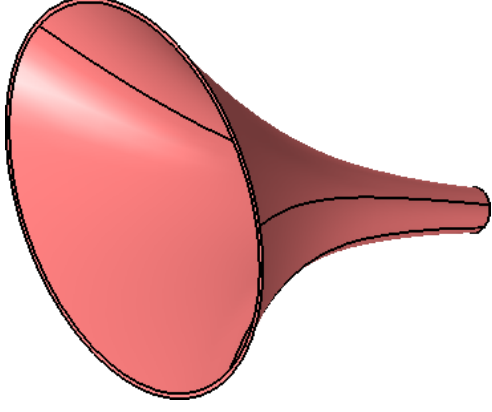
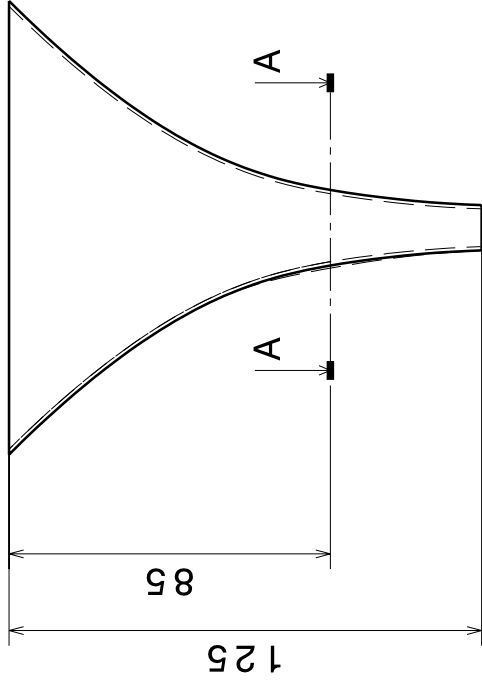
Data: 27/10/05

C.F.P.: 3.02

Escala: 1:2

Página:

35



Secção A-A

A espessura da parede é 1mm.



Escola Senai "Santos Dumont"

Unidade mm

Escola: 1:2

Desenhado por: Ugo Luiz

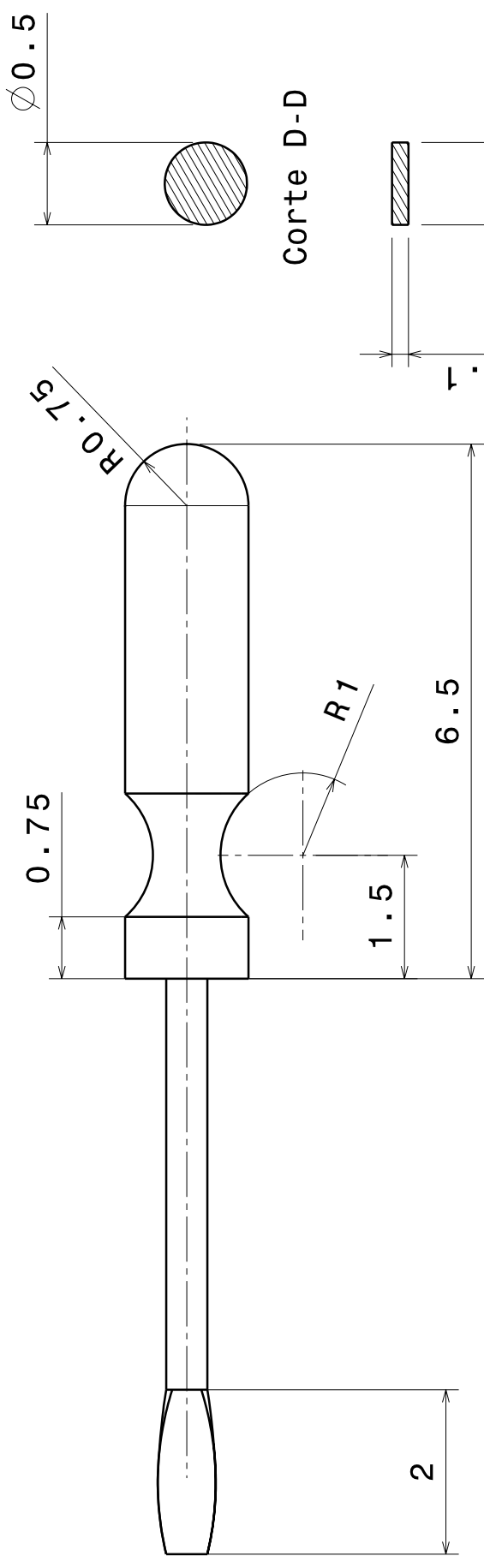
Data: 27/10/05

Página:

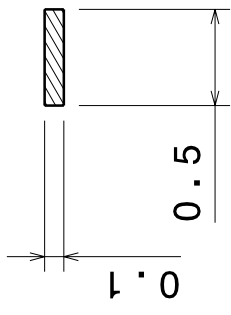
Desenho: EXPartDesign28

C.F.P.: 3.02

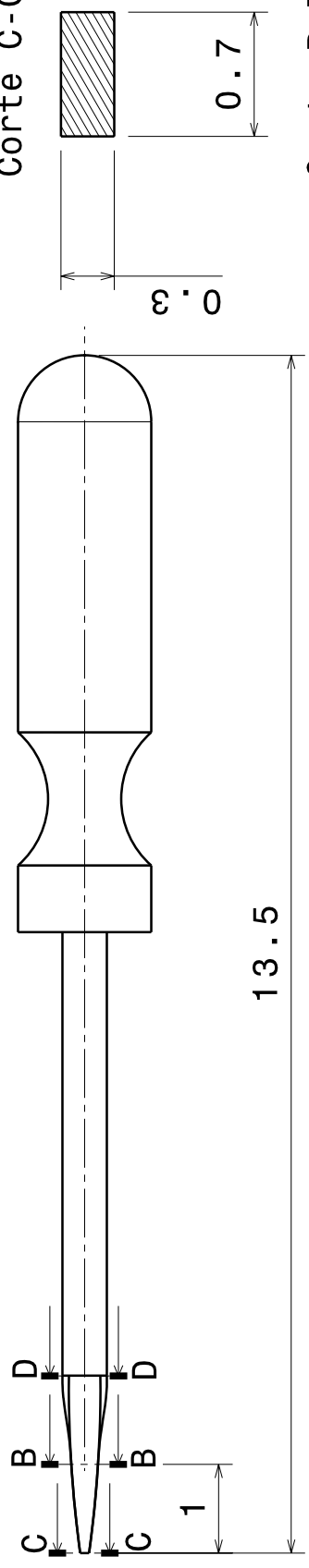
36



Corte D-D

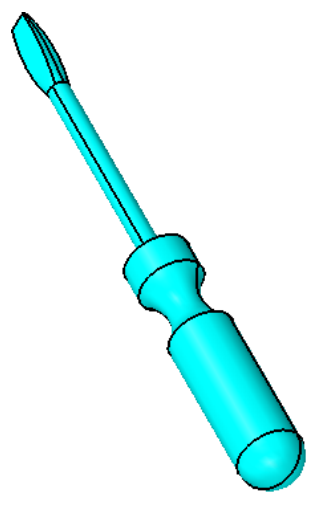





Corte C-C

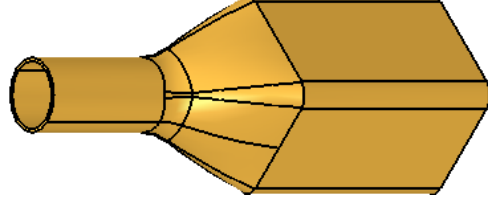
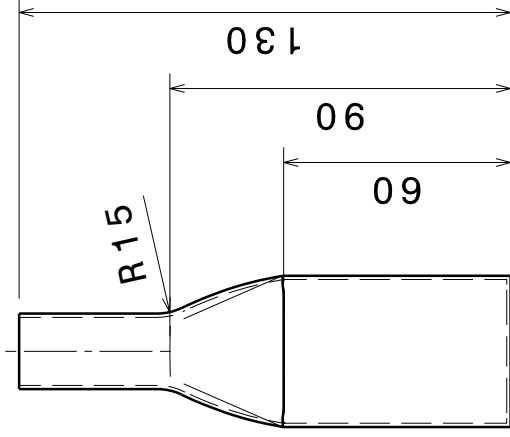


Corte B-B

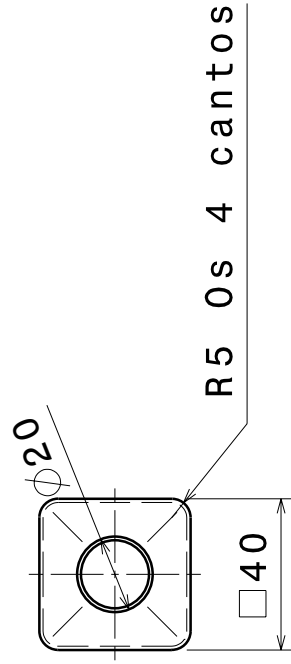
Todas as medidas estão em polegadas.



	Escola Senai "Santos Dumont"		 Escala: 1:2
	Desenhado por: Ugo Luiz		 Unidade mm
Desenho: EXPartDesign29		Data: 27/10/05	Página: 37
		C.F.P.: 3.02	



Todas as paredes espessura de 1mm.



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign30



Unidade mm

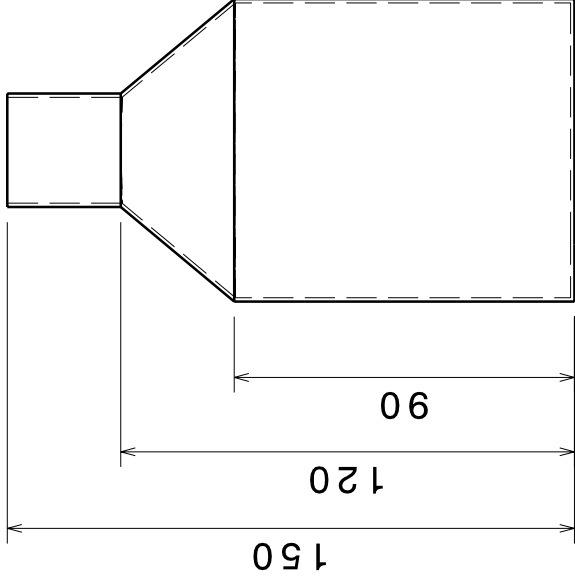
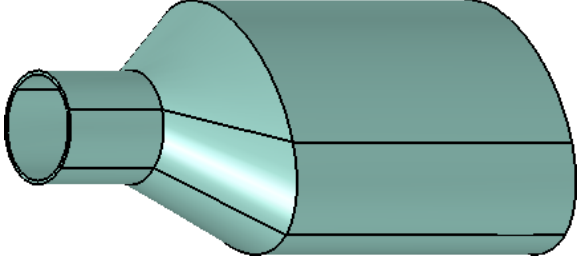
Escola: 1:2

Data: 27/10/05

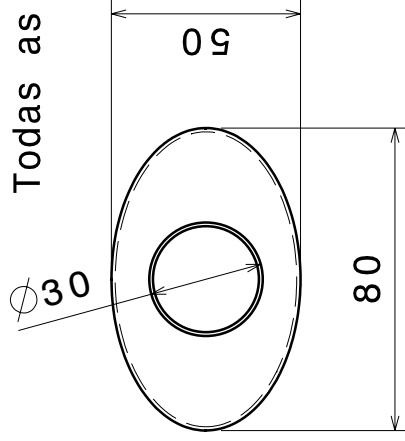
Página:

38

C.F.P.: 3.02



Todas as paredes espessura de 1mm.



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign31

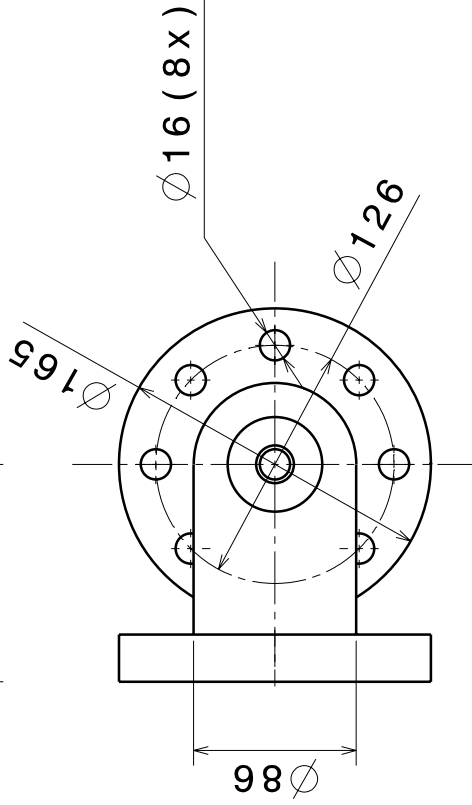
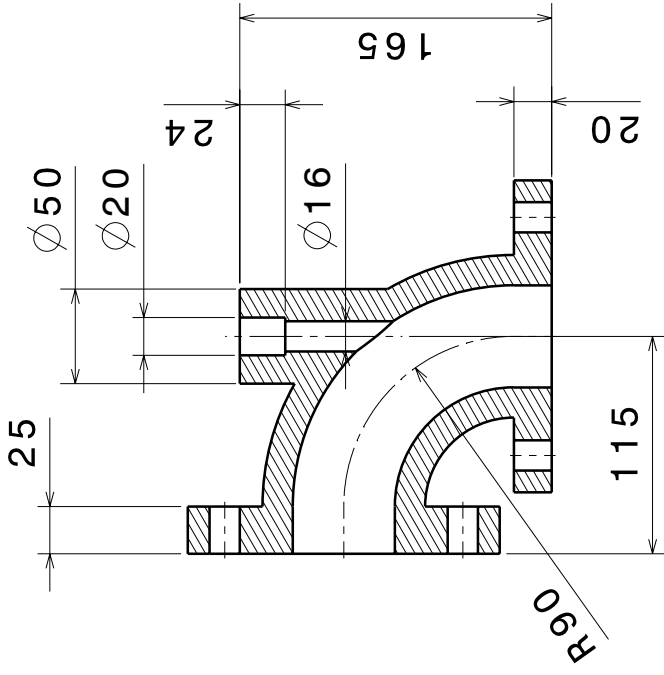
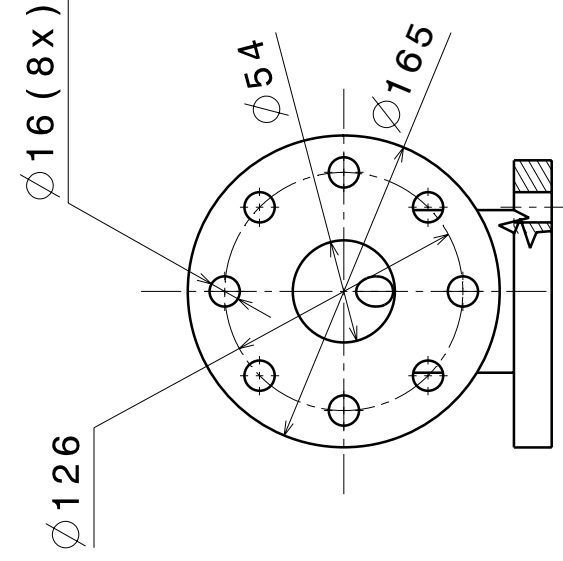
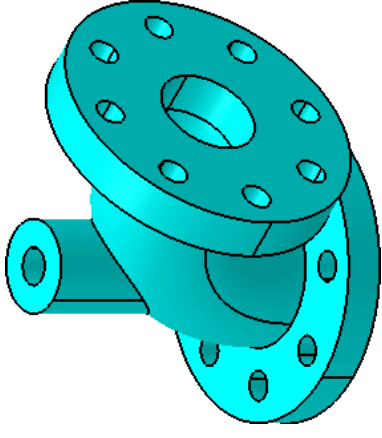





Unidade mm

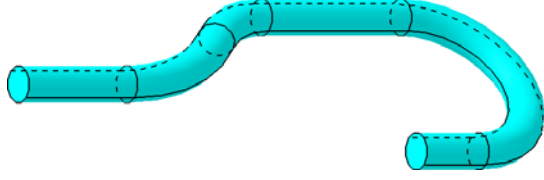
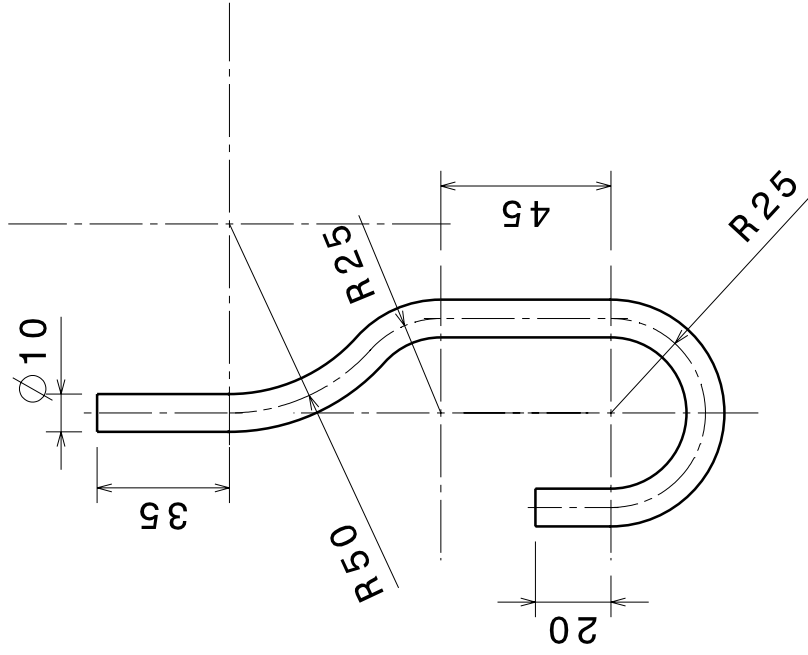
Escala:
1:2

Data: 27/10/05

Página:
39



	Escola Senai "Santos Dumont"		 Escala: 1:2
	Desenhado por: Ugo Luiz		 Unidade mm
Desenho: EXPartDesign32		Data: 18/11/05	Página: 40
		C.F.P.: 3.02	



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign33



Unidade mm

Data: 18/11/05

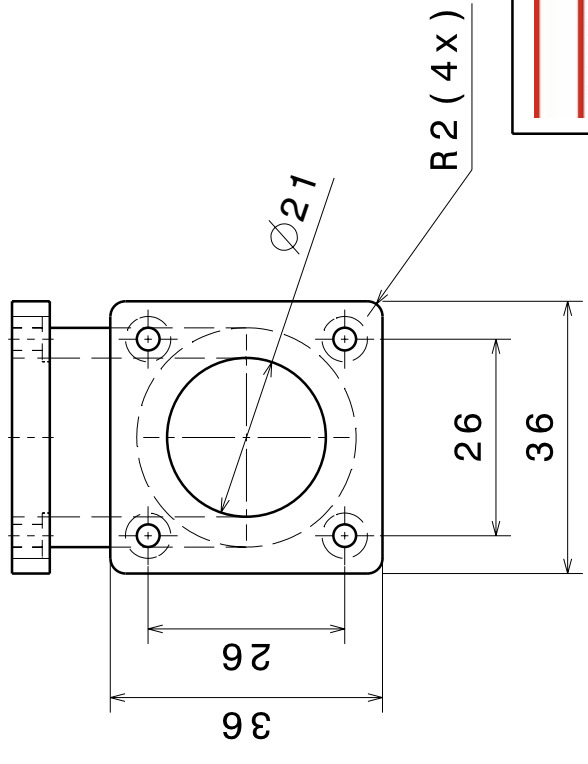
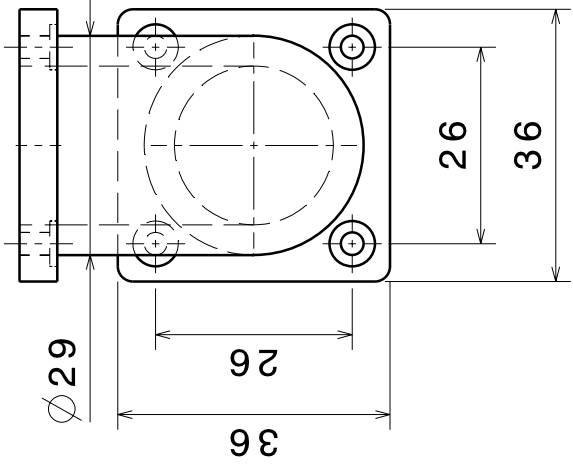
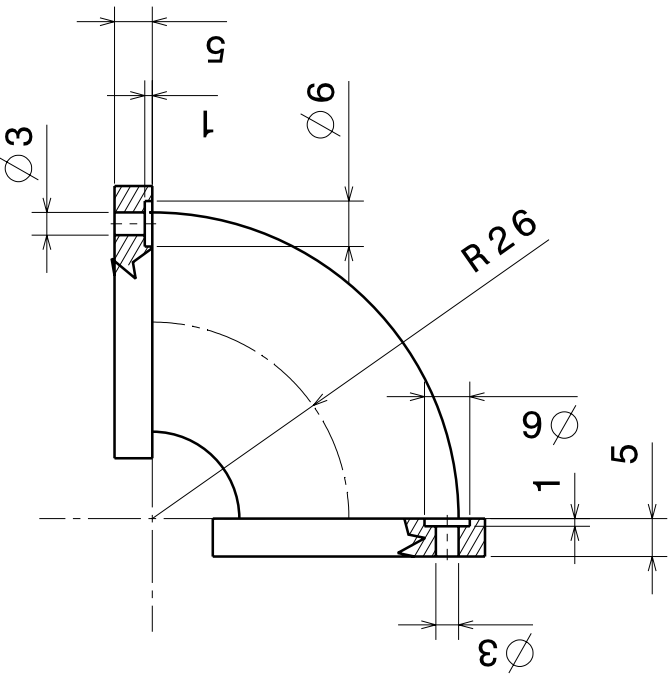
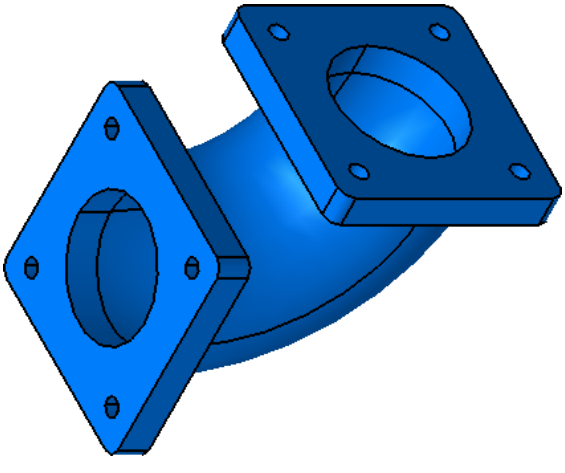
C.F.P.: 3.02

Escala:

1:2

Página:

41



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign34

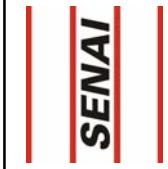
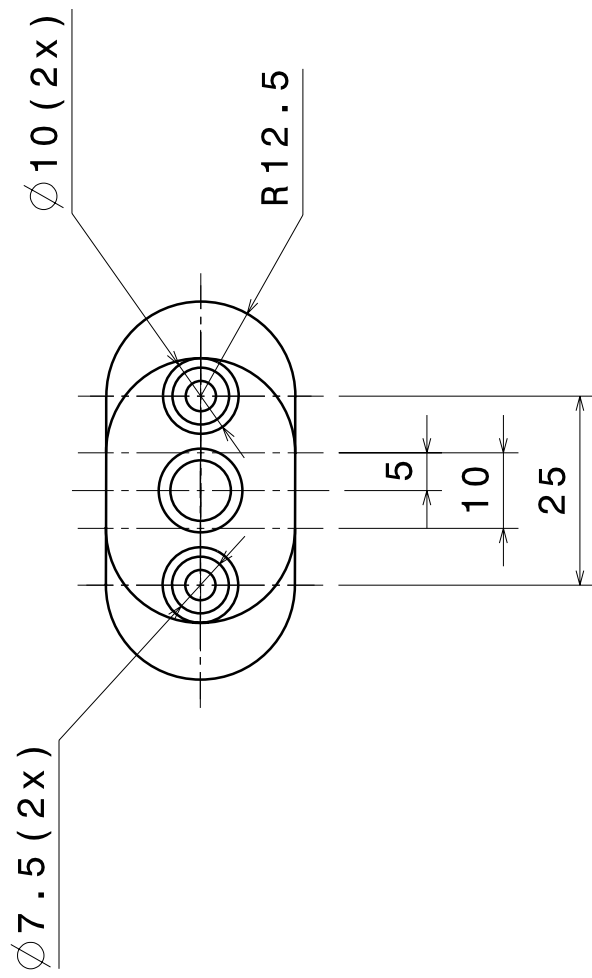
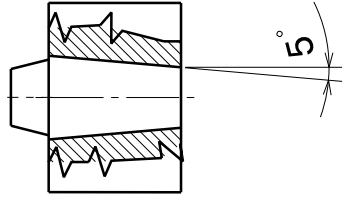
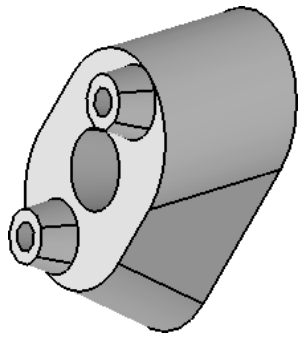
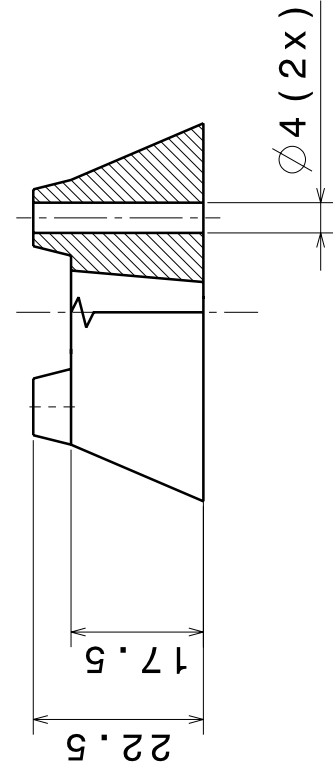
Unidade mm

Data: 18/11/05

C.F.P.: 3.02

Escola: 1:2

Página: 42



Escola Senai "Santos Dumont"

Desenhado por: Ugo Luiz

Desenho: EXPartDesign35

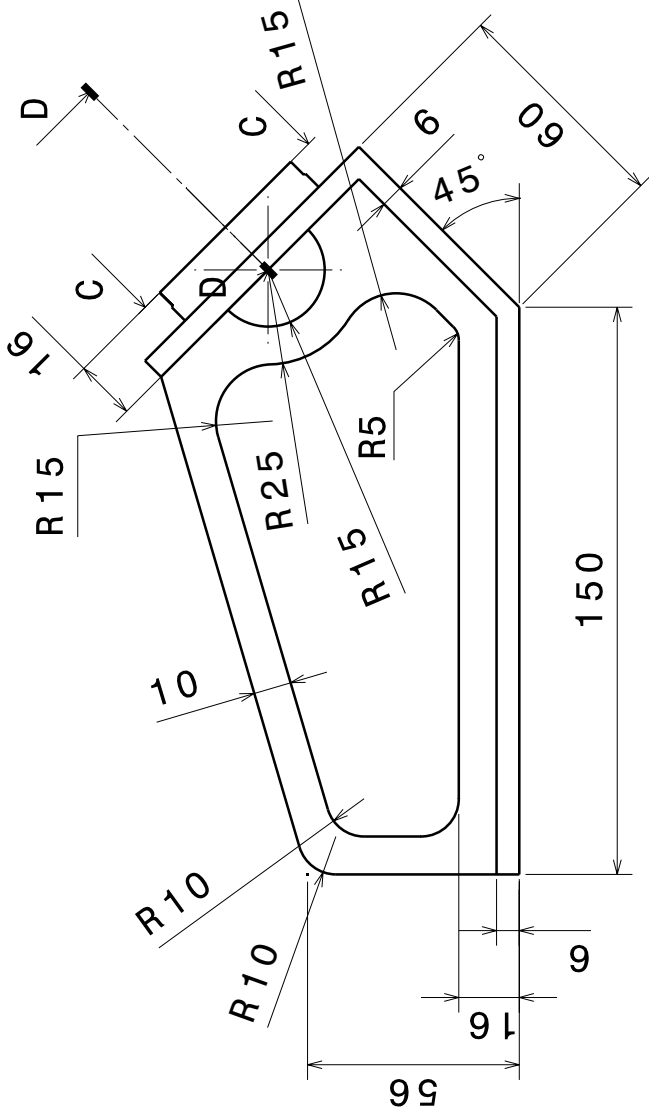
Unidade mm

Data: 18/11/05

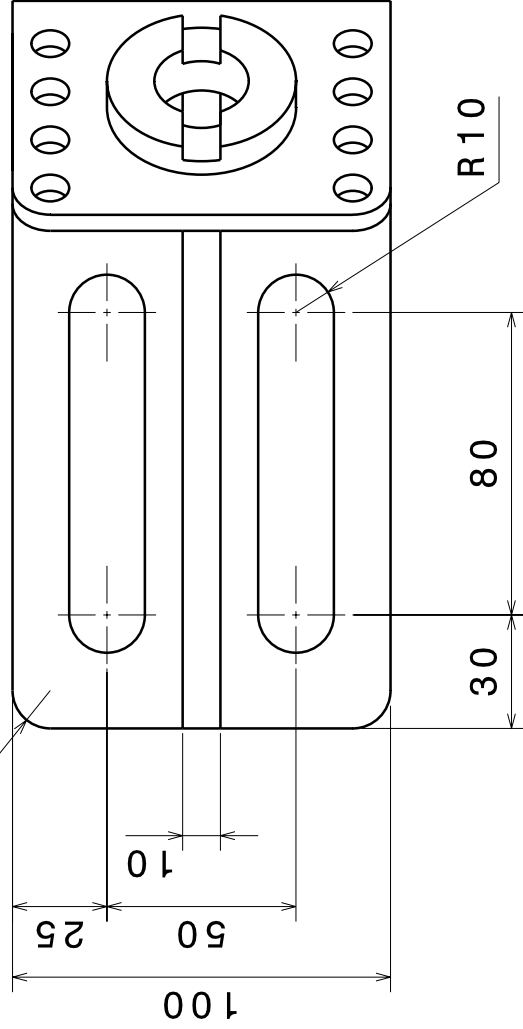
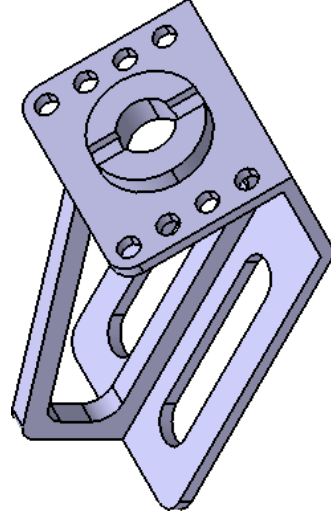
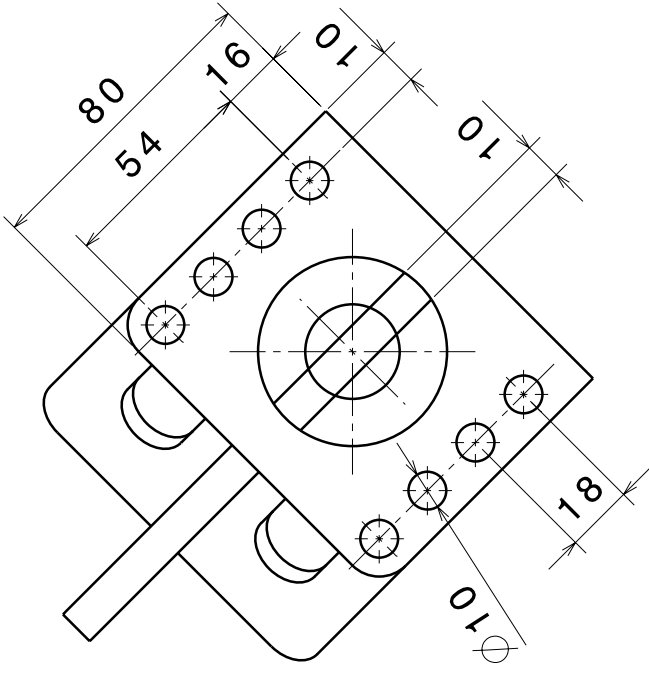
C.F.P.: 3.02

Escola: 1:2

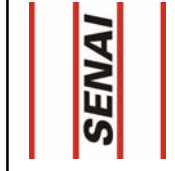
Página: 43



Vista C-C



Secção D-D



Escola Senai "Santos Dumont"

Escola: 1:4

Unidade mm

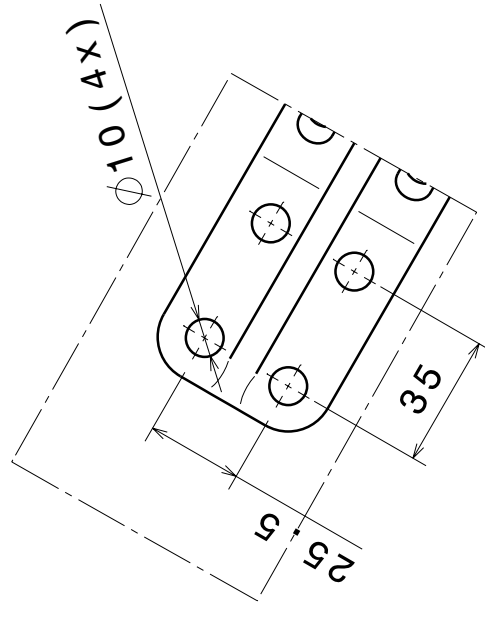
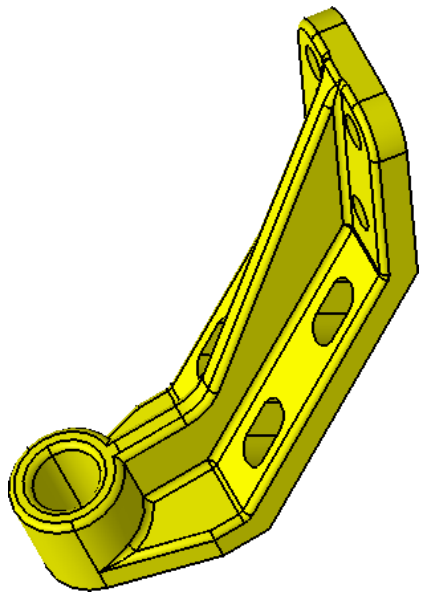
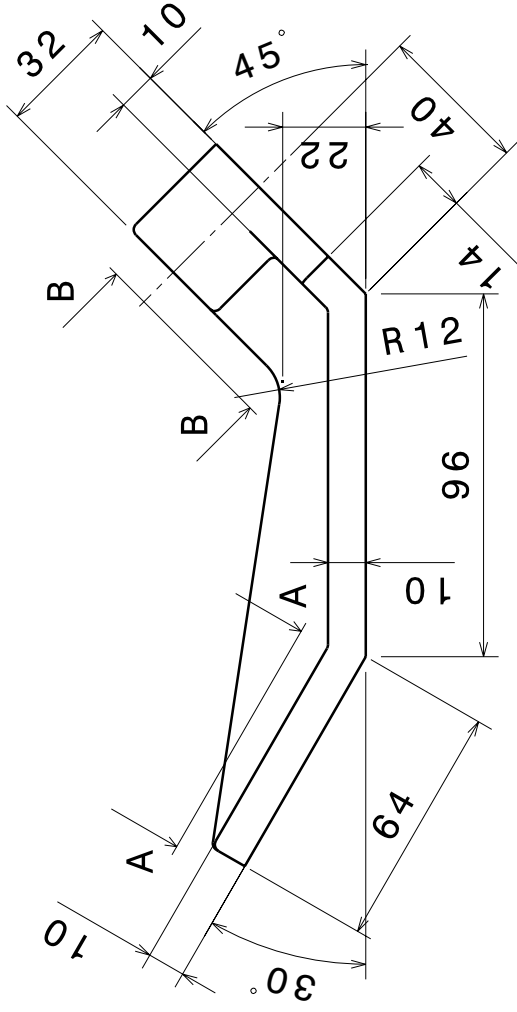
Desenhado por: Ugo Luiz

Data: 27/10/05

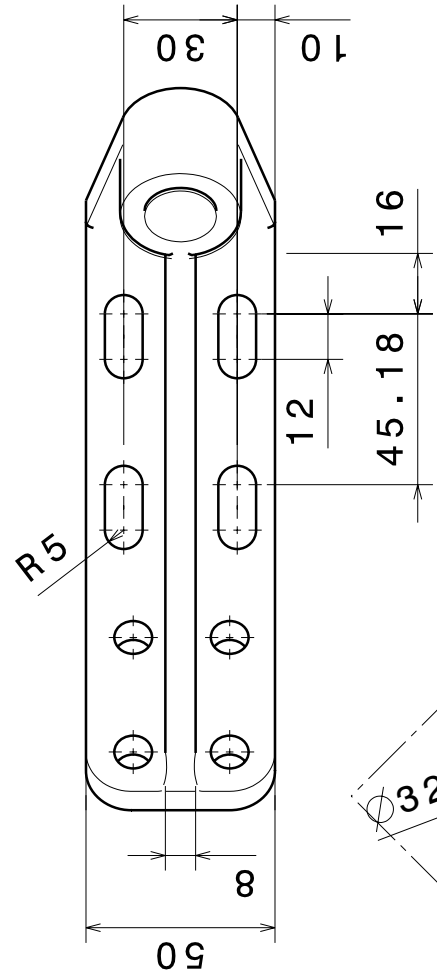
Desenho: ExPartDesign36

Página: 44

C.F.P.: 3.02



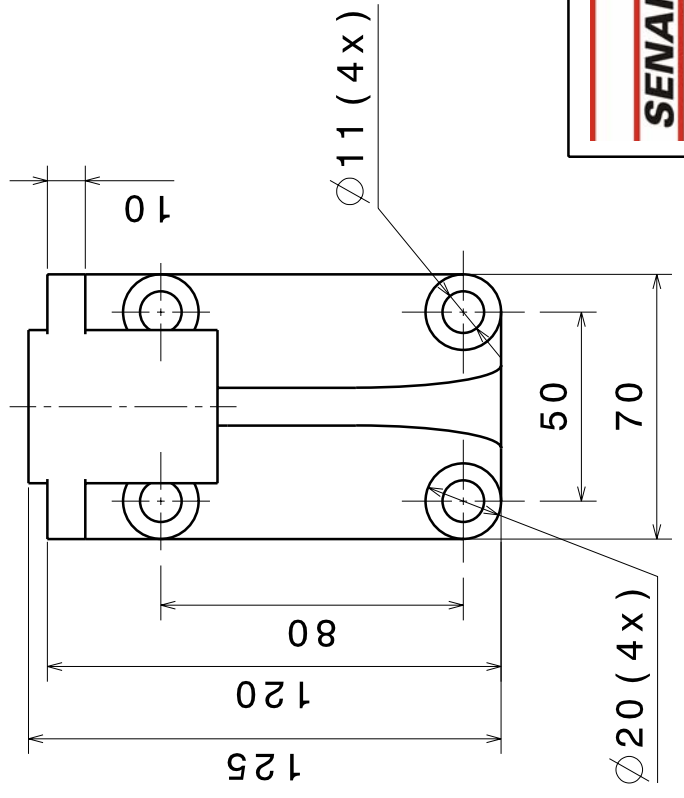
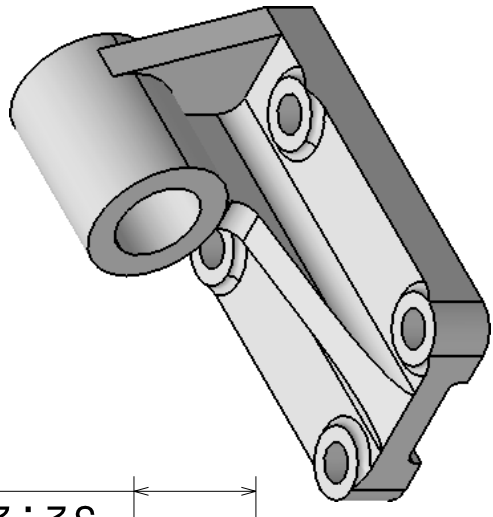
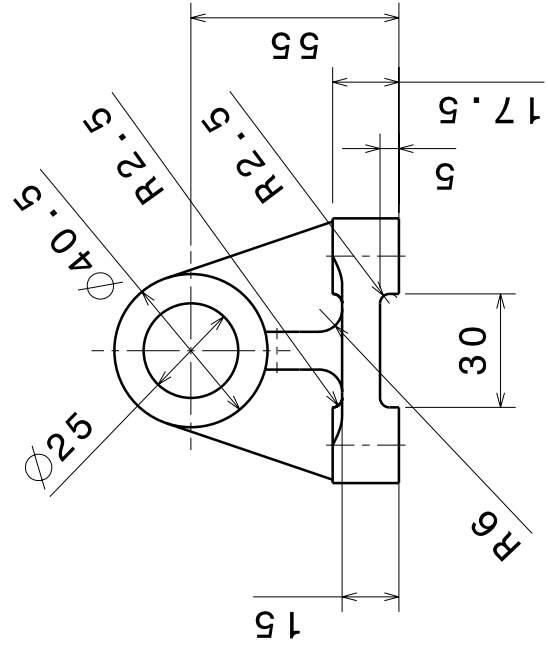
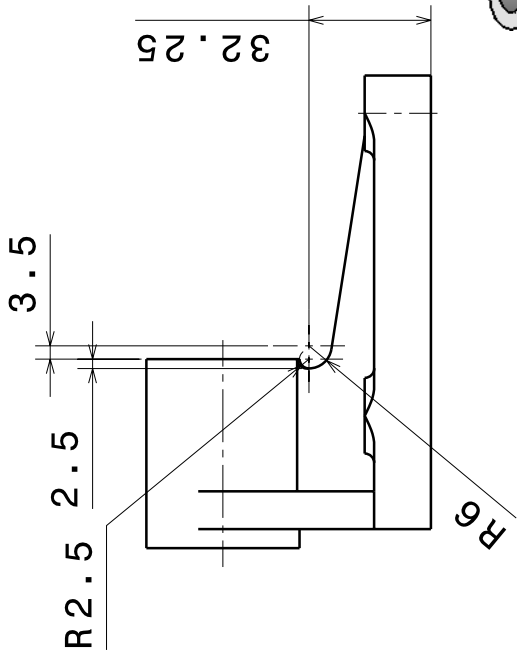
Vista Auxiliar A



Vista Auxiliar B

Todos raios não indicados adotar 2mm

	Escola Senai "Santos Dumont"		Escala: 1:2
	Desenhado por: Ugo Luiz		Unidade mm
Desenho: EXPartDesign37			Data: 27/10/05
			Página: 45
			C.F.P.: 3.02



Escola Senai "Santos Dumont"

Escala: 1:2

Unidade mm

Desenhado por: Ugo Luiz

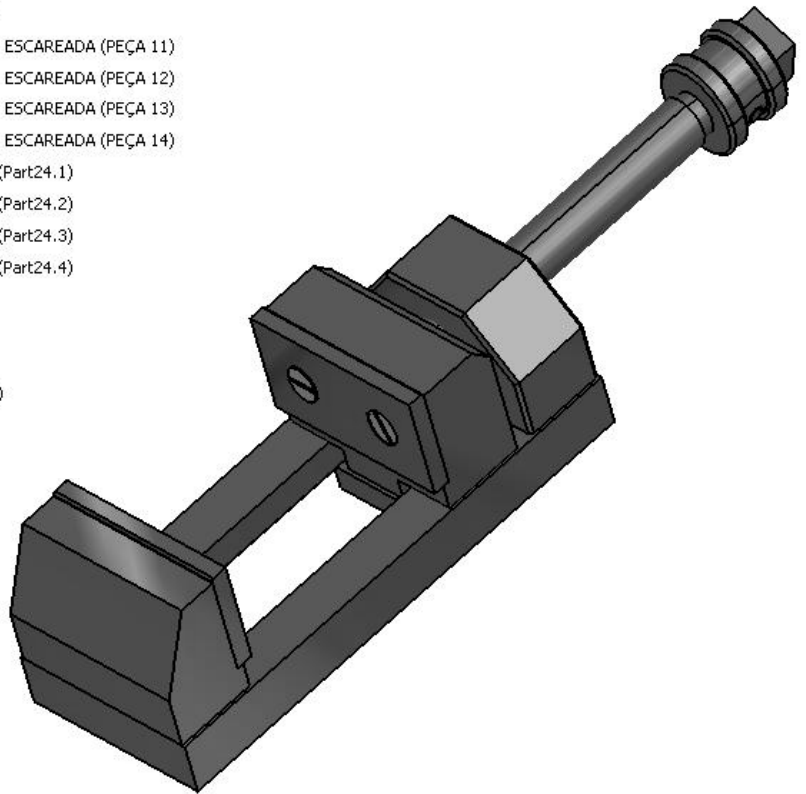
Página:

Desenho: EXPartDesign38

C.F.P.: 3.02

46

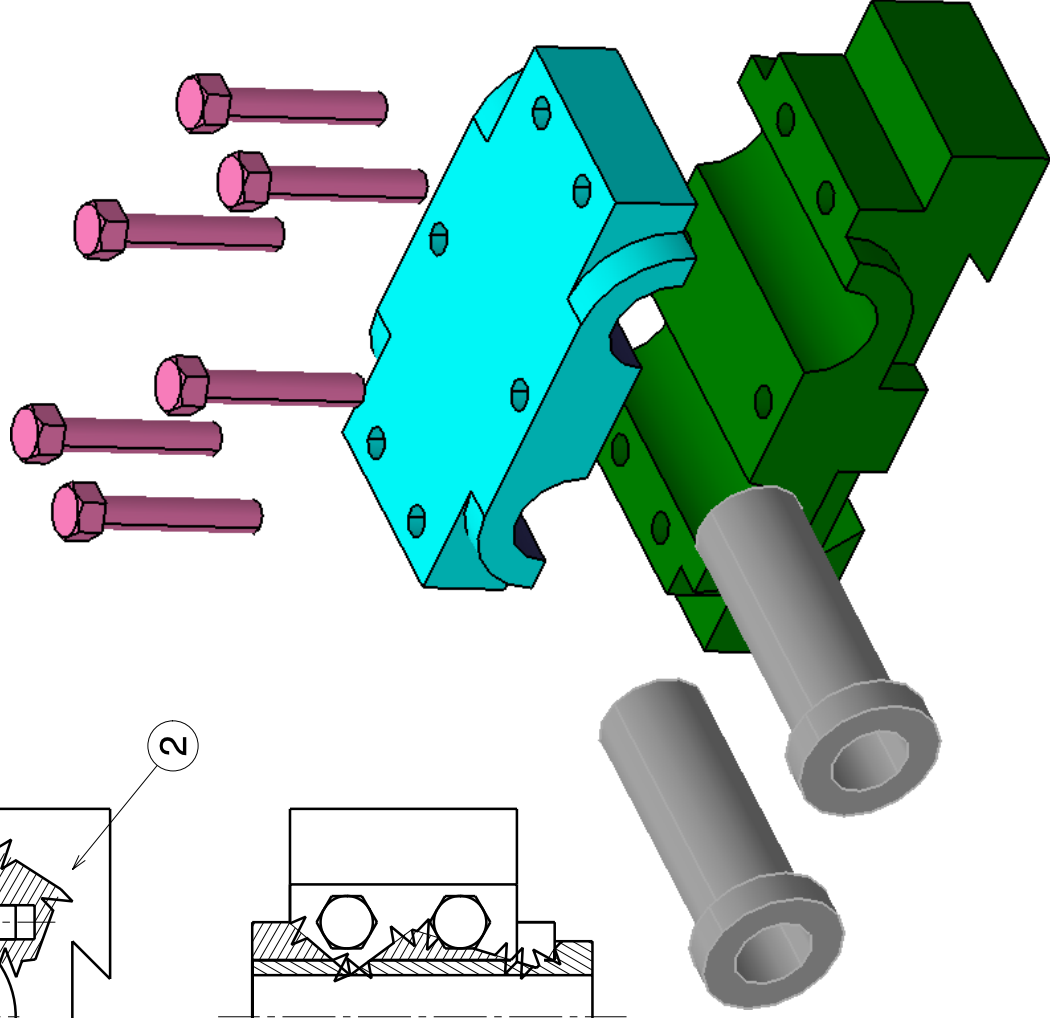
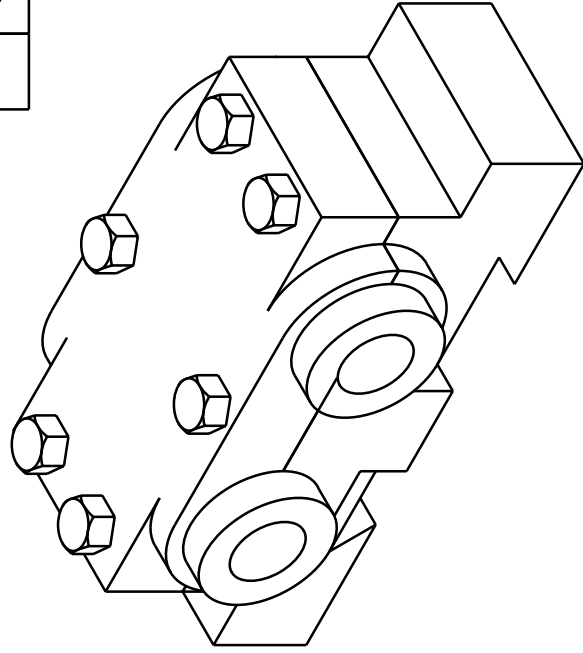
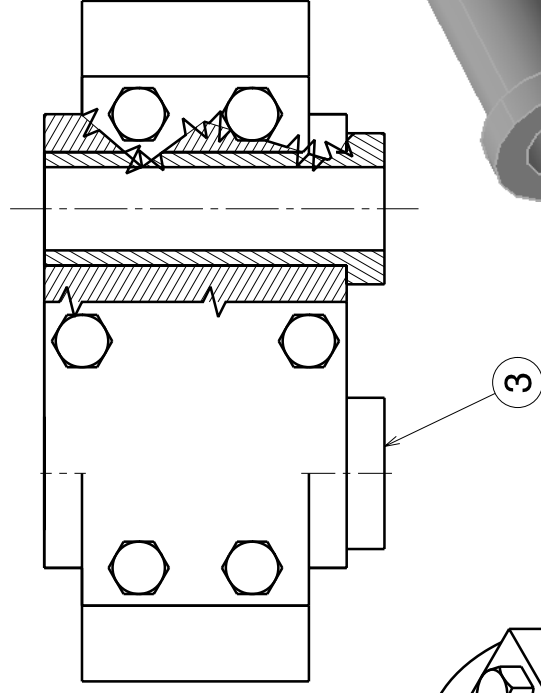
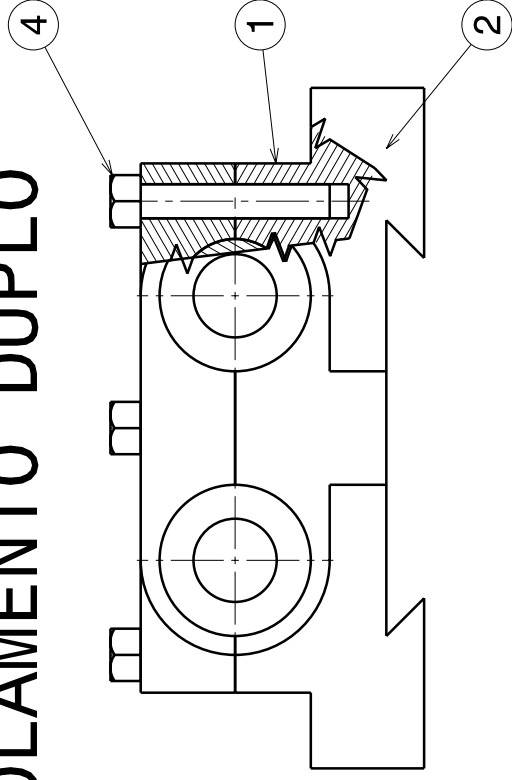
- Morsa
- base (peça 01)
- Base do eixo roscado (Peça 02)
- Mandibula fixa (peça 03)
- Base da Mandibula Movel (PEÇA 04)
- PARAFUSO M5x10 (PEÇA 05)
- PARAFUSO M5x10 (PEÇA 06)
- MANDIBULA MOVEL (PEÇA 07)
- eixo roscado (PEÇA 08)
- BATENTE (PEÇA 09)
- BATENTE (PEÇA 10)
- PARAFUSO CABEÇA ESCAREADA (PEÇA 11)
- PARAFUSO CABEÇA ESCAREADA (PEÇA 12)
- PARAFUSO CABEÇA ESCAREADA (PEÇA 13)
- PARAFUSO CABEÇA ESCAREADA (PEÇA 14)
- PARAFUSO M6x16 (Part24.1)
- PARAFUSO M6x16 (Part24.2)
- PARAFUSO M6x16 (Part24.3)
- PARAFUSO M6x16 (Part24.4)
- PINO 2 (Part6.1)
- PINO 2 (Part6.2)
- PINO 1 (Part5.2)
- MANIPULO (Part3.2)
- Constraints
- Applications



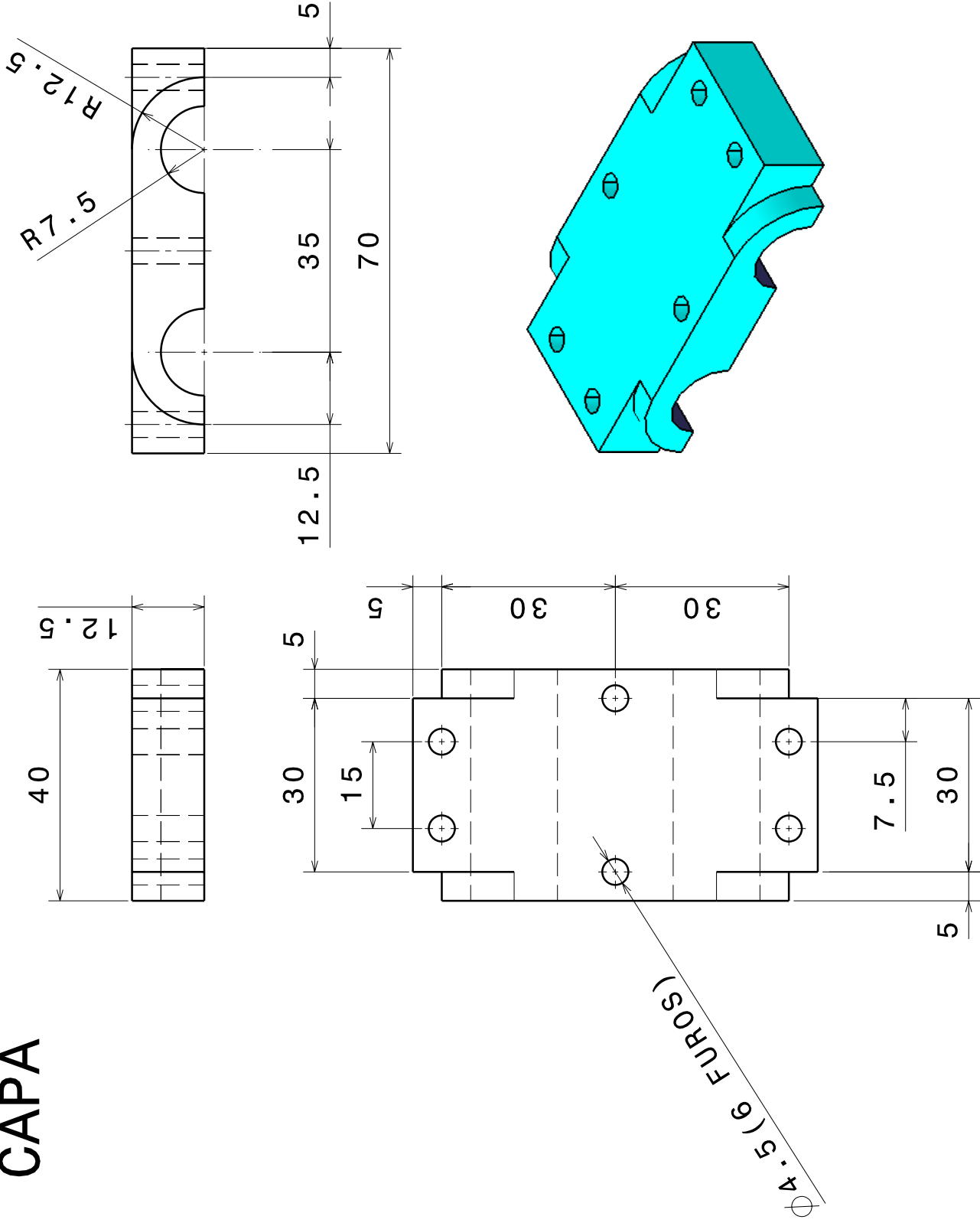
Assembly Design

CONJUNTO ROLAMENTO DUPLO

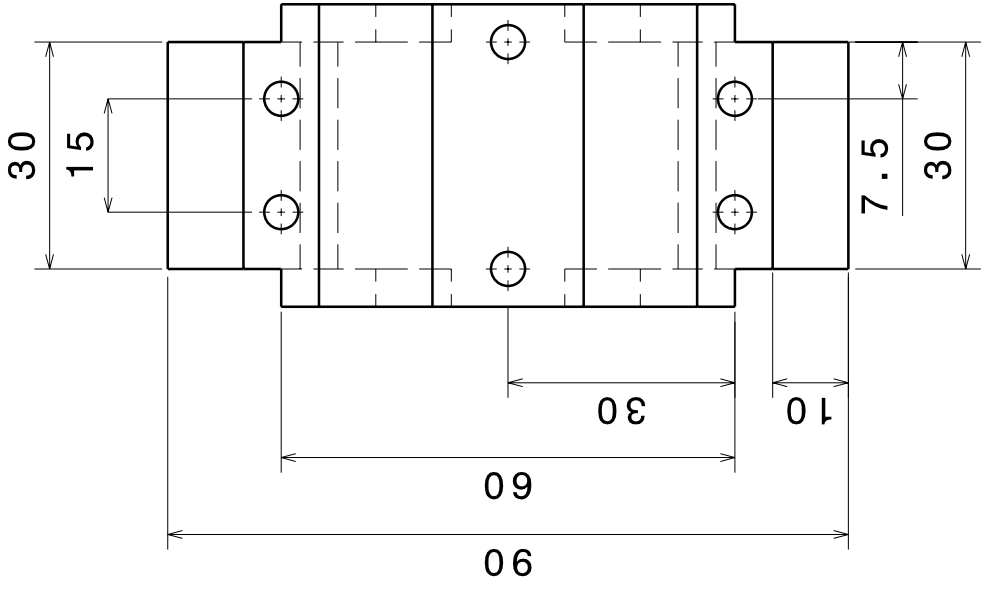
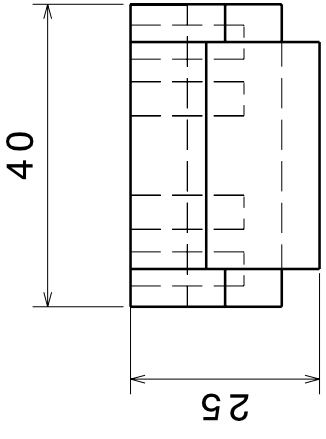
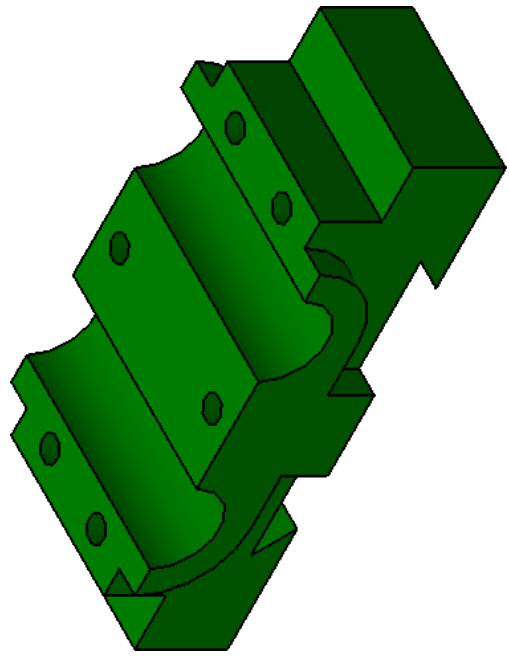
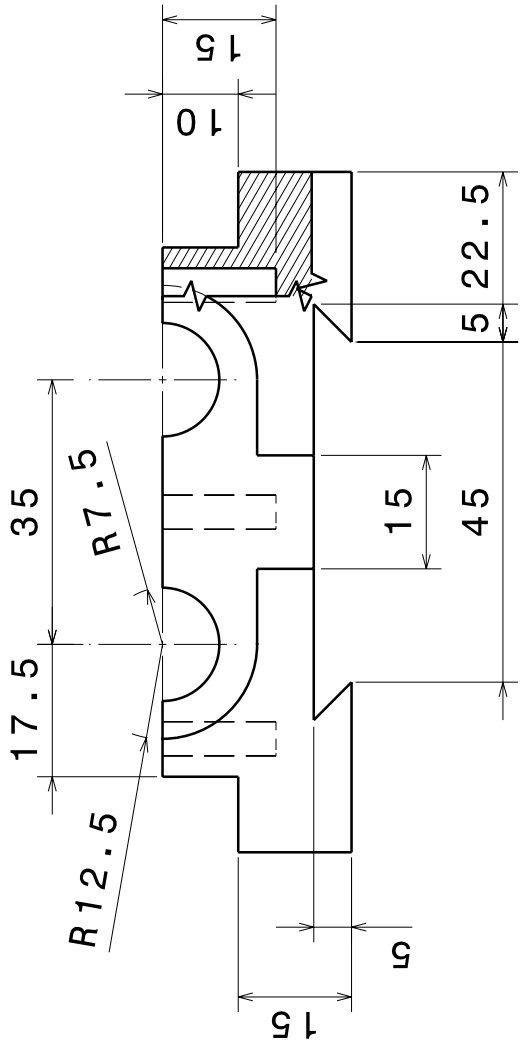
ITEM	DESCRIÇÃO	QUANTIDADE
1	CAPA	1
2	BASE	1
3	BUCHA	2
4	PARAFUSO	6



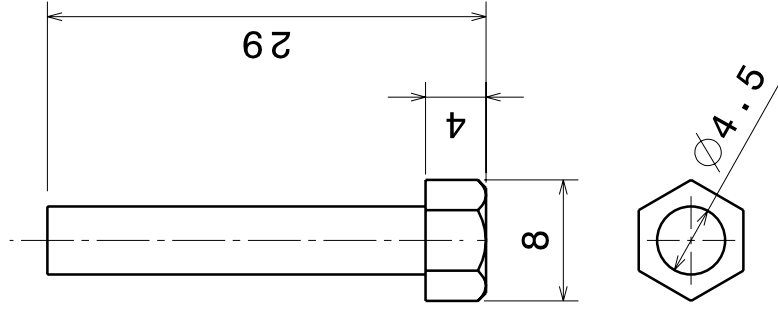
CAPA



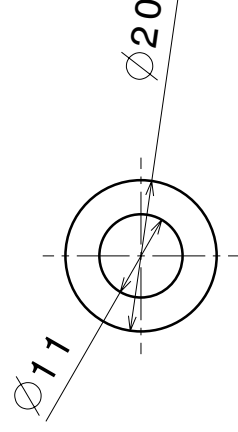
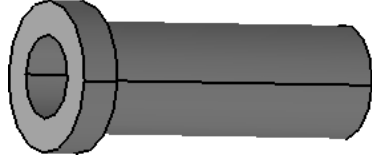
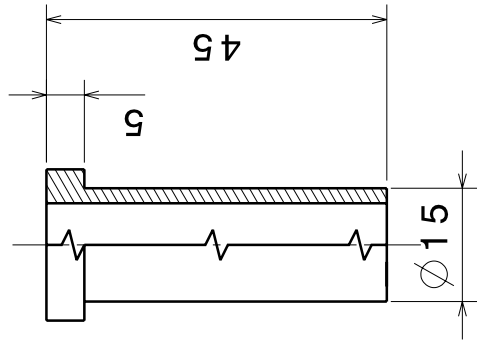
BASE



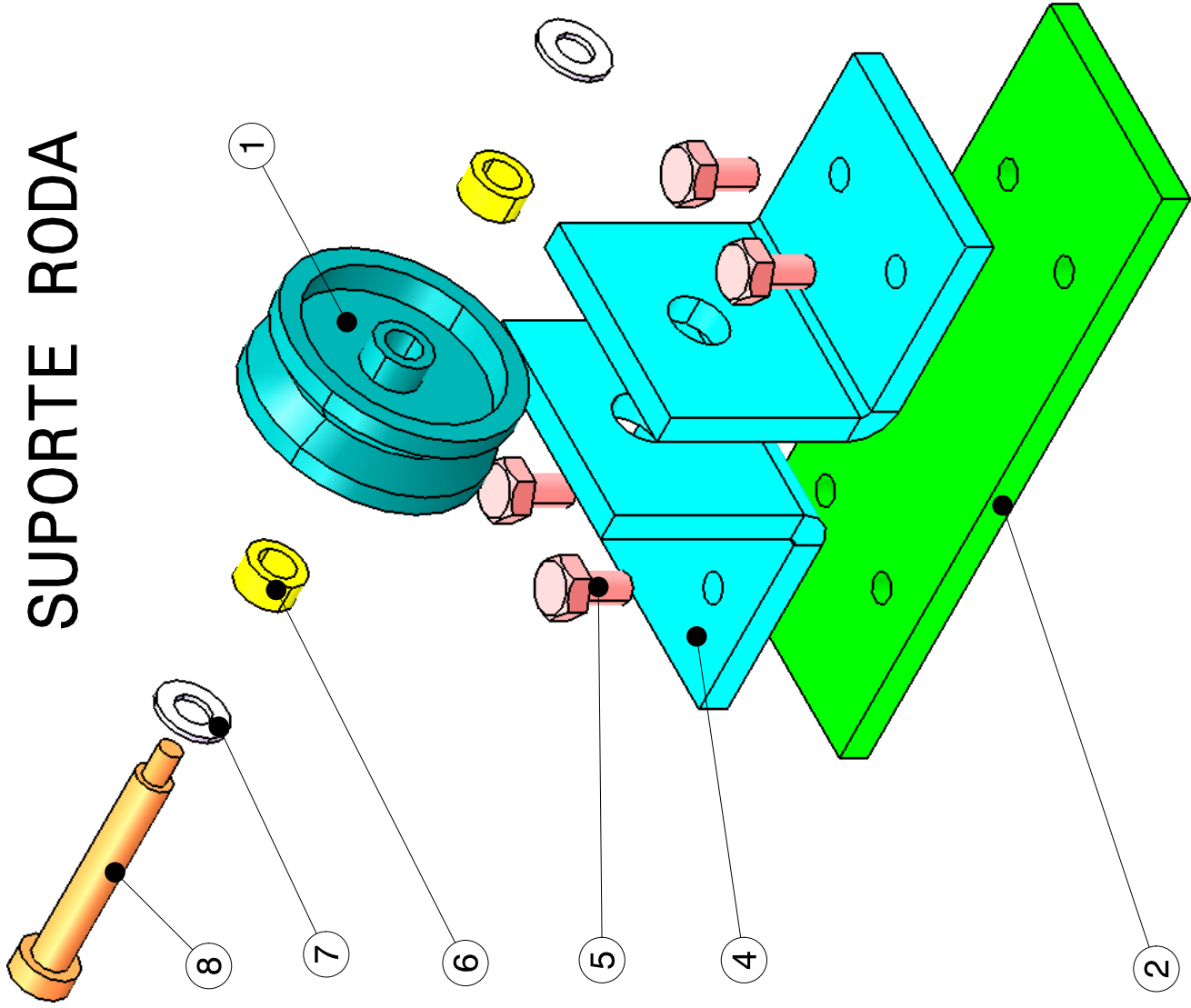
PARAFUSO



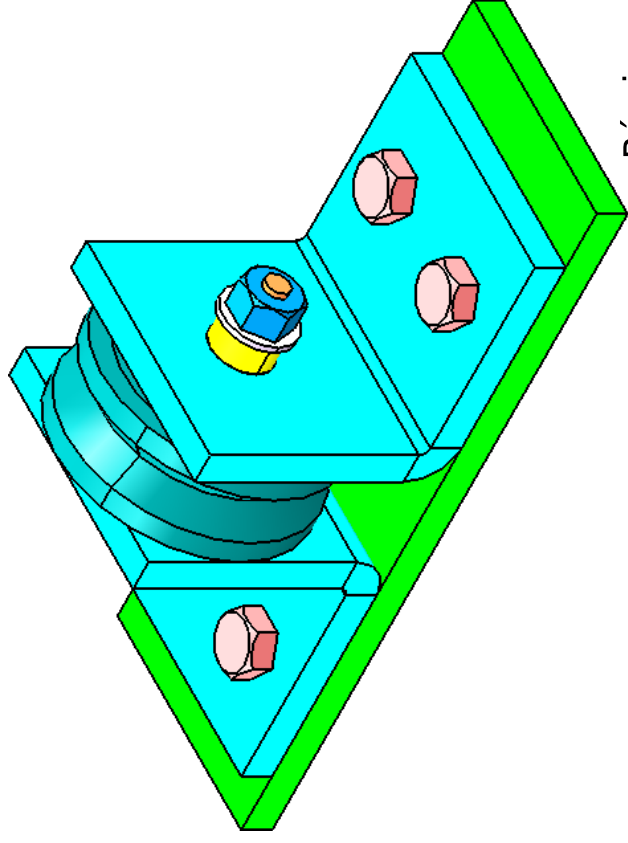
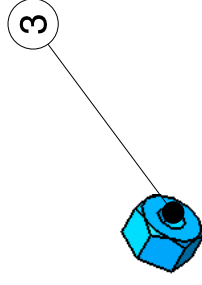
BUCHA



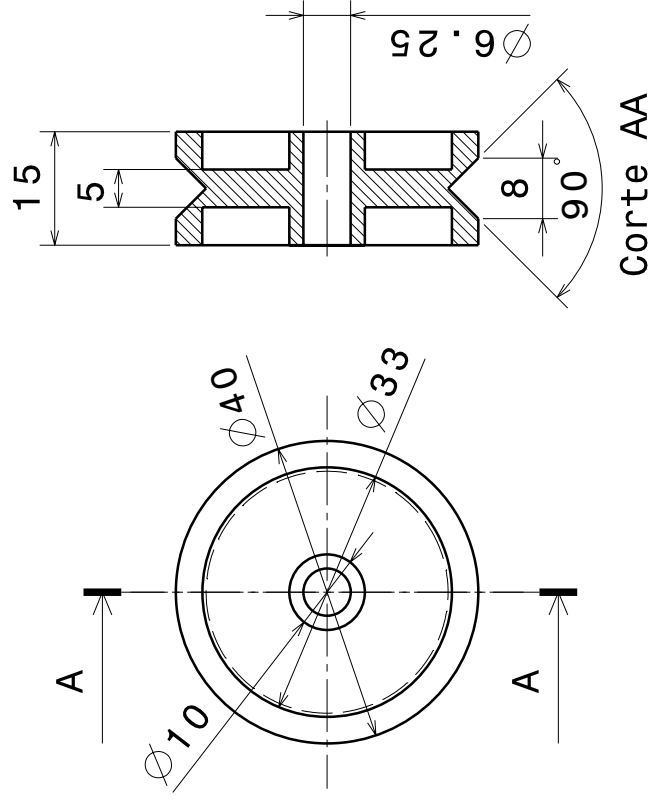
SUPORTE RODA



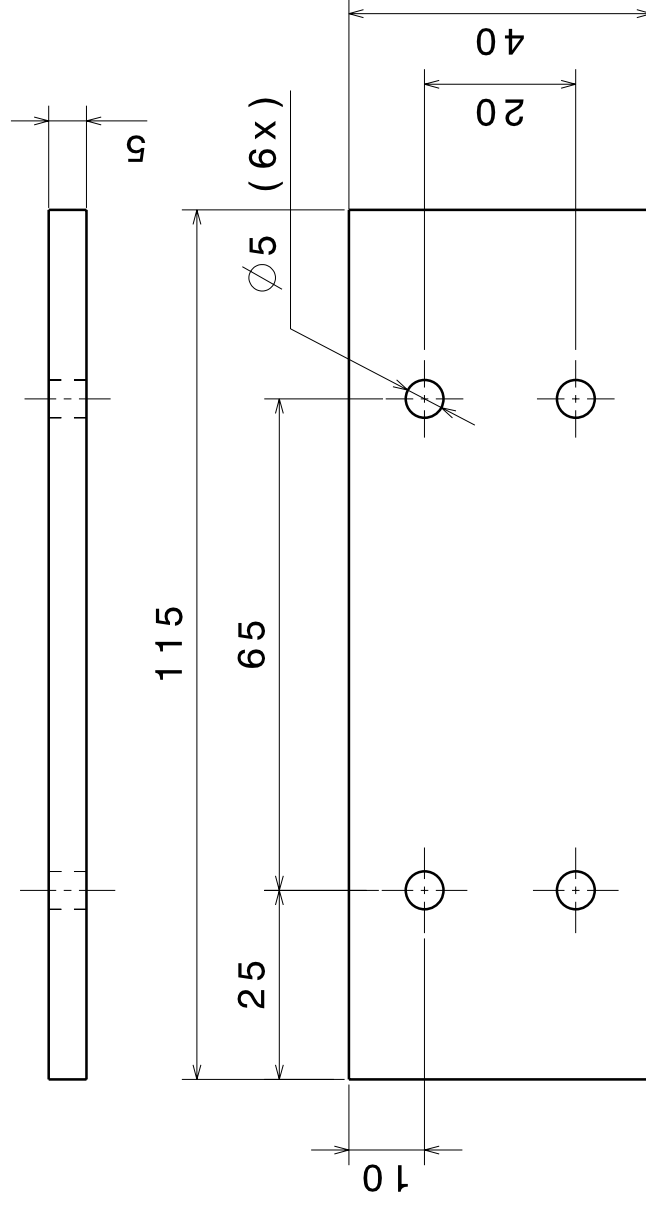
ITEM	DESCRIÇÃO	QUANTIDADE
1	RODA	1
2	BASE	1
3	PORCA	1
4	SUPORTE	2
5	PARAFUSO	4
6	BUCHA	2
7	ARRUELA	2
8	PARAFUSO ESPECIAL	1



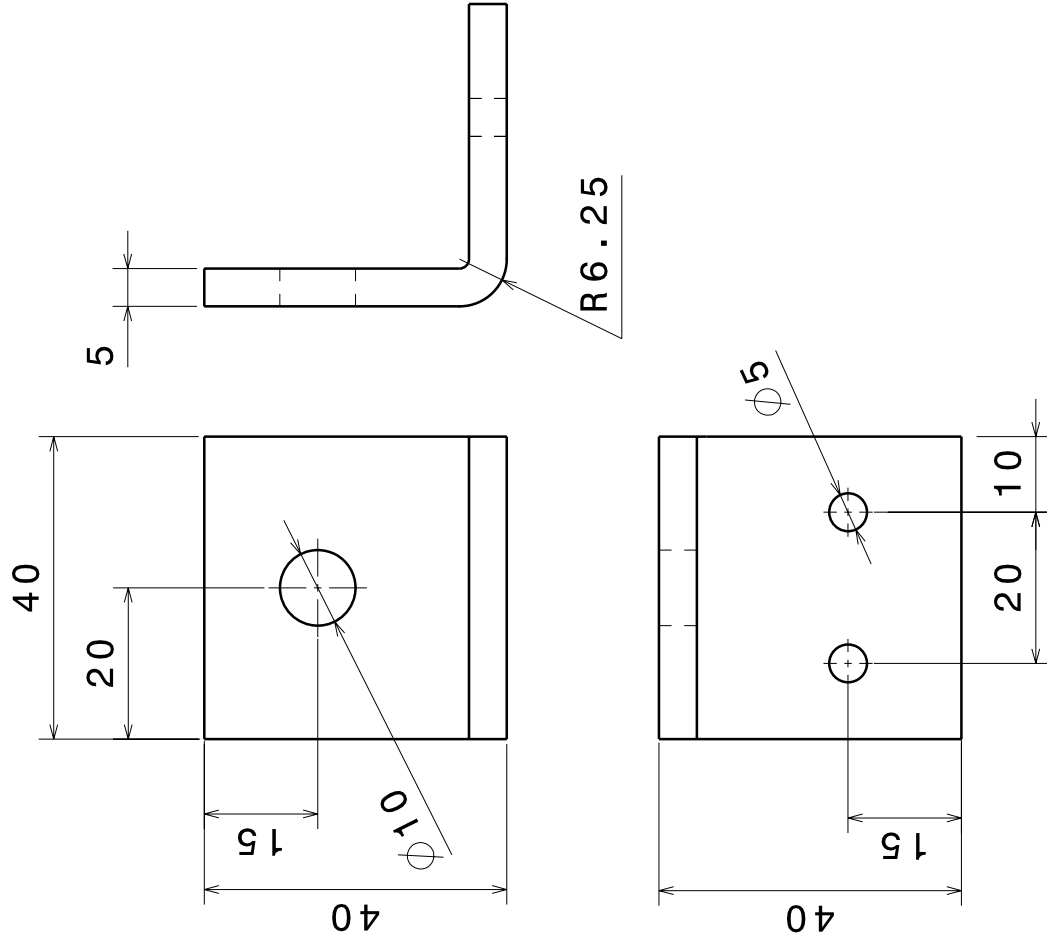
RODA



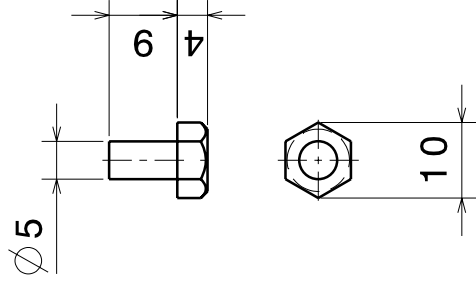
BASE



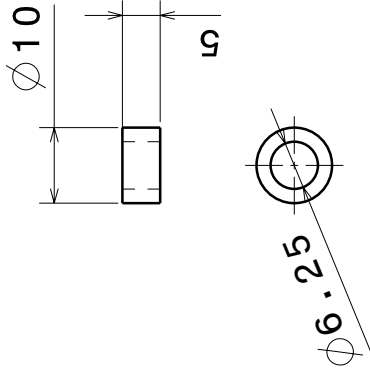
SUPORTE



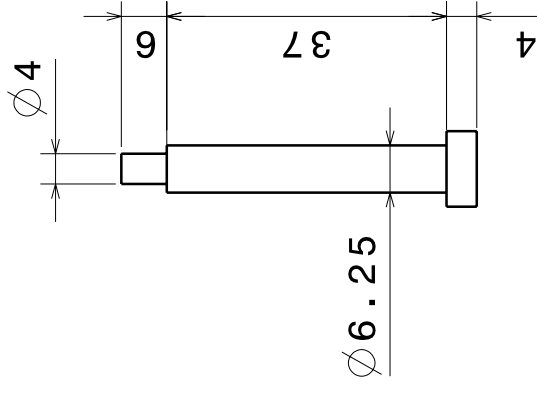
PARAFUSO



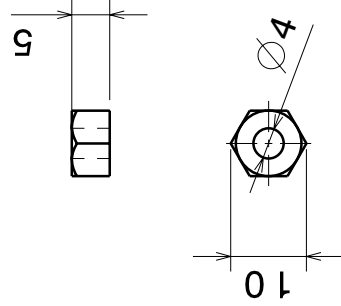
BUCHA



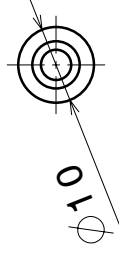
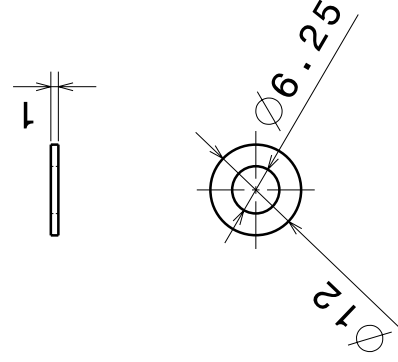
PARAFUSO ESPECIAL



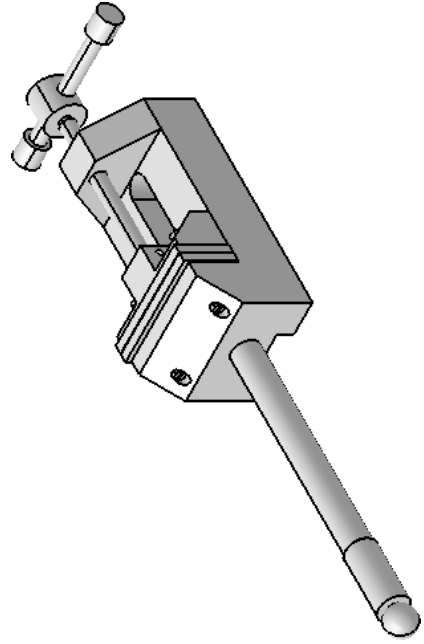
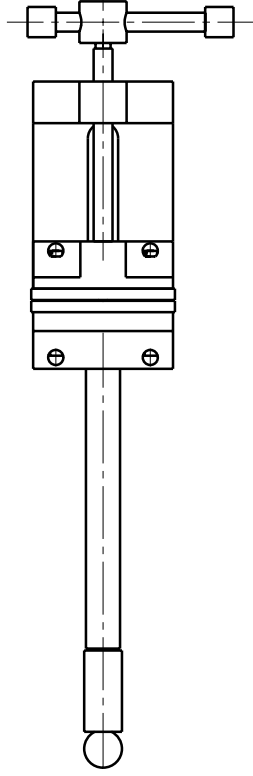
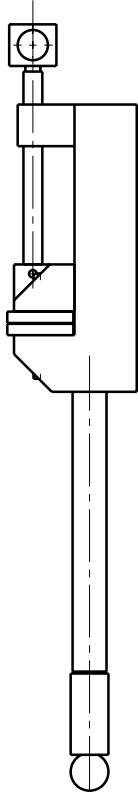
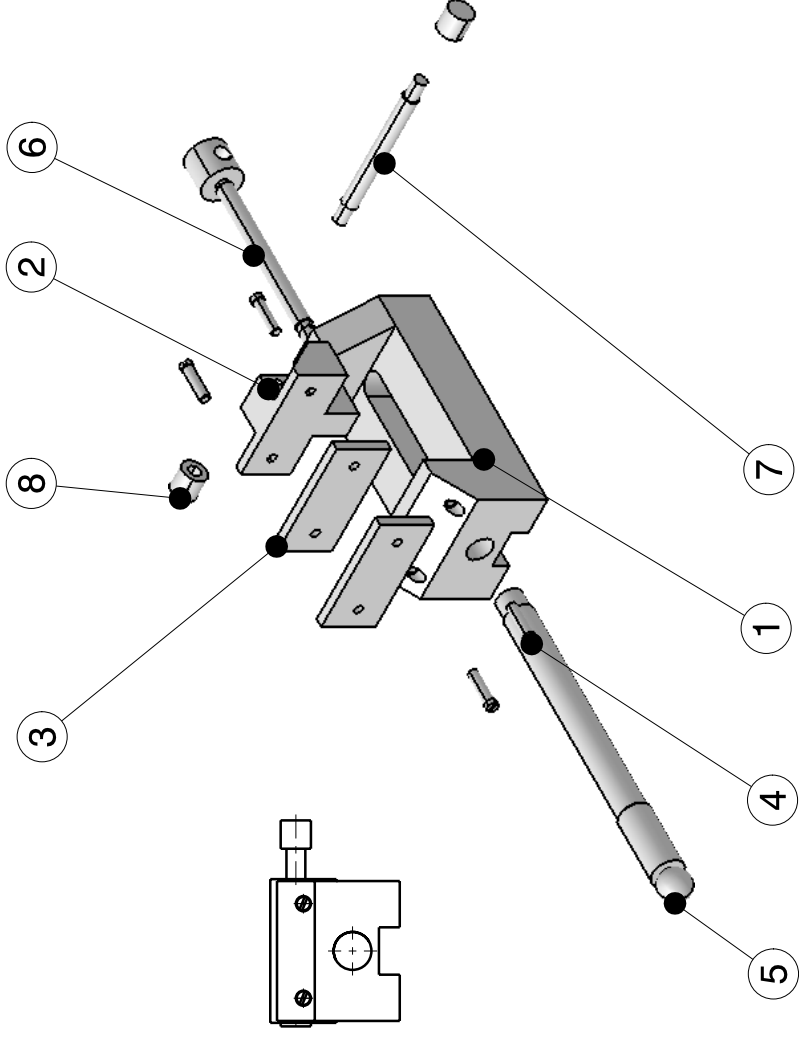
PORCA



ARRUELA

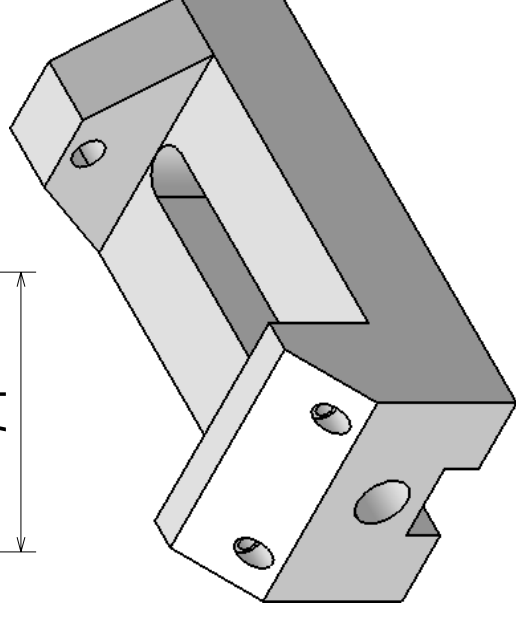
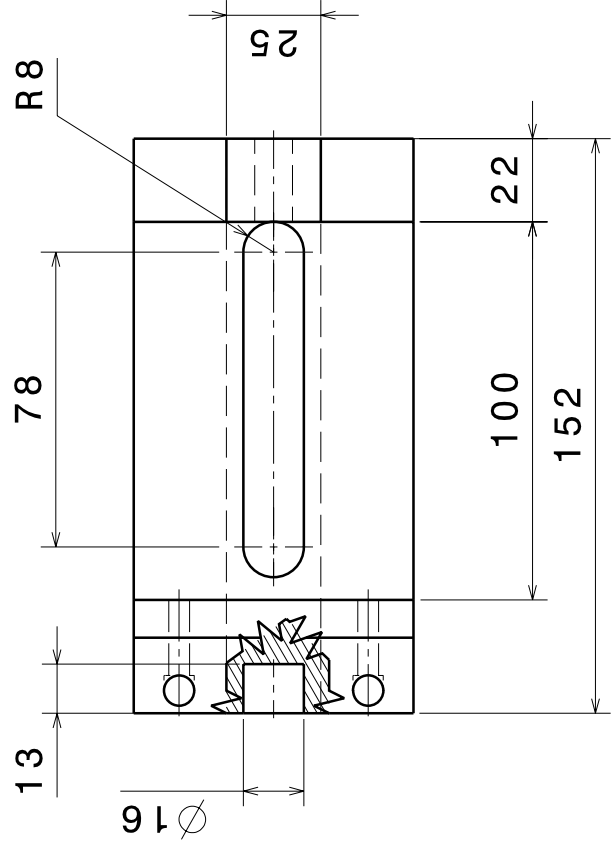
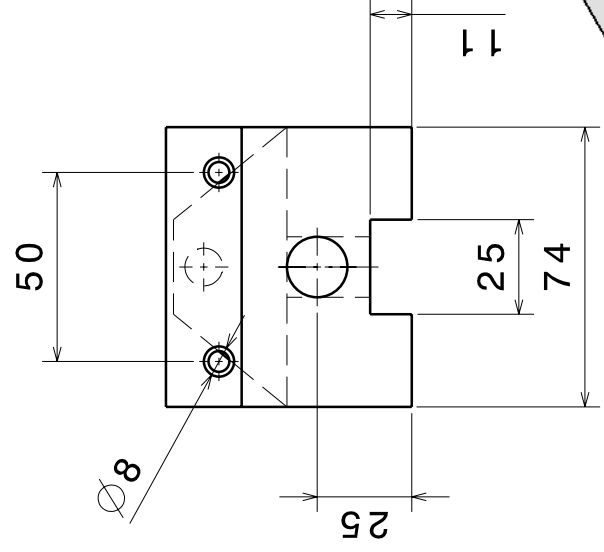
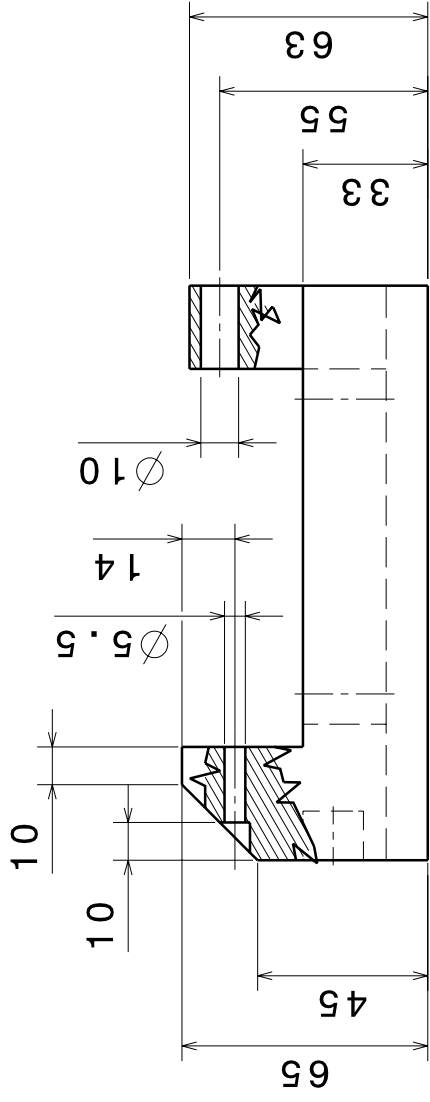


MORSA

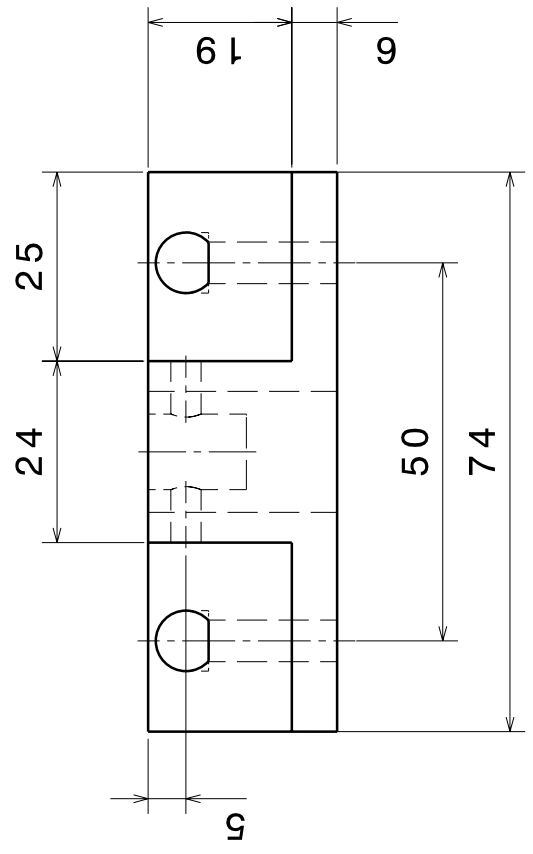
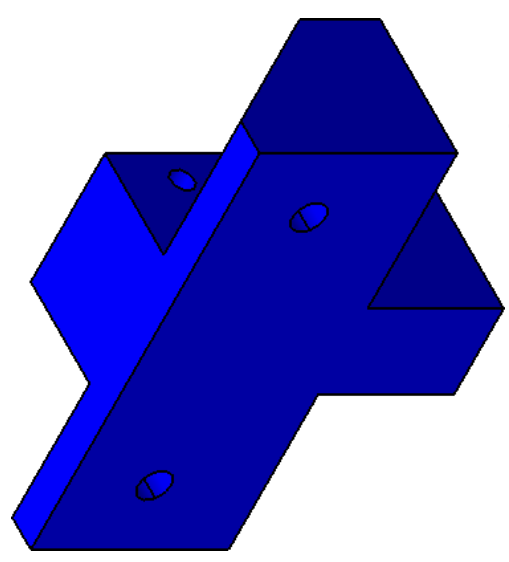
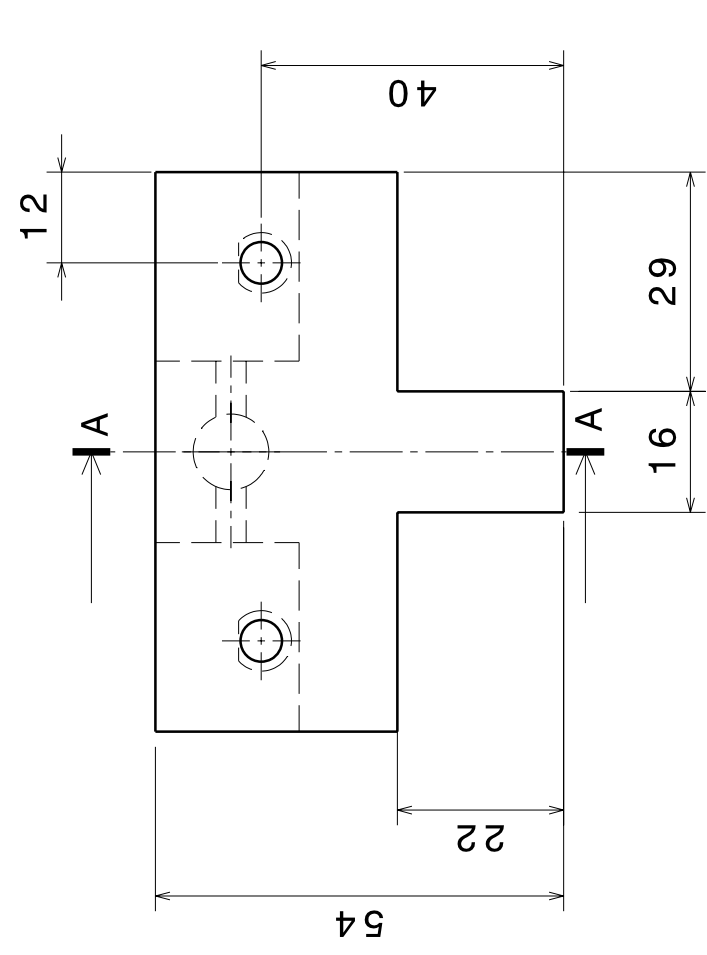
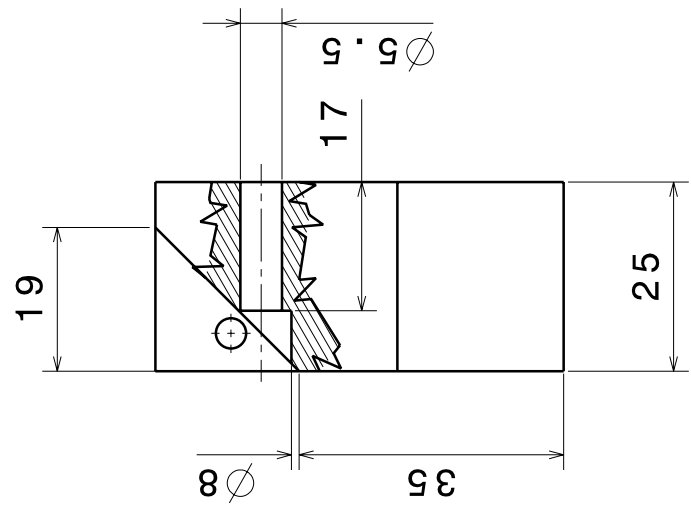
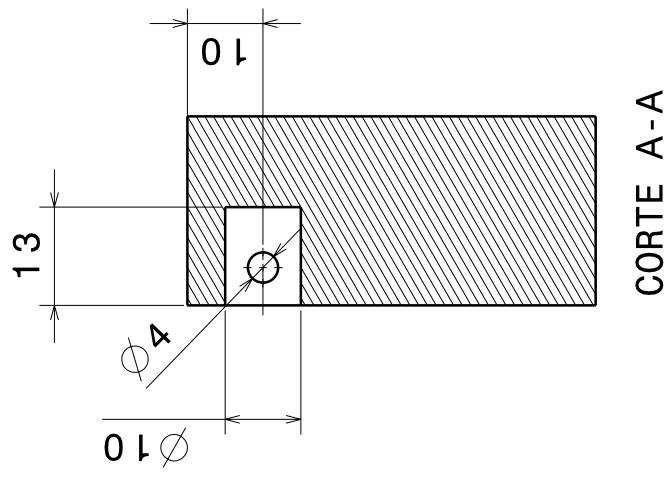


ITEM	DESCRIÇÃO	QUANTIDADE
1	BASE	1
2	MANDÍBULA MÓVEL	1
3	PLACA MANDÍBULA	2
4	PARAFUSO	4
5	GUIA DE PROTEÇÃO	1
6	EIXO	1
7	EIXO MANIVELA	1
8	PROTEÇÃO EIXO MANIVELA	2

BASE

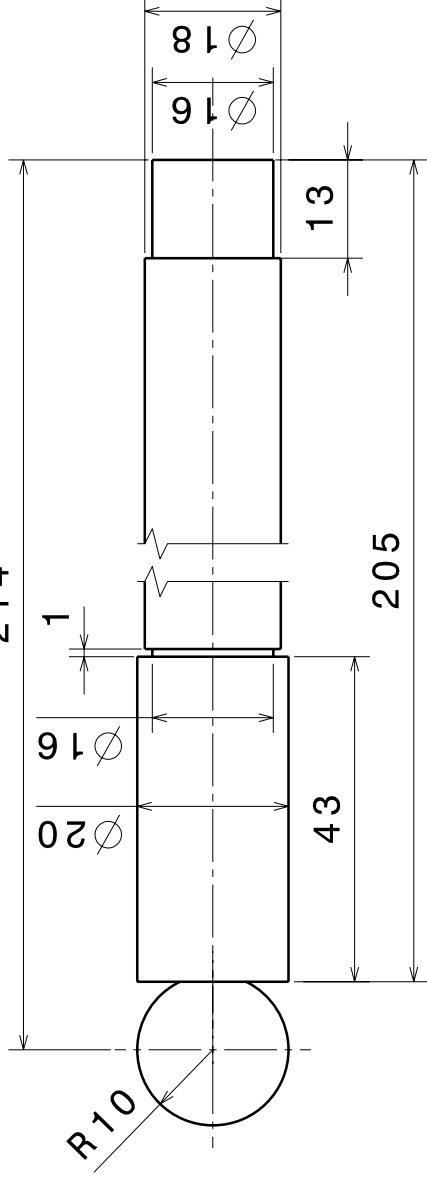


MANDÍBULA MÓVEL

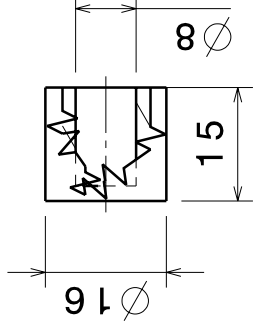


GUIA DE PROTEÇÃO

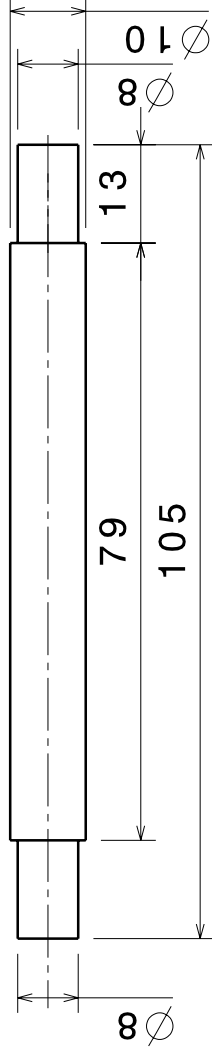
214



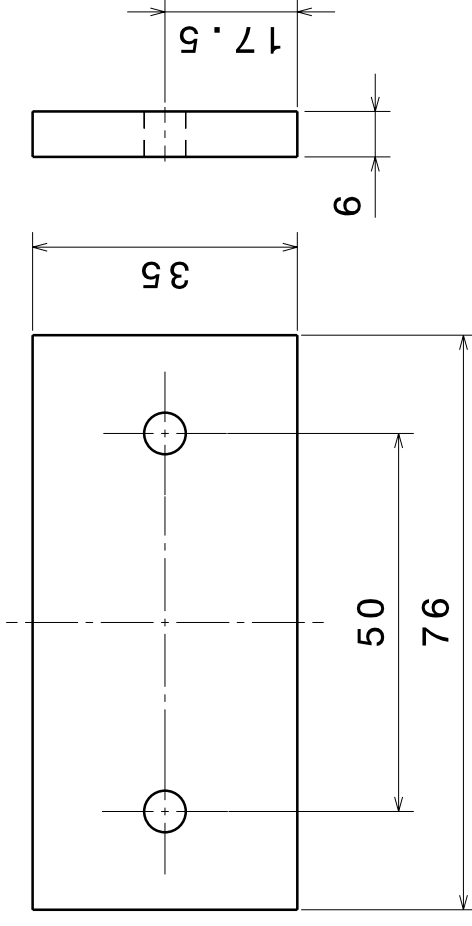
PROTEÇÃO EIXO MANIVELA



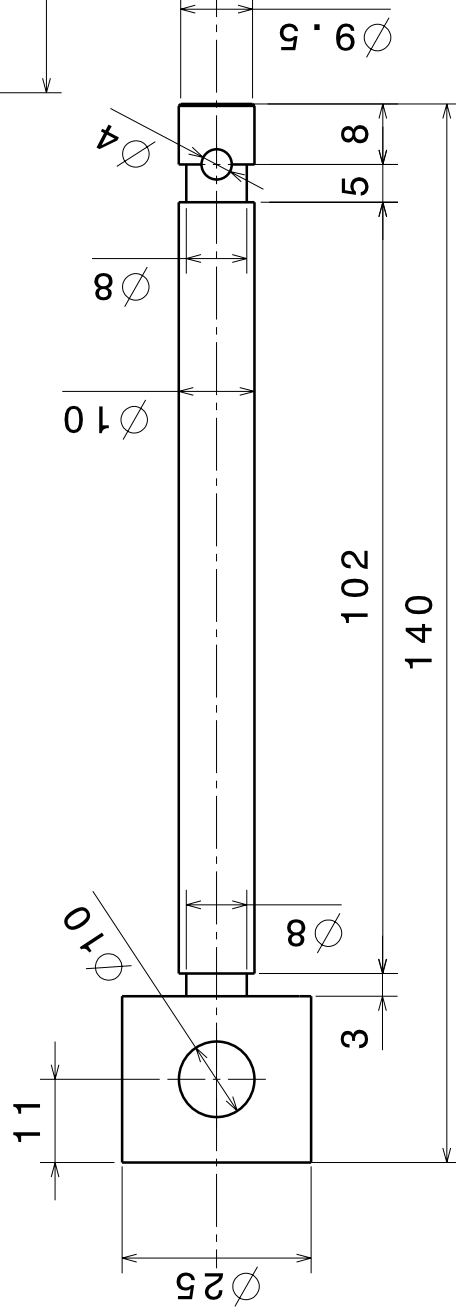
EIXO MANIVELA



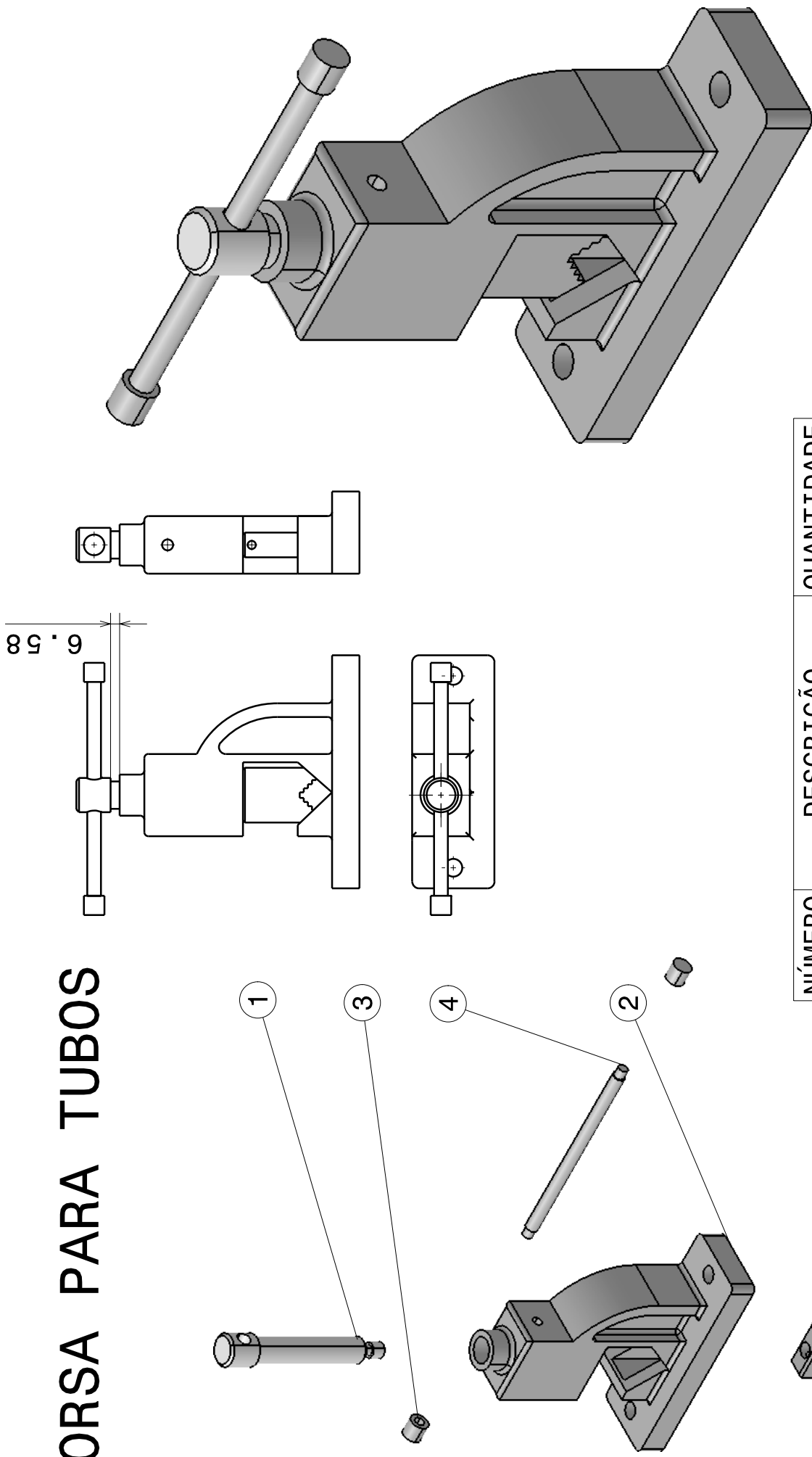
PLACA MANDÍBULA



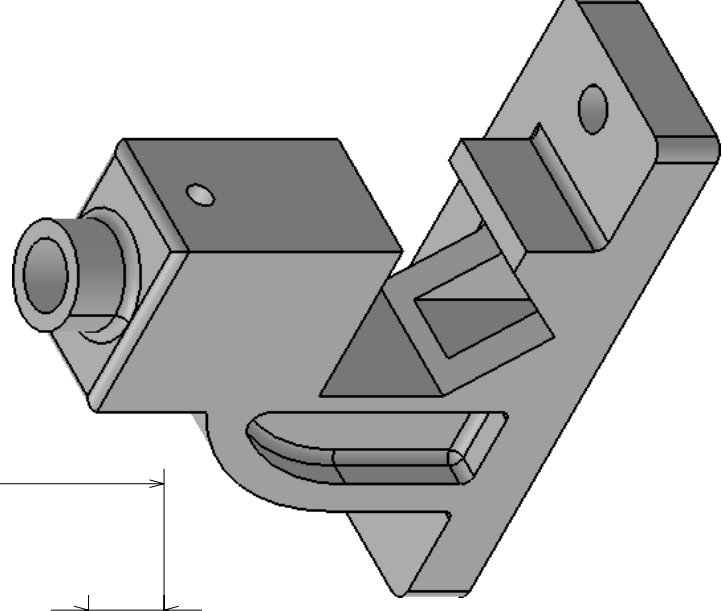
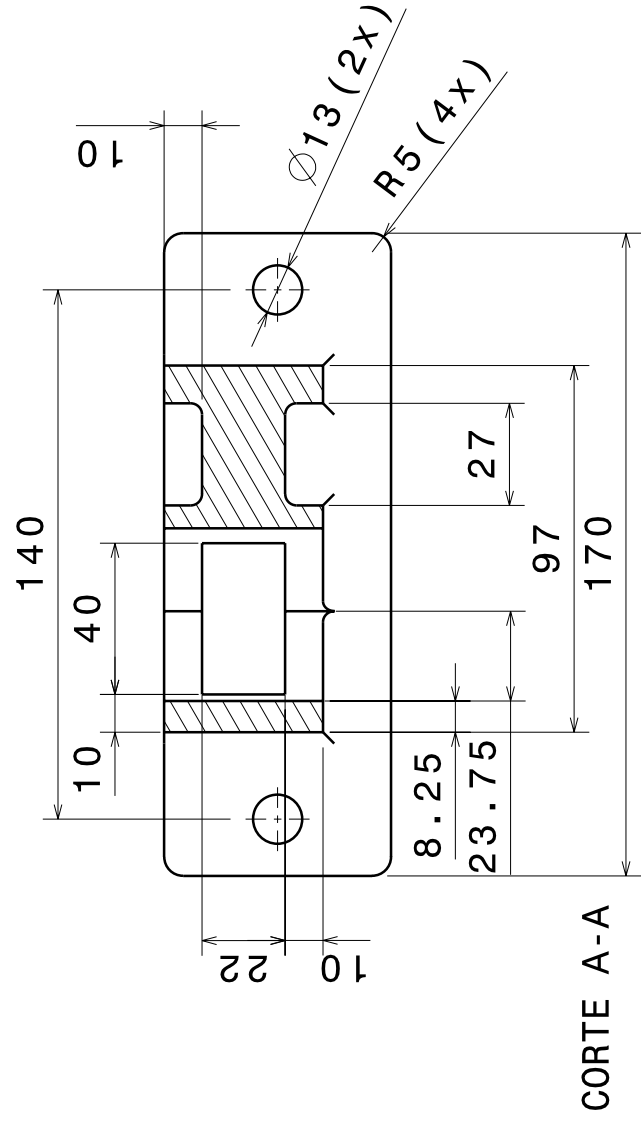
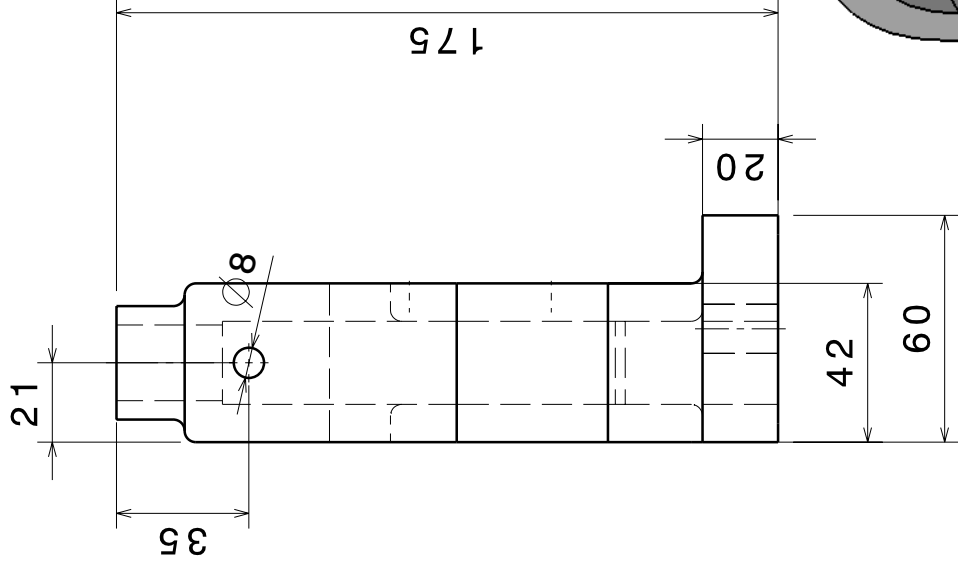
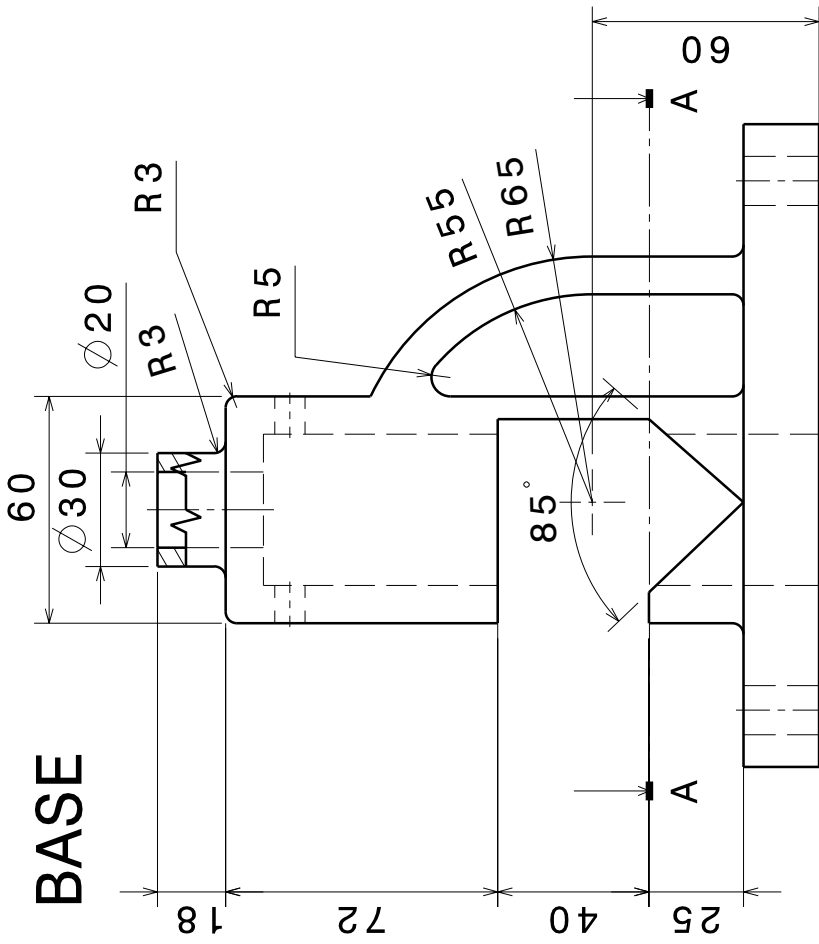
EIXO



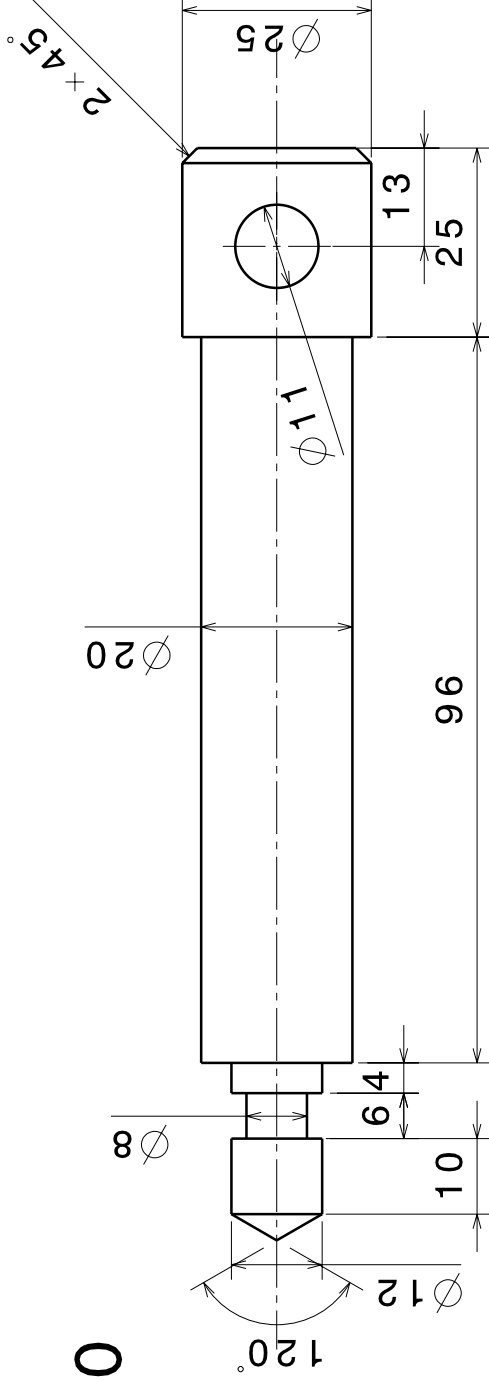
MORSA PARA TUBOS



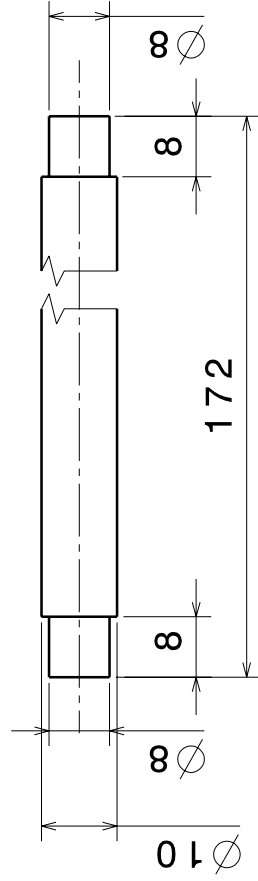
NÚMERO	DESCRIÇÃO	QUANTIDADE
1	PARAFUSO	1
2	BASE	1
3	PARAFUSO MANIVELA	2
4	MANIVELA	1
5	MANDÍBULA MÓVEL	1



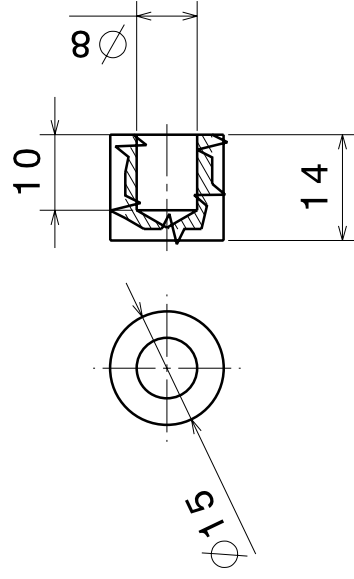
PARAFUSO



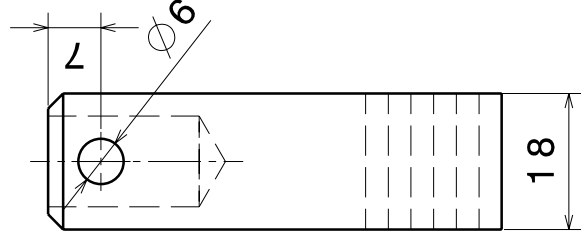
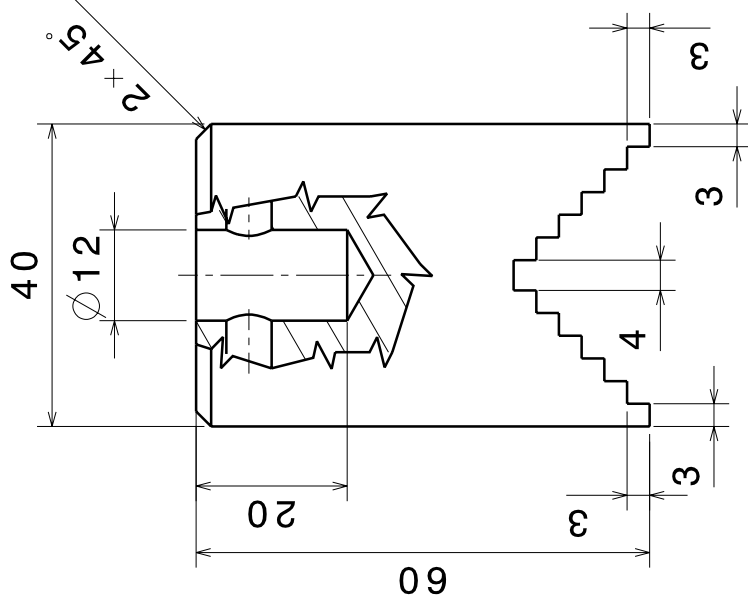
MANIVELA



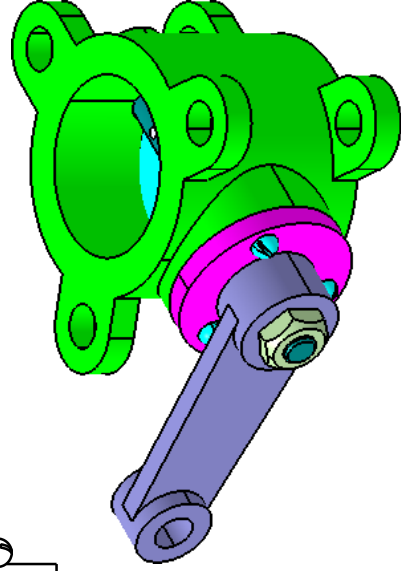
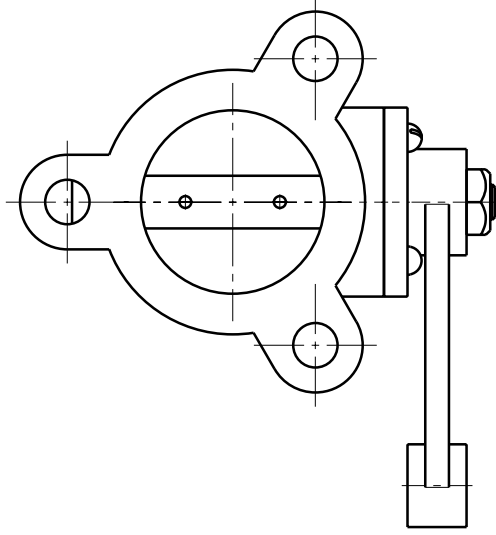
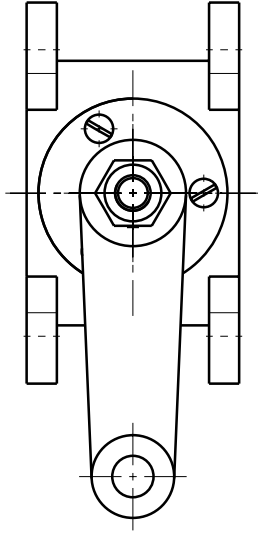
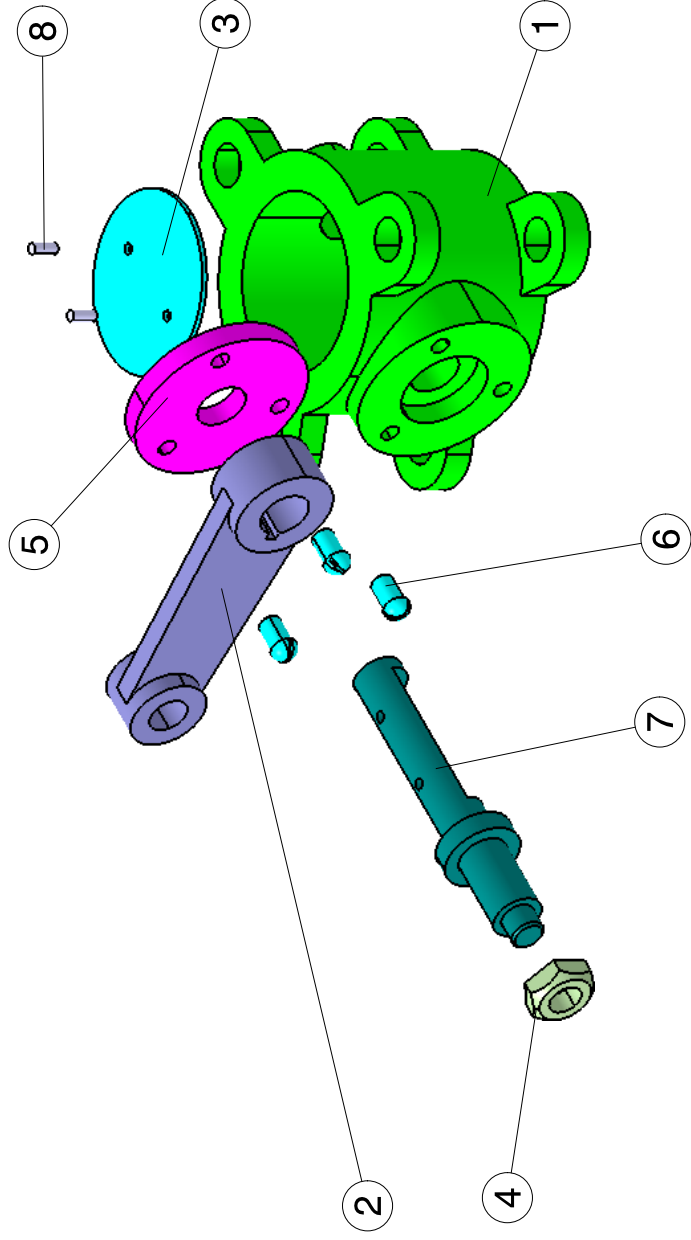
PARAFUSO MANIVELA



MANDÍBULA MÓVEL

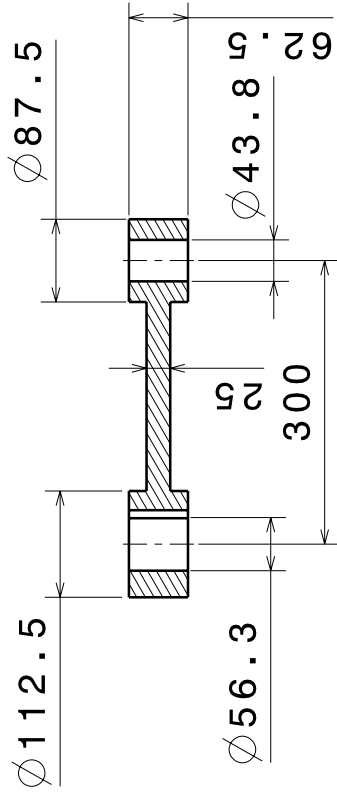
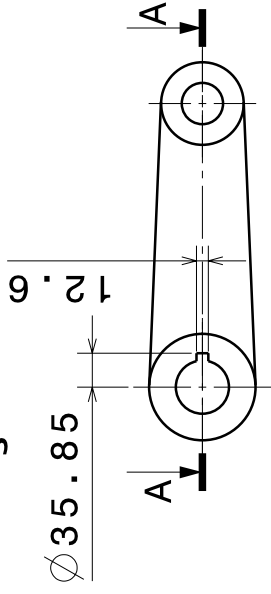


VÁLVULA BORBOLETA

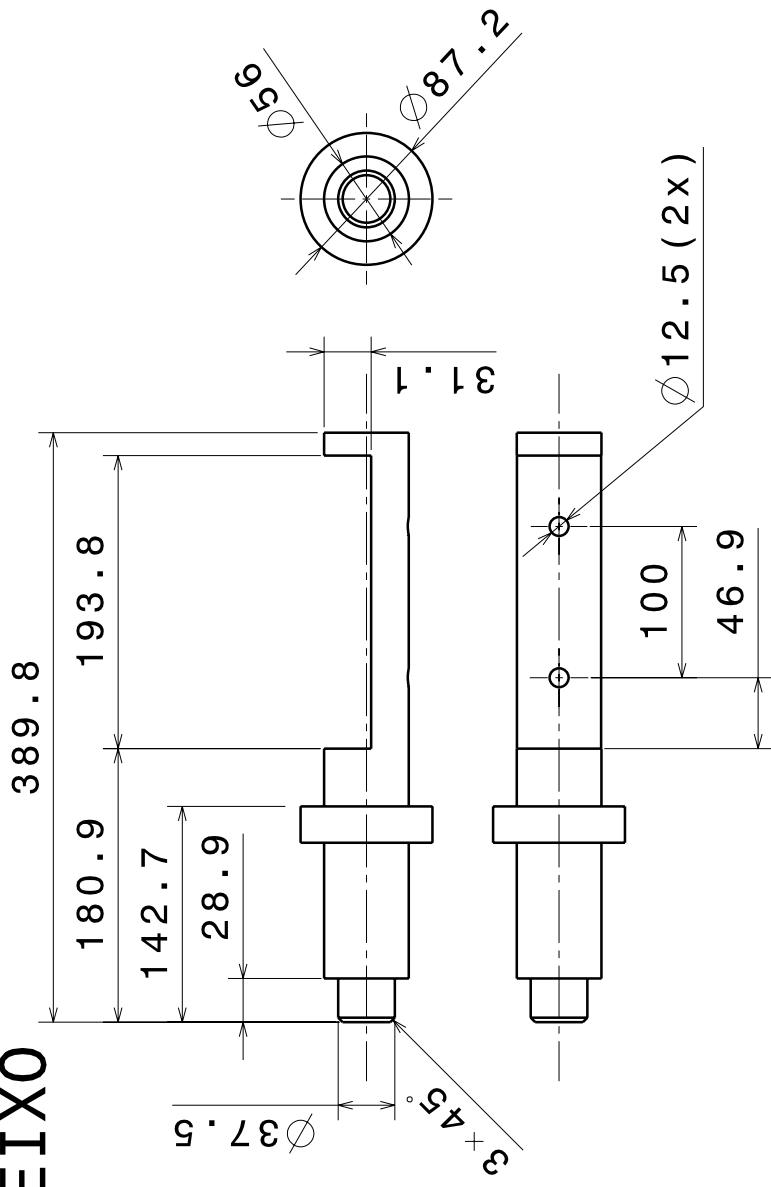


NÚMERO	PEÇA	QUANTIDADE
1	CORPO DA VÁLVULA	1
2	BRAÇO	1
3	PLACA	1
4	PORCA	1
5	RETENTOR	1
6	PARAFUSO	3
7	EIXO	1
8	PINO	2

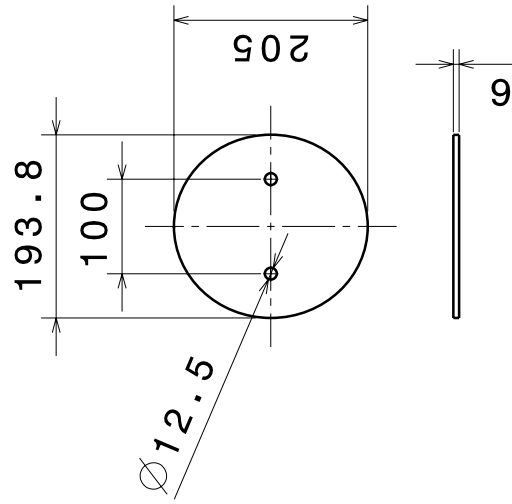
BRAÇO



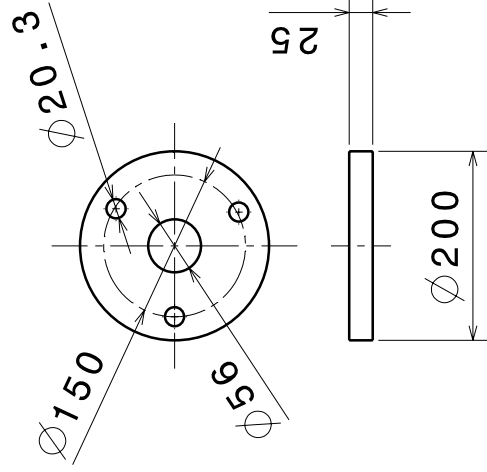
EIXO



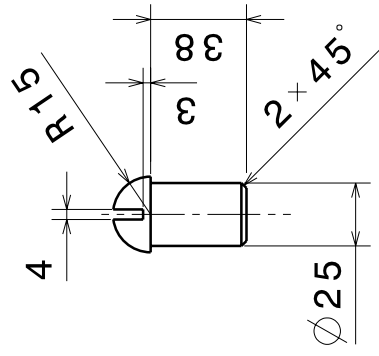
PLACA



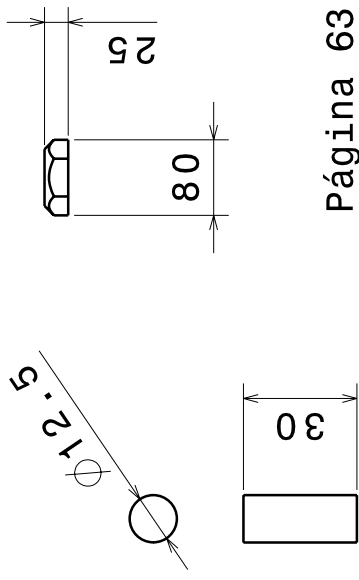
RETENTOR



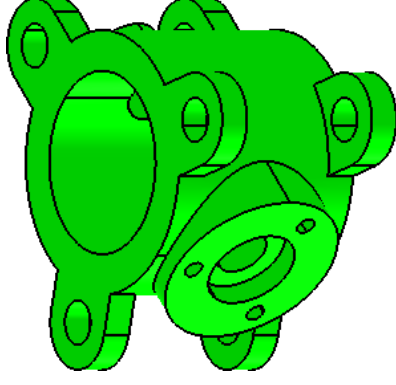
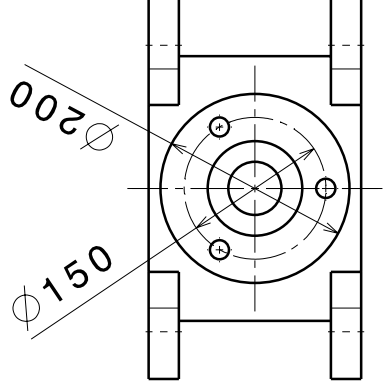
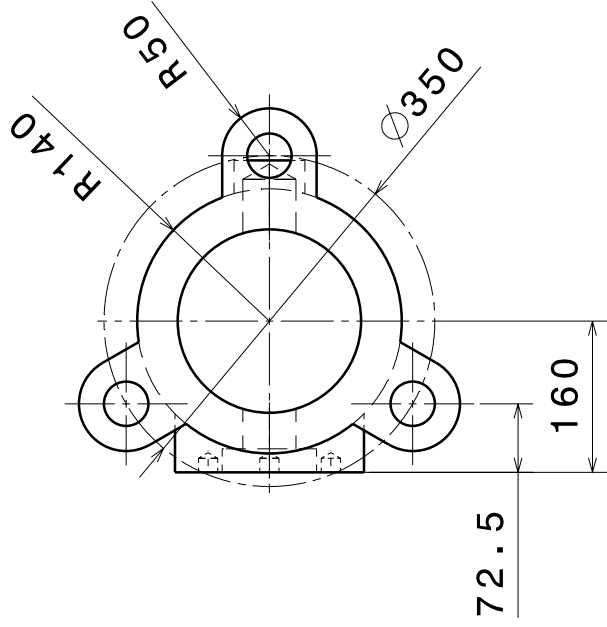
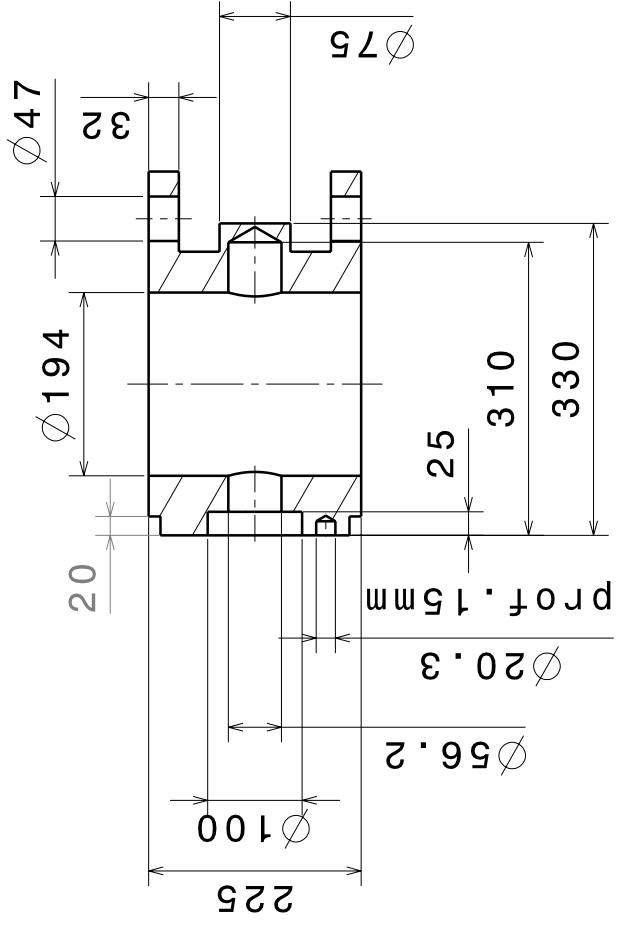
PARAFUSO

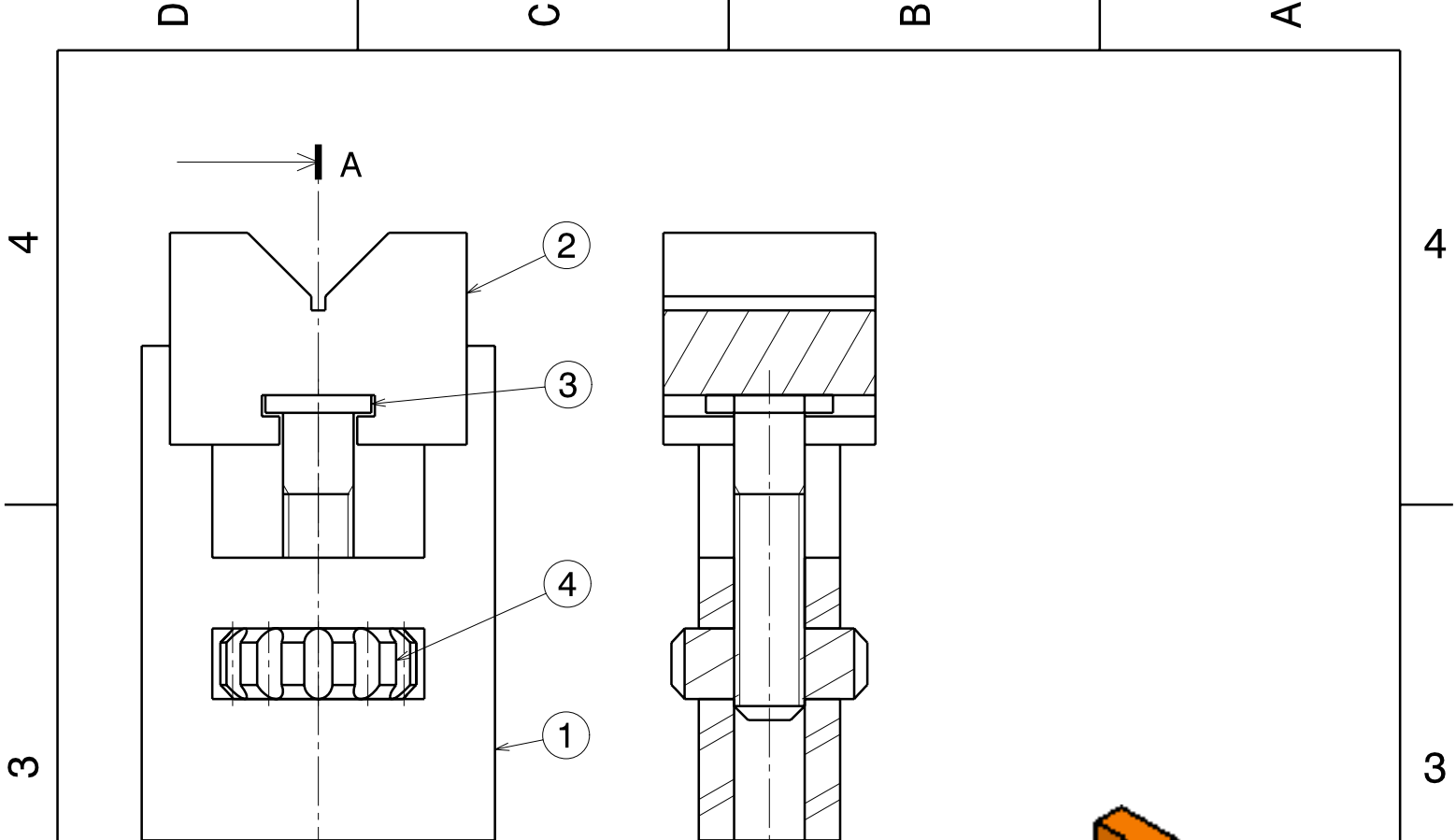


PORCA

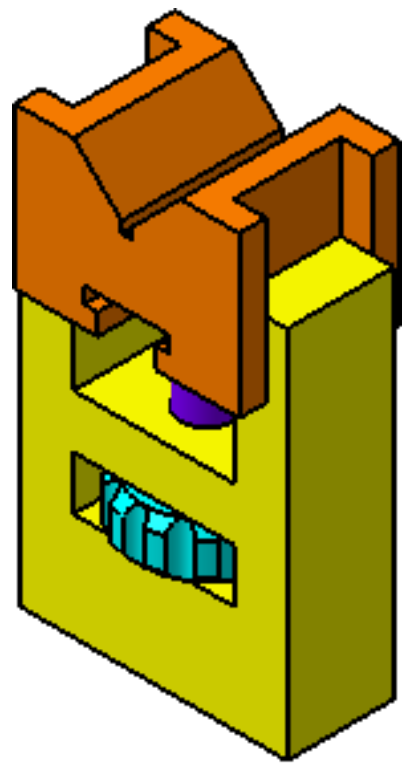


CORPO DA VÁLVULA





CORTE A-A
ESCALA: 1:1



AFASTAMENTO GERAL ± 1

PEÇA	DESCRIÇÃO	QTD
1	BASE	1
2	BLOCO EM 'V'	1
3	PARAFUSO	1
4	PORCA	1



SENAI "SANTOS DUMONT"

MATERIAL:

XXXXX

DESENHADO POR:
Ugo

DATA
23/4/2005

VERIFICADO POR:
Fabiana

DATA
XXX

FORMATO:
A4

TÍTULO:
Conjunto Bloco em "V"

REV
X

APROVADO POR:
XXX

DATA
XXX

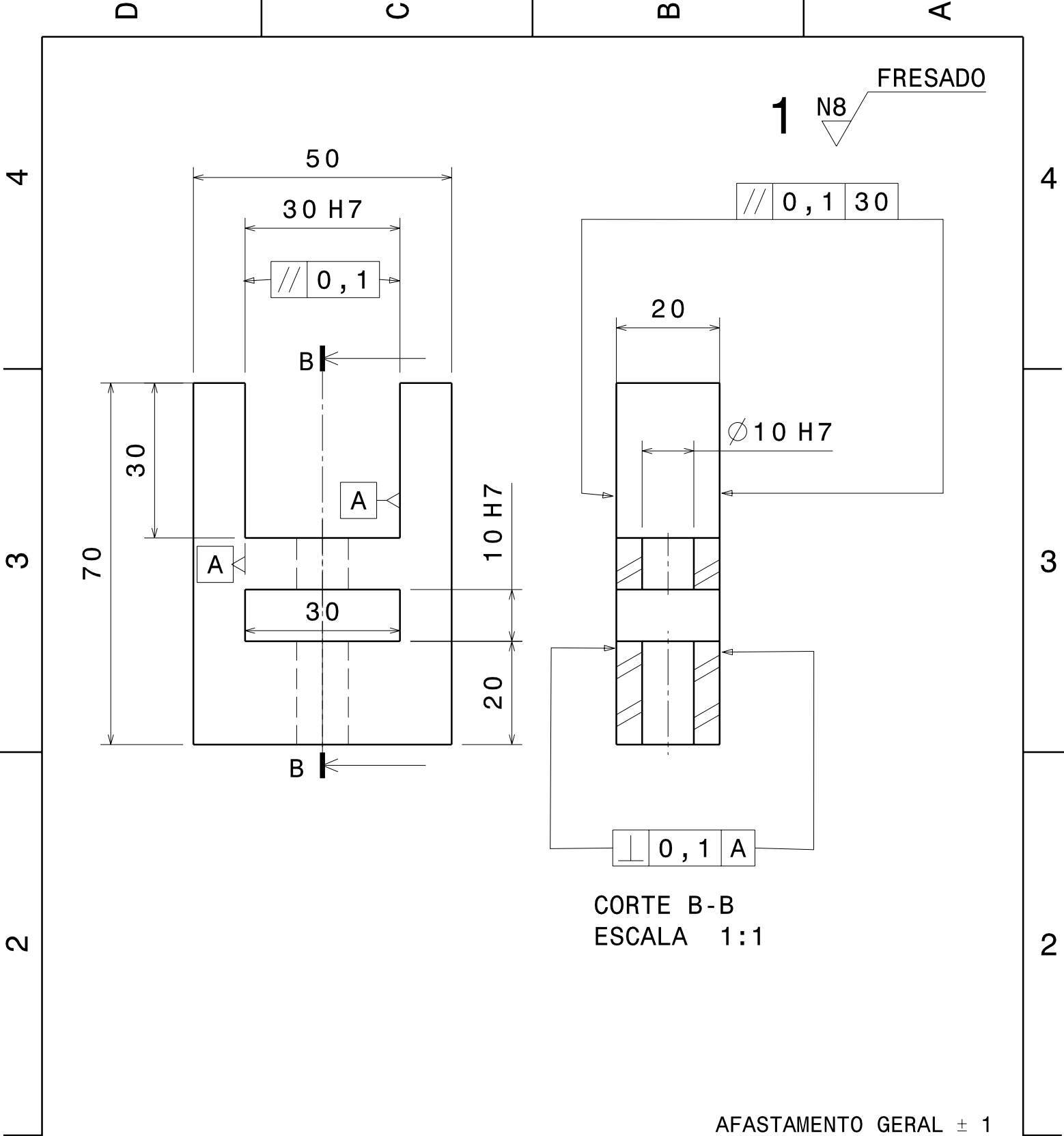
ESCALA 1:1

PESO(kg) XXX

PÁGINA 65

D

A



CORTE B-B
ESCALA 1:1

AFASTAMENTO GERAL ± 1



SENAI "SANTOS DUMONT"

MATERIAL:

AÇO ABNT 1010/20 □ 25,4X76,5X55

DESENHADO POR:
Ugo

DATA
23/4/2005

VERIFICADO POR:
Fabiana

DATA
XXX

FORMATO:
A4

TÍTULO:
BASE

REV
X

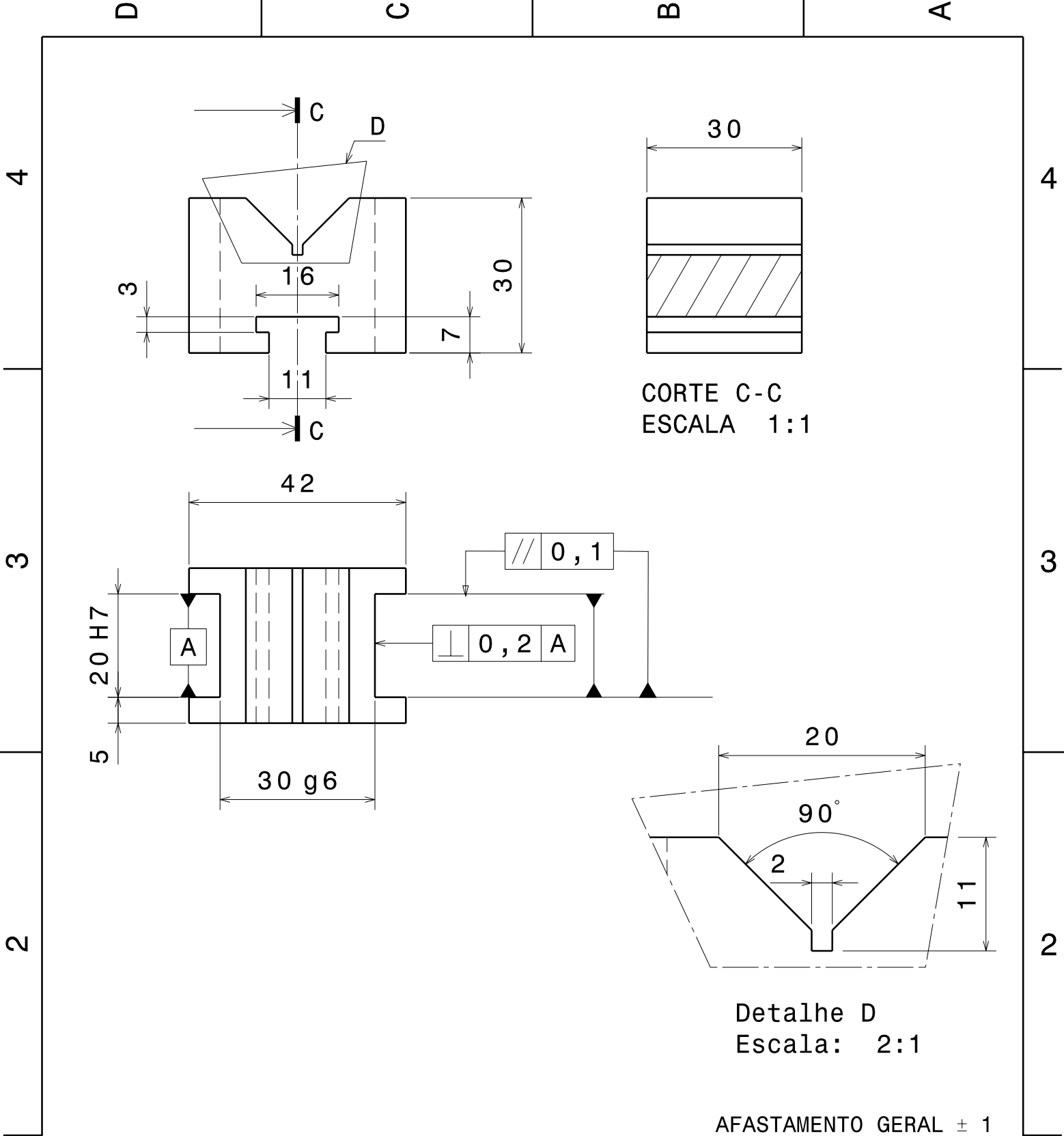
APROVADO POR:
XXX

DATA
XXX

ESCALA 1:1

PESO (kg) XXX

PÁGINA 66



CORTE C-C
ESCALA 1:1

Detalhe D
Escala: 2:1

AFASTAMENTO GERAL ± 1



SENAI "SANTOS DUMONT"

MATERIAL:

FERRO FUNDIDO □ 35X48

DESENHADO POR:
Ugo

DATA
23/4/2005

VERIFICADO POR:
Fabiana

DATA
XXX

FORMATO:
A4

TÍTULO:
BLOCO EM 'V'

REV
X

APROVADO POR:
XXX

DATA
XXX

ESCALA 1:1

PESO(kg) XXX

PÁGINA 67

D	C	B	A		
4					4
3					3
2					2
1					1
D					A

D

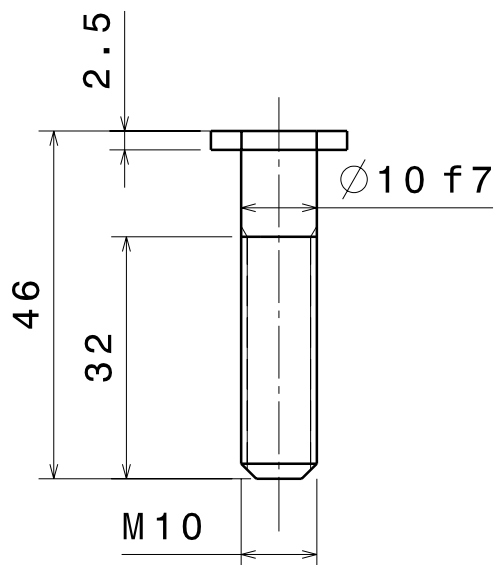
C

B

A

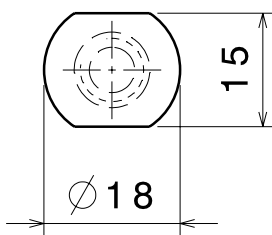
4

4



3

3



2

2

AFASTAMENTO GERAL ± 1



SENAI "SANTOS DUMONT"

MATERIAL:

AÇO ABNT 1010/20 -TREF.Ø19X50

DESENHADO POR:

Ugo

DATA

23/4/2005

VERIFICADO POR:

Fabiana

DATA

XXX

FORMATO:

A4

TÍTULO:

PARAFUSO

REV

X

APROVADO POR:

XXX

DATA

XXX

ESCALA 1:1

PESO(kg)

XXX

PÁGINA

68

1

1

D

A

D

C

B

A

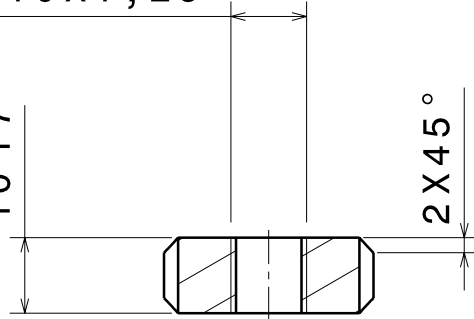
4

4

M10X1,25

10 f7

2X45°

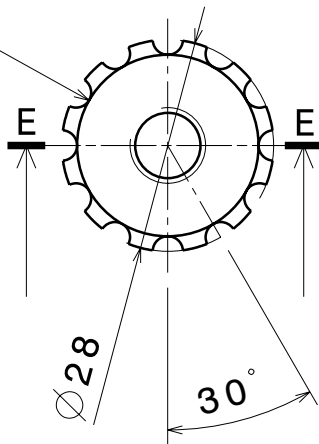


CORTE E-E

3

3

12 ESTRIAS R2 - ESPAÇADAS IGUALMENTE



2

2

AFASTAMENTO GERAL ± 1



SENAI "SANTOS DUMONT"

MATERIAL:

DURALUMÍNIO - ϕ 32 X 15

DESENHADO POR:

Ugo

DATA

23/4/2005

VERIFICADO POR:

Fabiana

DATA

XXX

FORMATO:

A4

TÍTULO:

PORCA

REV

X

APROVADO POR:

XXX

DATA

XXX

ESCALA

1:1

PESO (kg)

XXX

PÁGINA

69

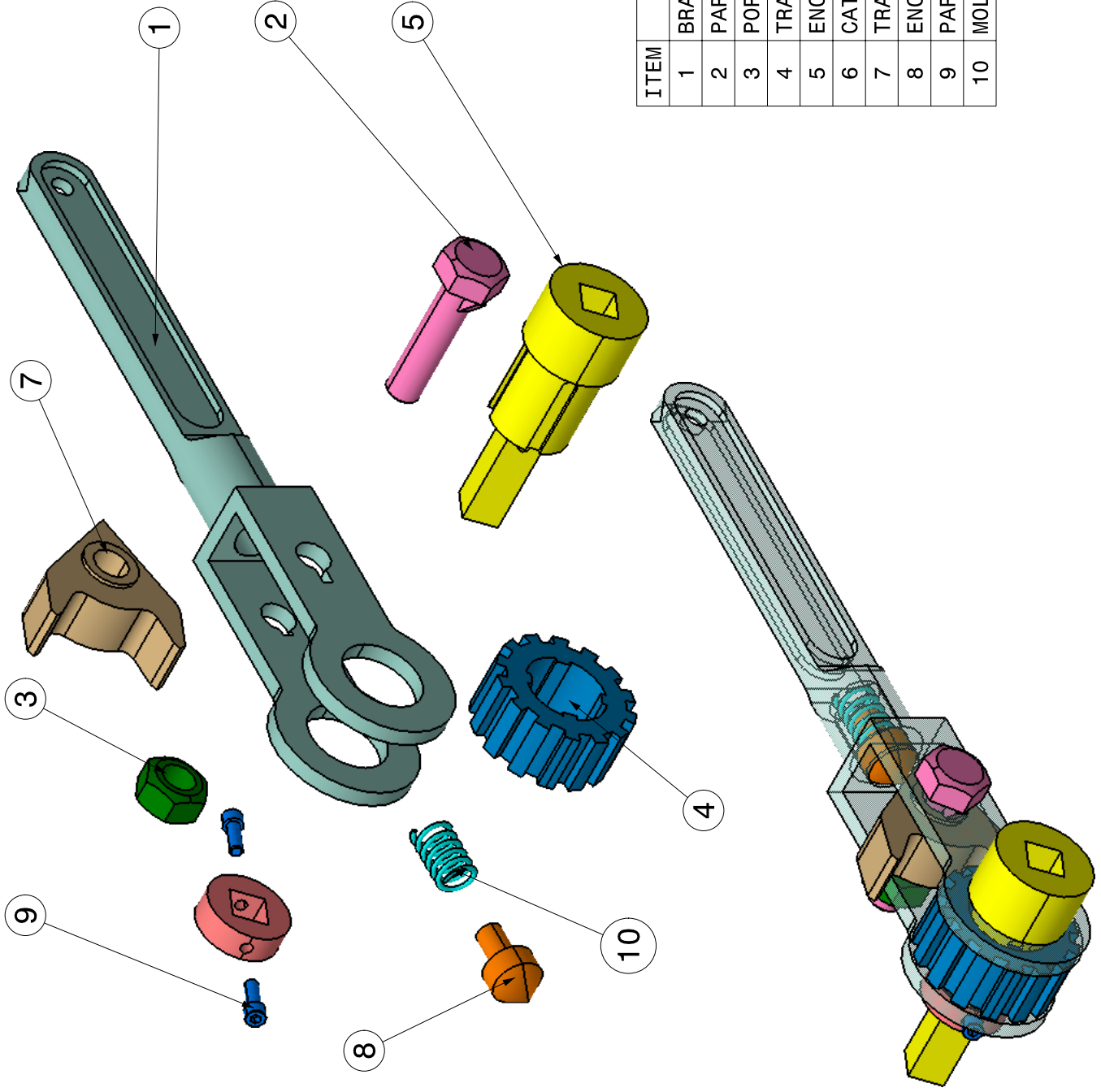
1

1

D

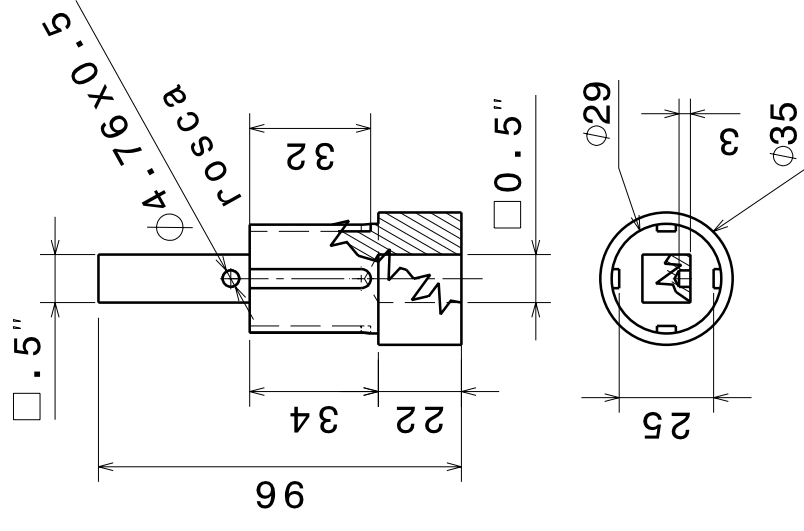
A

CHAVE ROQUETE

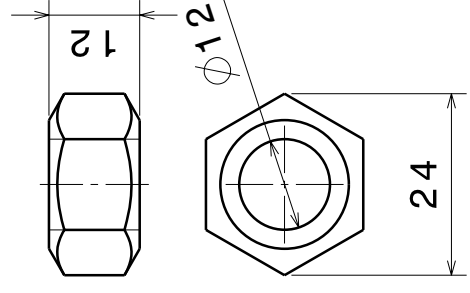


ITEM	DESCRIÇÃO	QUANTIDADE
1	BRAÇO	1
2	PARAFUSO SEXTAVADO COM NERVURA	1
3	PORCA SEXTAVADA	1
4	TRANQUETA	1
5	ENCAIXE	1
6	CATRACA	1
7	TRAVA	1
8	ENCOSTO	1
9	PARAFUSO ALLEN	2
10	MOLA	1

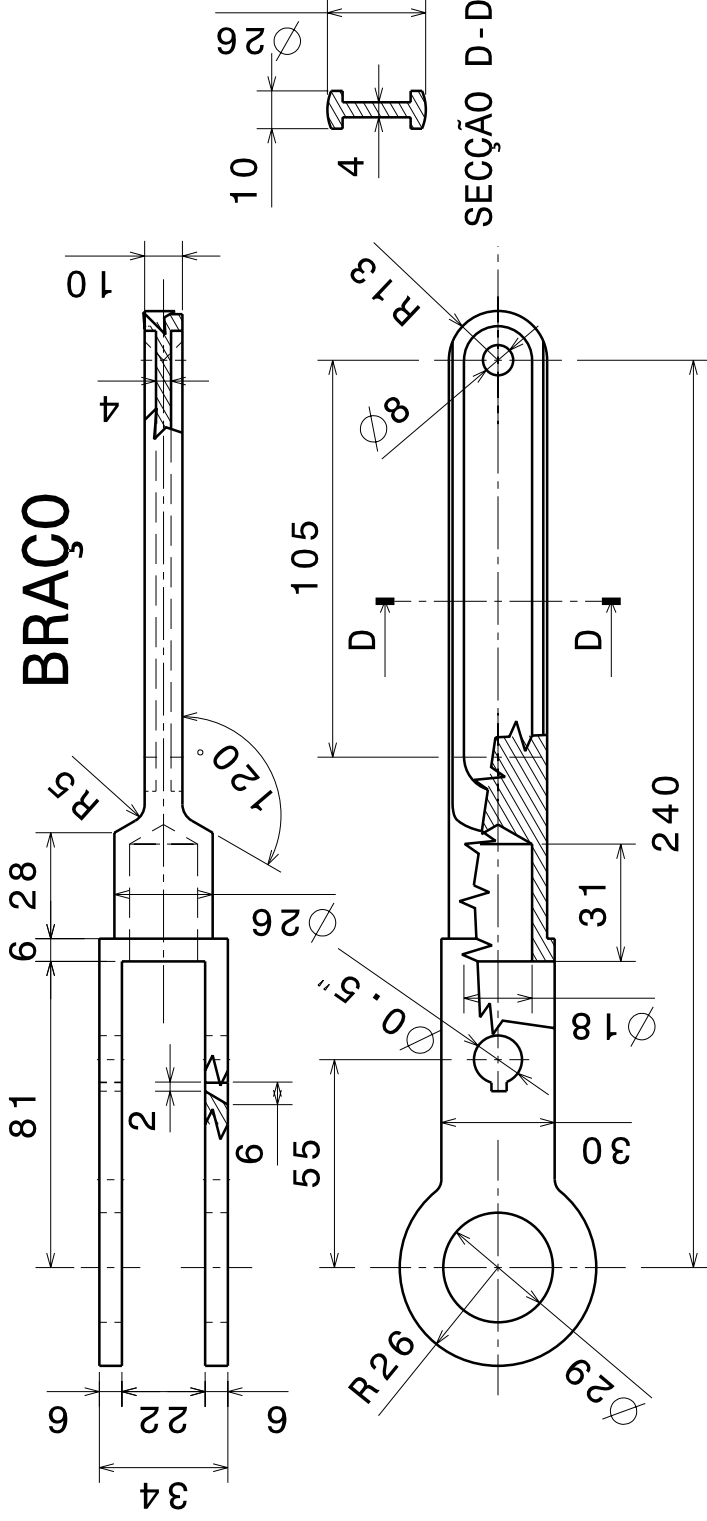
ENCAIXE



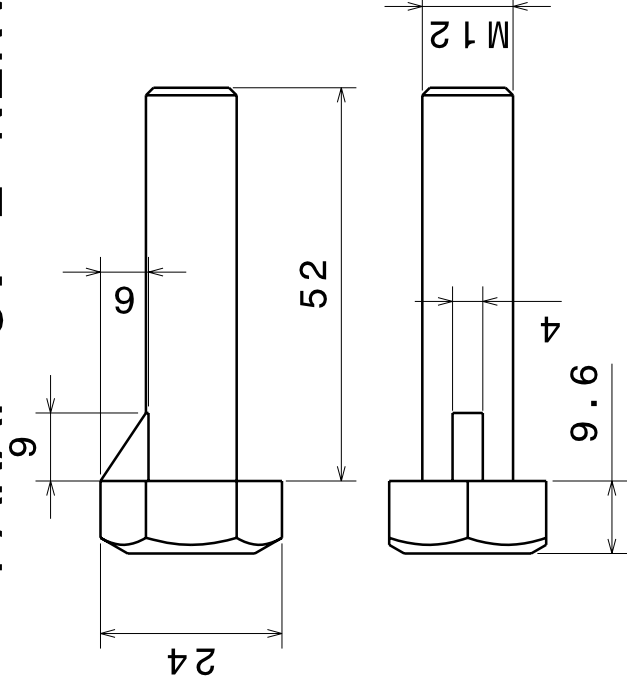
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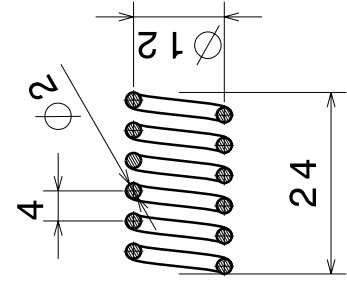
BRAÇO



PARAF S. E NERV

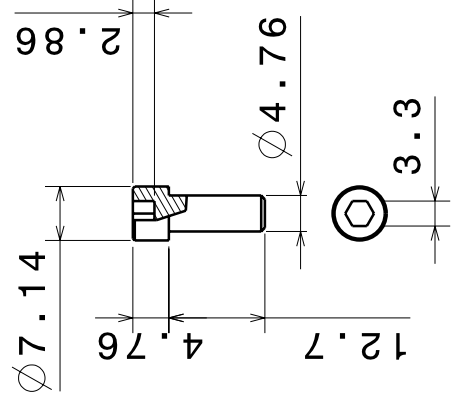


MOLA

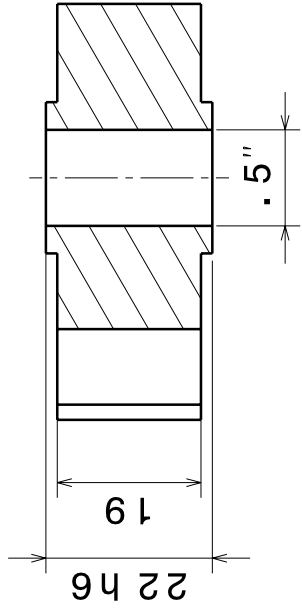
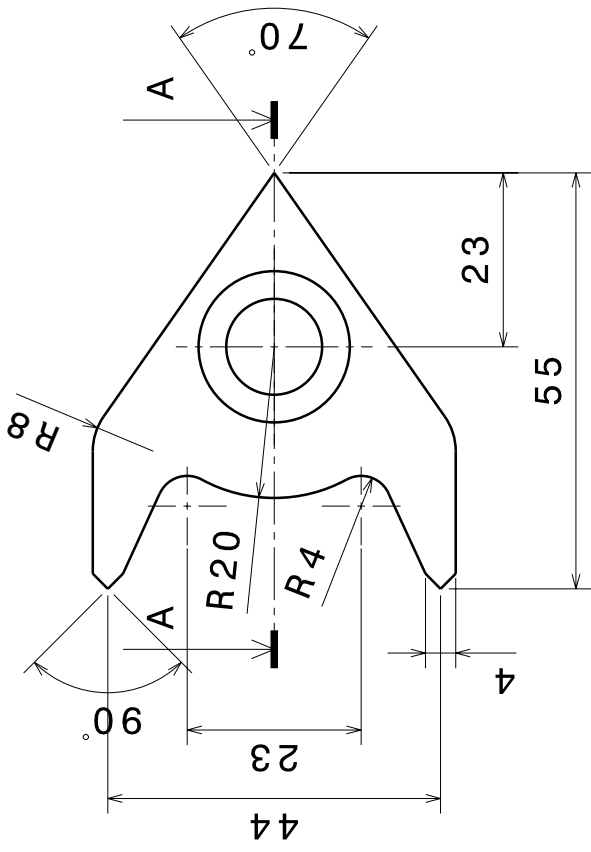


PARAFUSO ALLEN

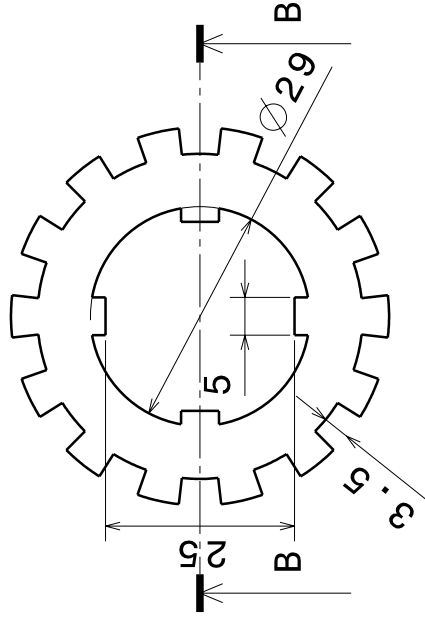
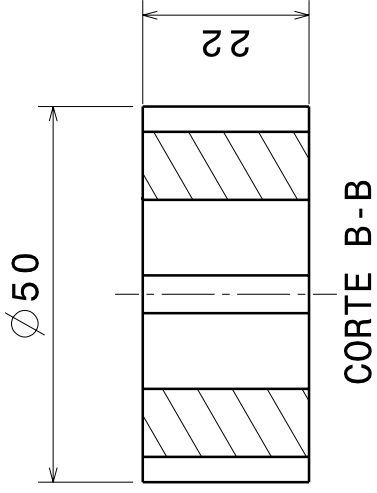
ALLEN



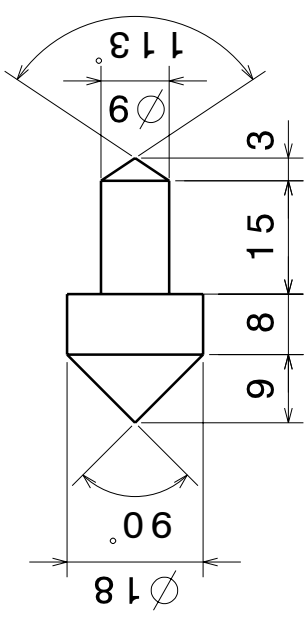
TRANQUETA



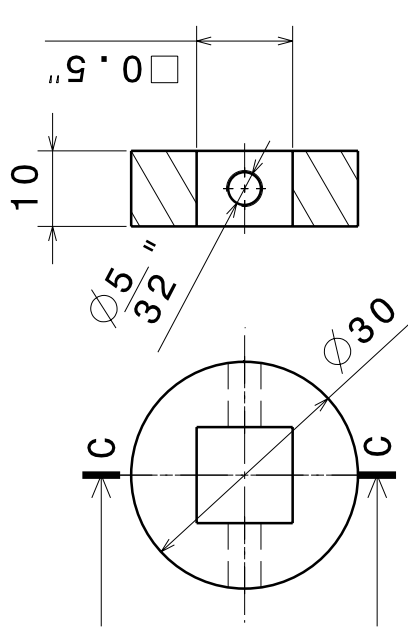
CATRACA



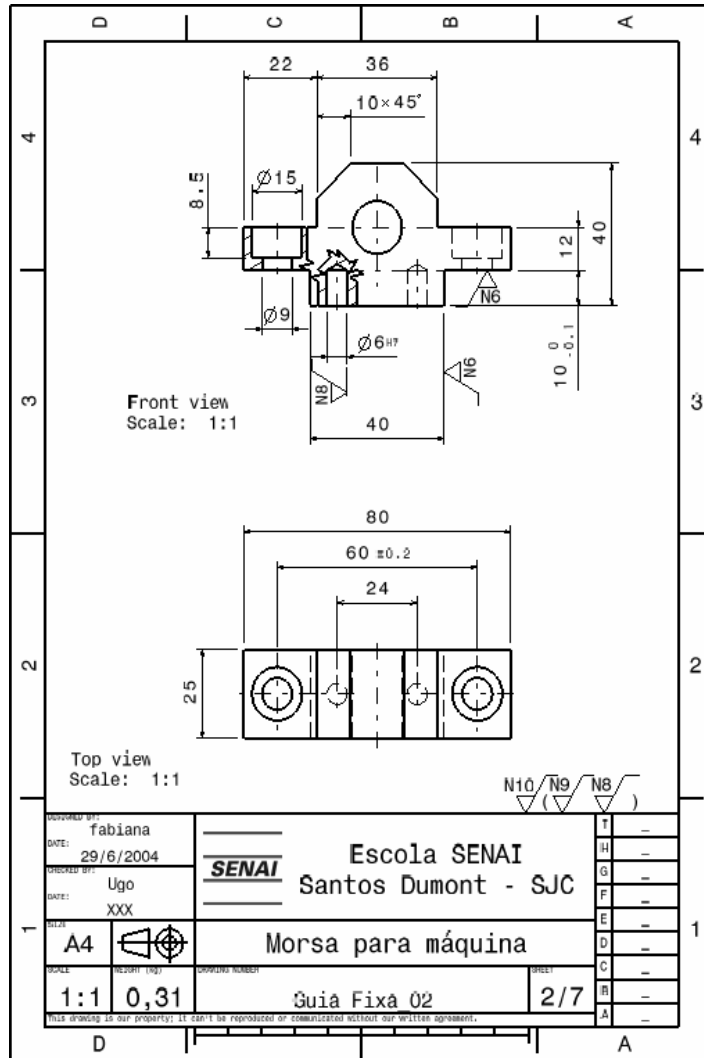
TRAVA



ENCOSTO

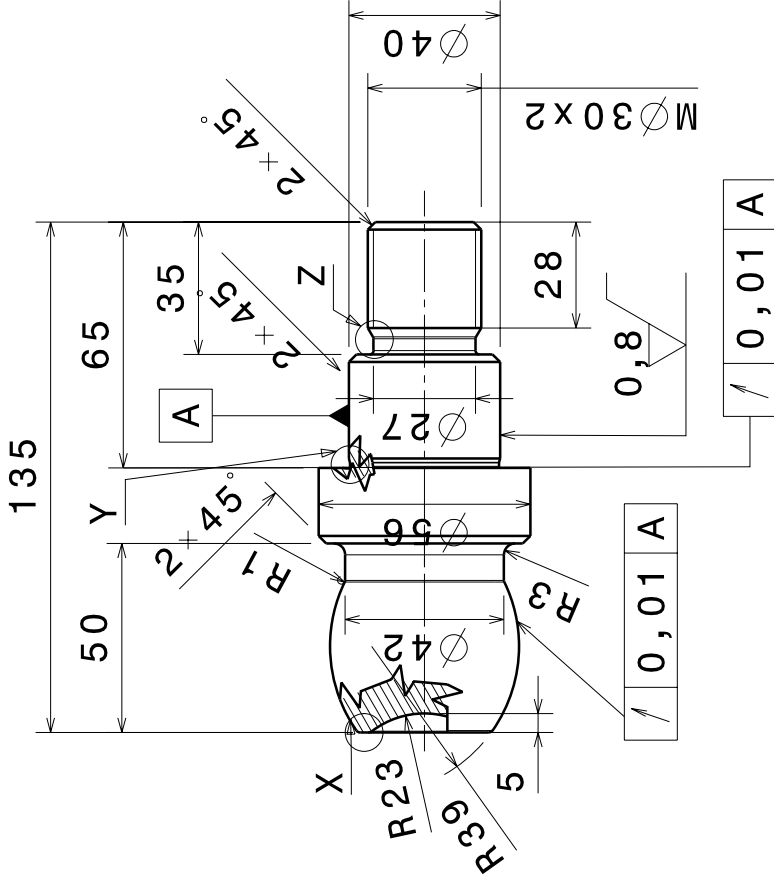


CORTE C-C

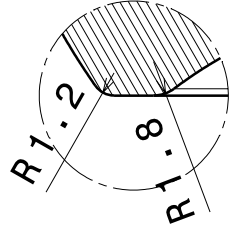


Drafting

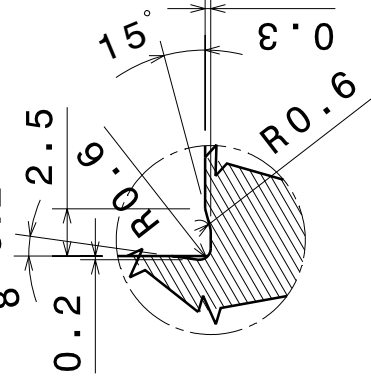
3,2 (0,8)



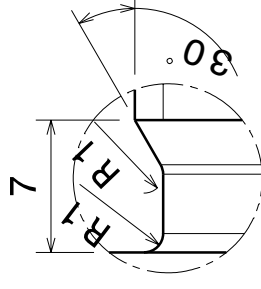
Detalhe X
5:2



Detalhe Y
5:2



Detalhe Z
5:2



Escola Senai "Santos Dumont"

Unidade mm
Escala: 1:2

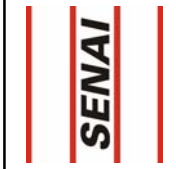
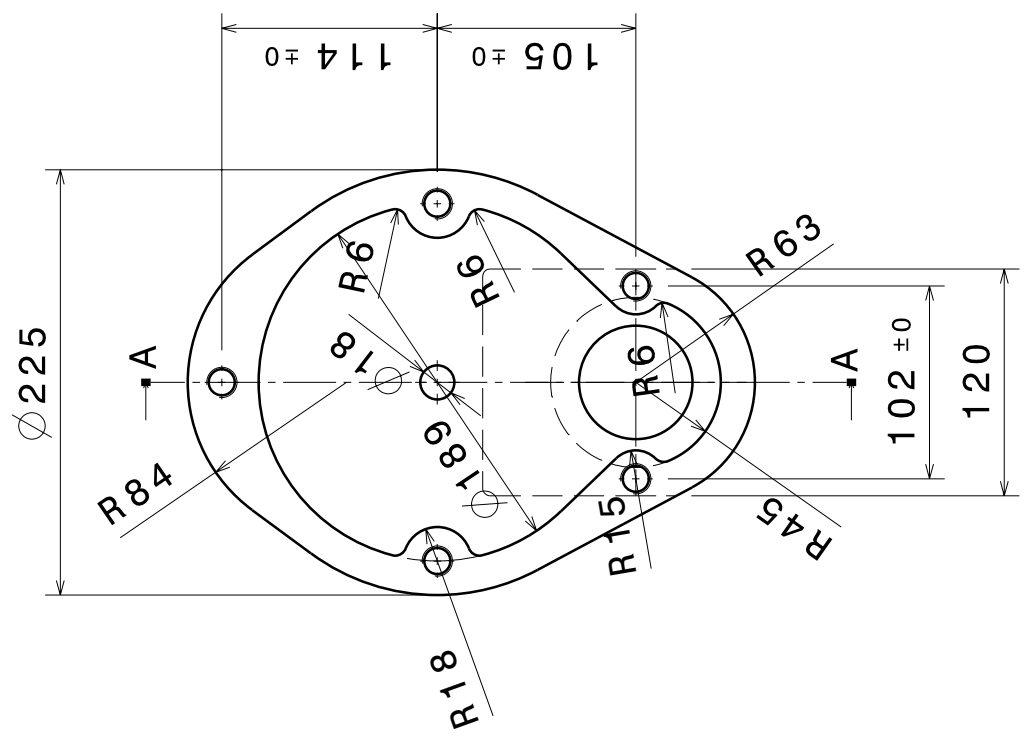
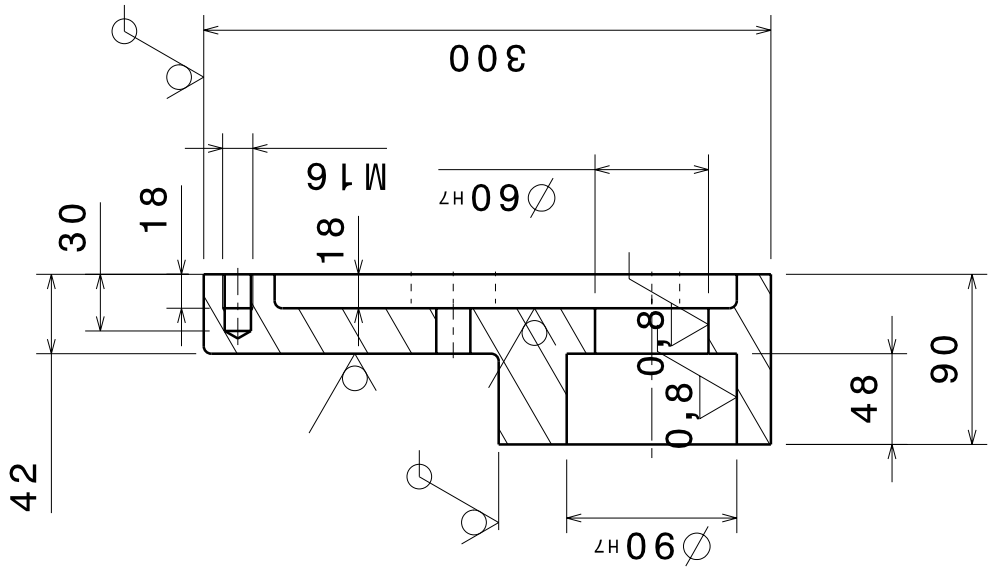
Desenhado por: Ugo Luiz

Data: 27/10/05
Página: 74

Desenho: EXDrafting01

C.F.P.: 3.02

6,3 (0,8)



Escola Senai "Santos Dumont"

Unidade mm

Escala: 1:2

Desenhado por: Ugo Luiz

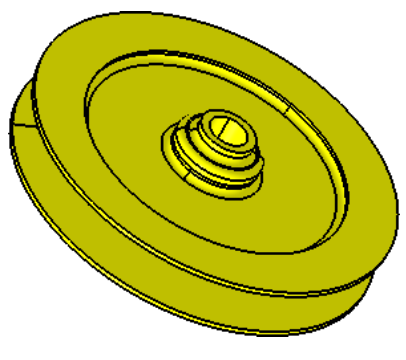
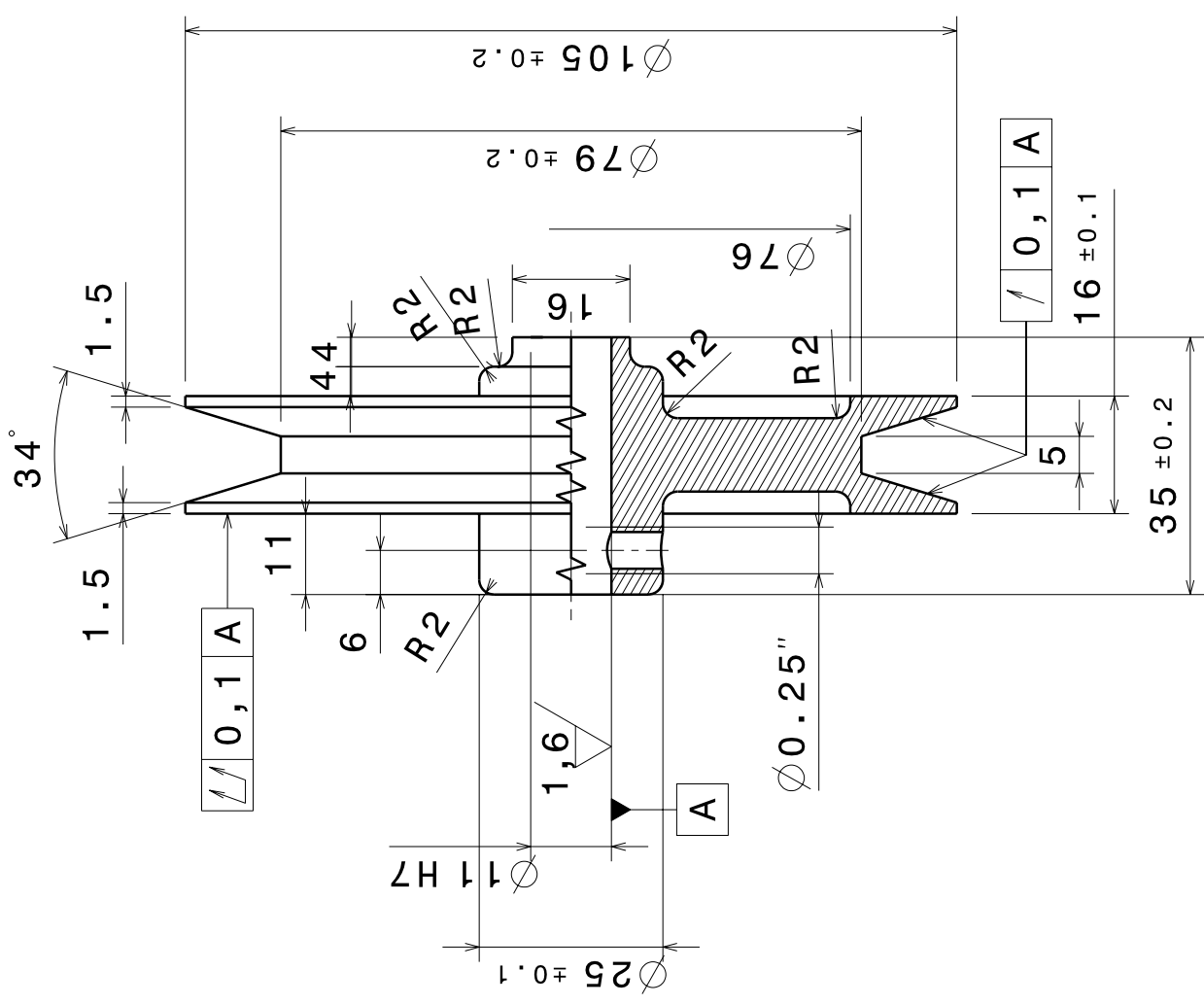
Página: 75

Desenho: EXDrafting02

Data: 27/10/05

C.F.P.: 3.02

3,2 2,5 1,6 0,8
1,6 (0,8)



Escola Senai "Santos Dumont"

Escala: 1:1

Desenhado por: Ugo Luiz

Página: 76

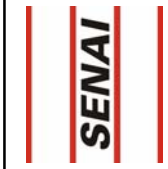
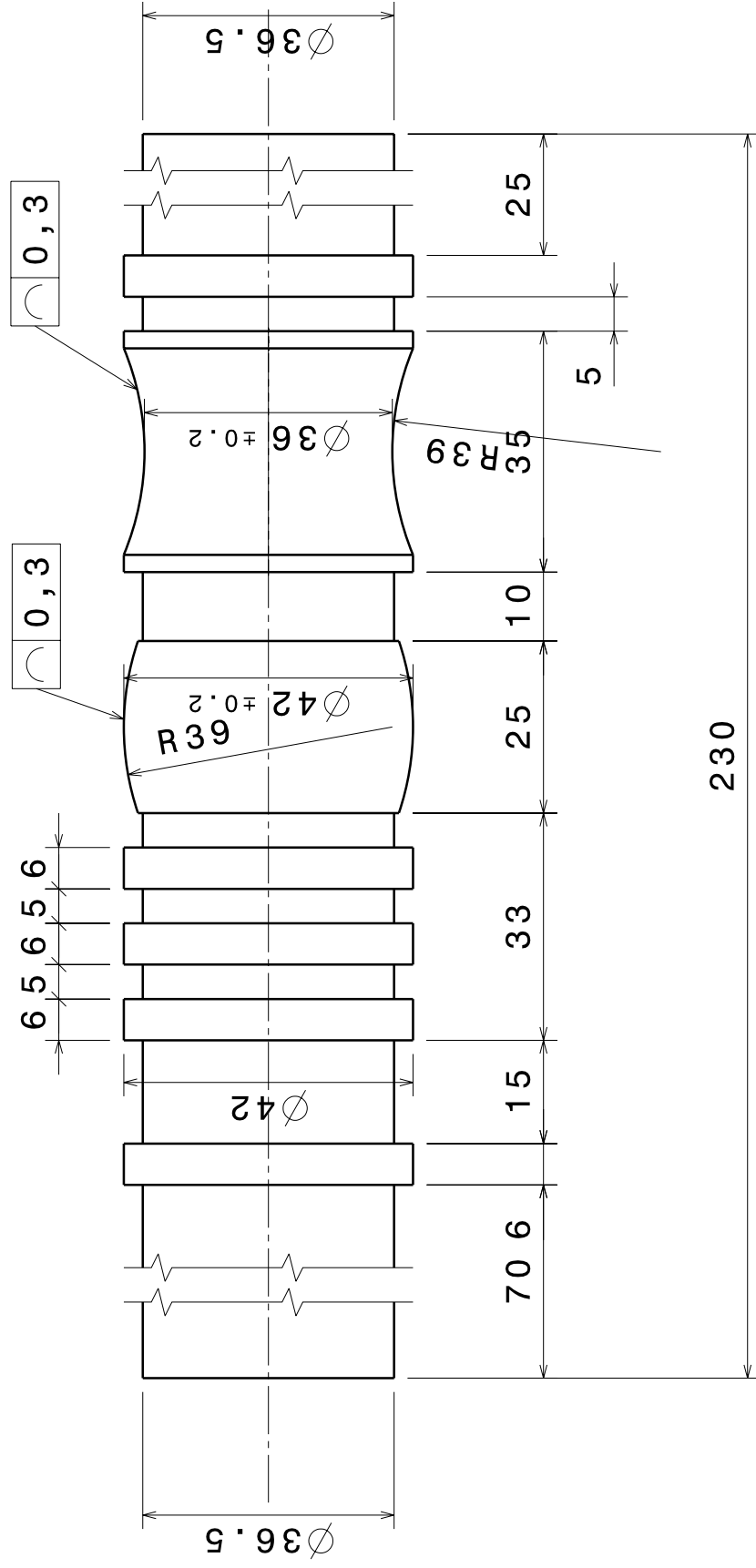
Desenho: EXDrafting03

Data: 27/10/05

C.F.P.: 3.02

Unidade mm

3,2 2,5



Escola Senai "Santos Dumont"

Escala: 1:1

Unidade mm

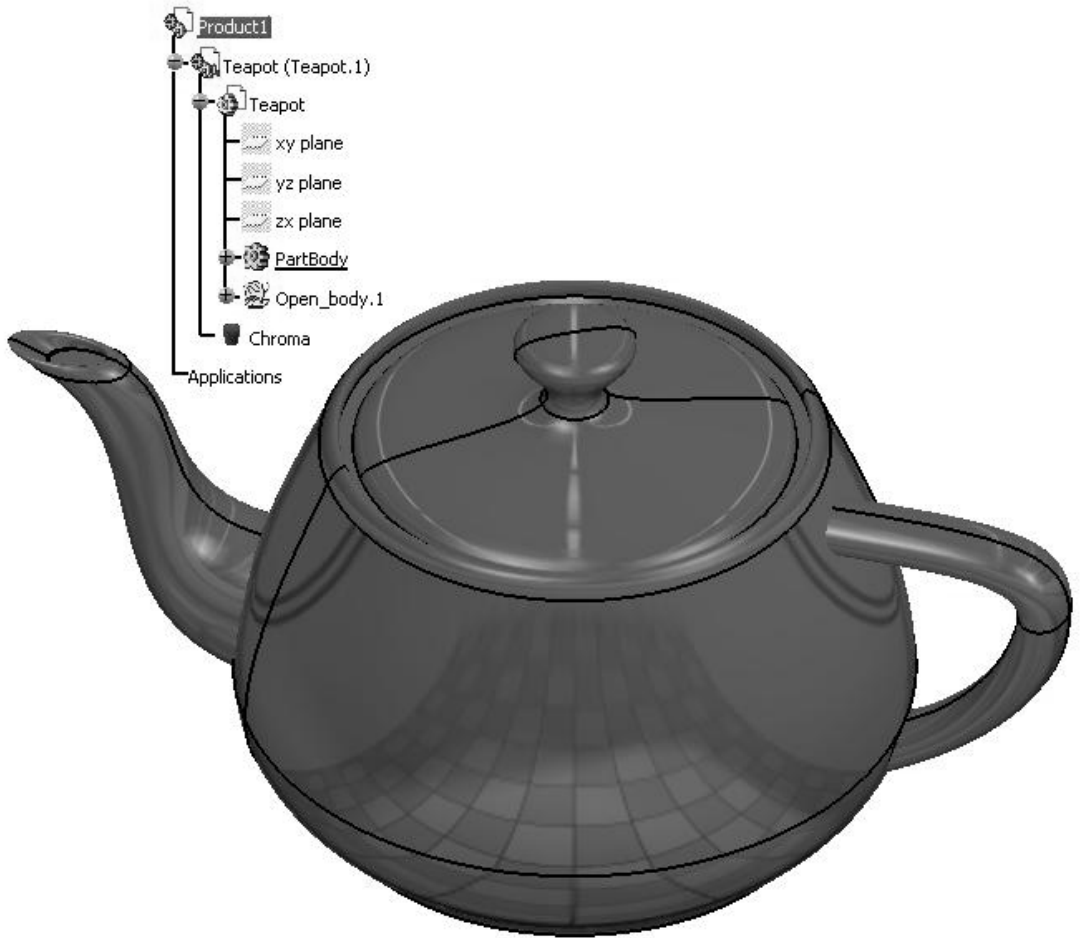
Desenhado por: Ugo Luiz

Página: 77

Desenho: EXDrafting04

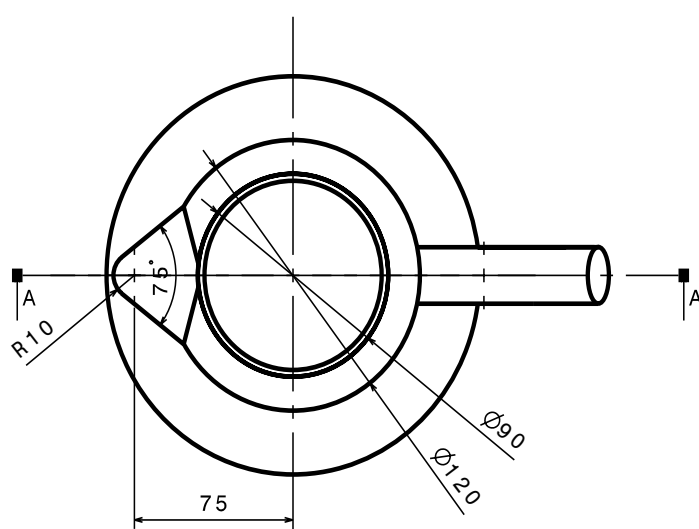
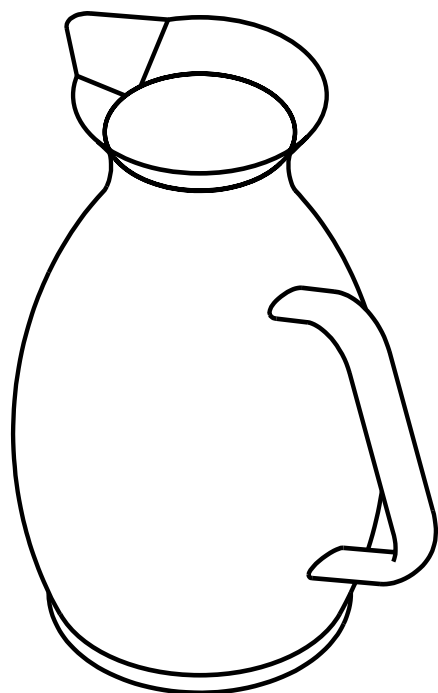
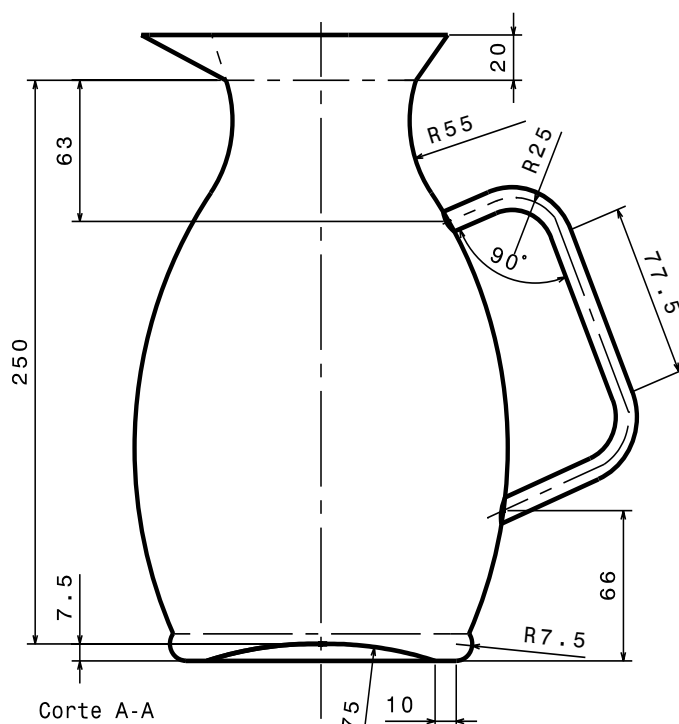
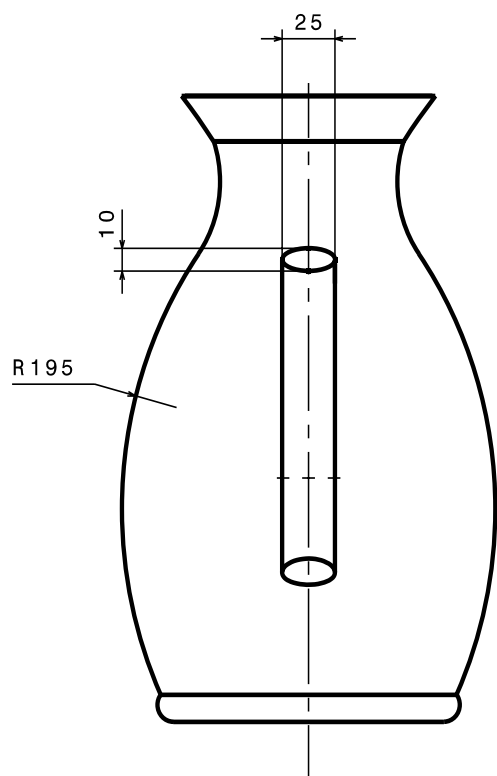
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C.F.P.: 3.02

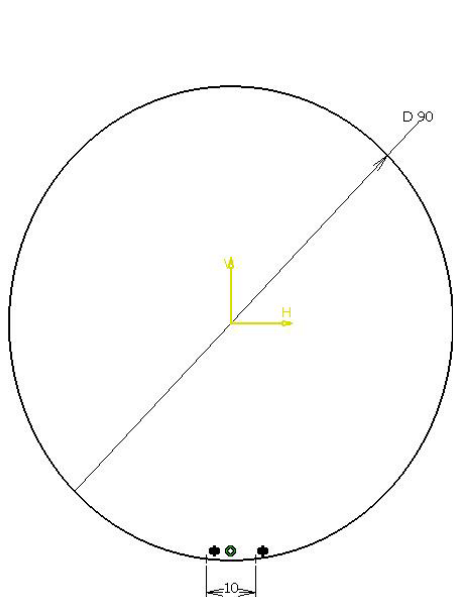


Wireframe & Surface

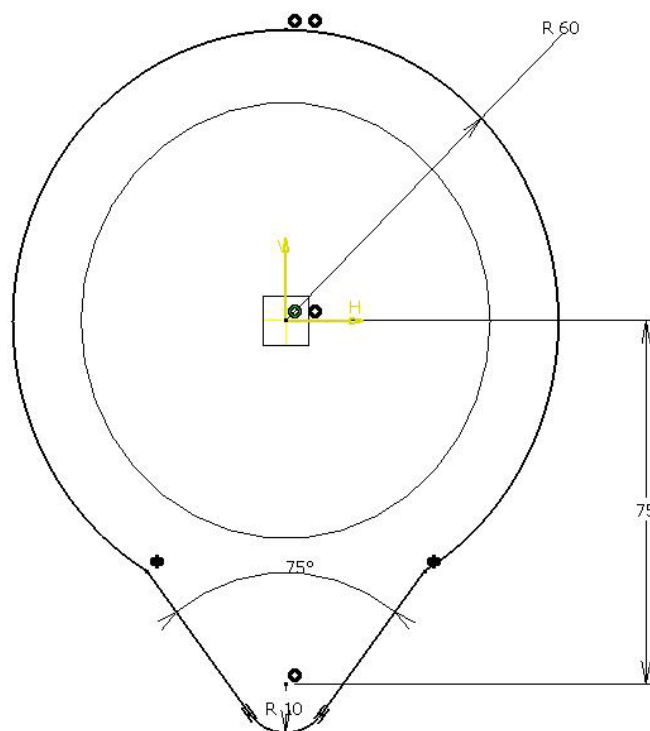
Faça o exercício abaixo no módulo *Wireframe & Surface Design*.



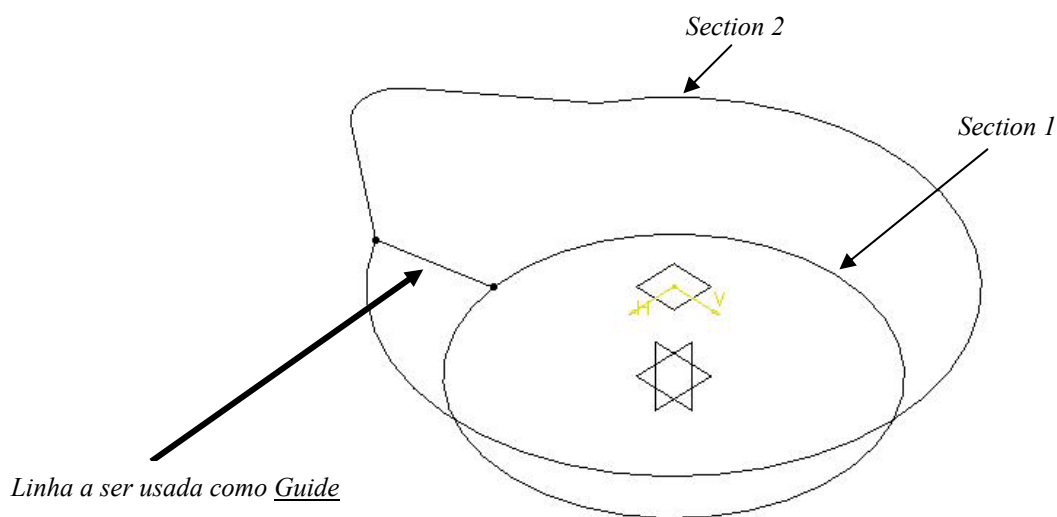
1. Desenhar os sketches para o comando *Loft Surface*



Primeira secção da superfície



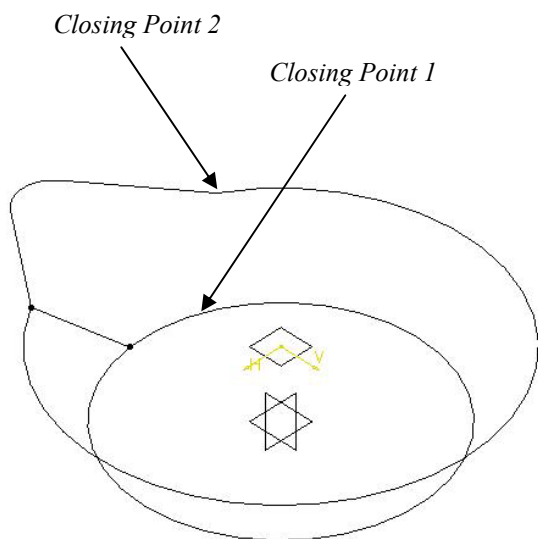
Segunda secção da superfície



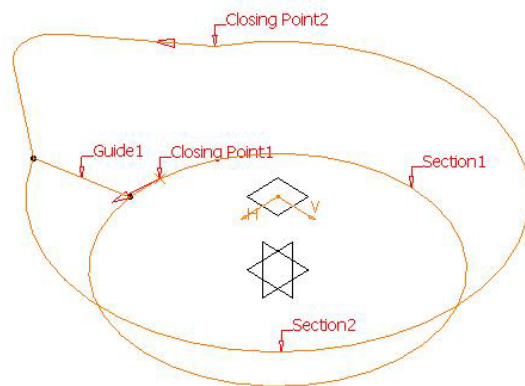
Linha a ser usada como Guide

Linha criada entre dois pontos nas secções

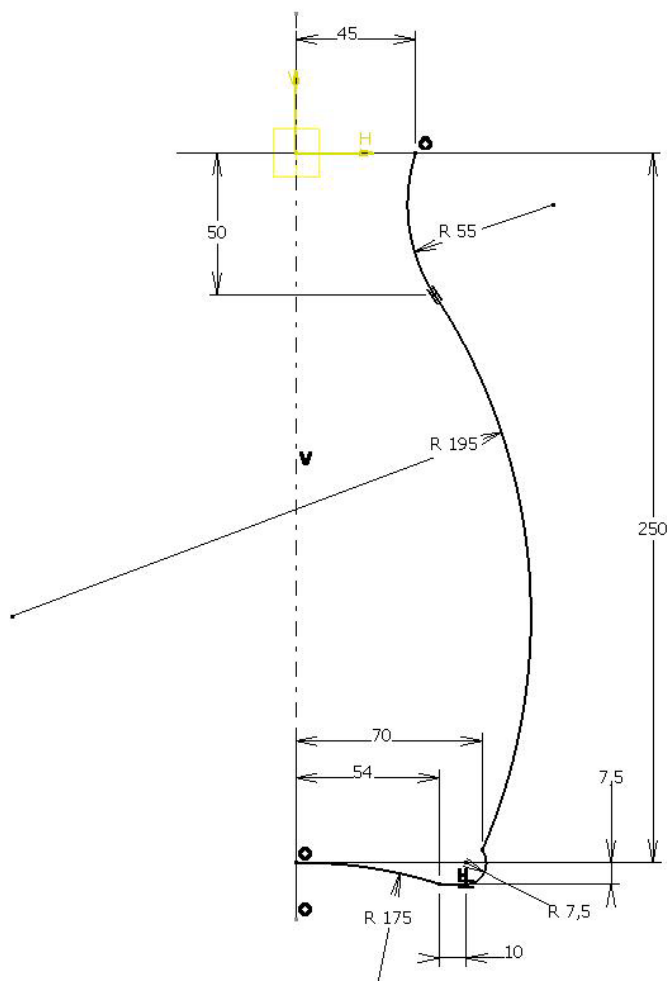
2. Criar o Loft Surface



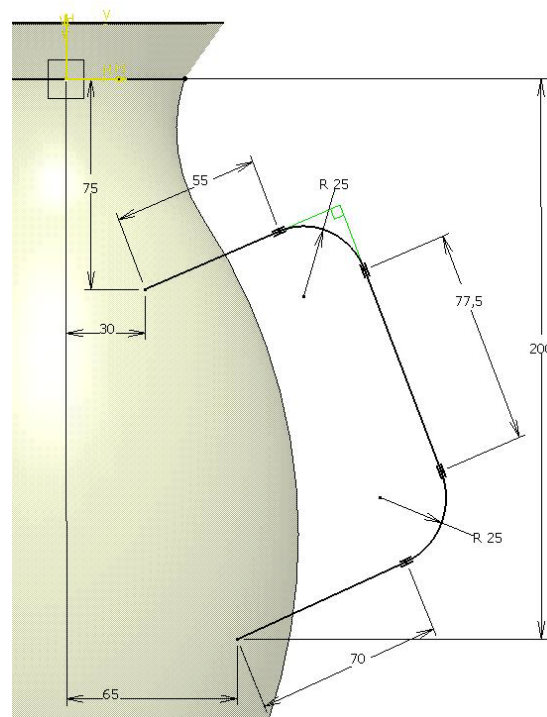
Posição dos "Closing Points"



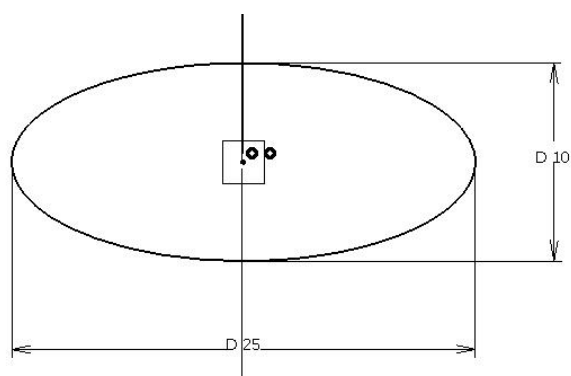
3. Criar o Sketcher para a superfície de revolução



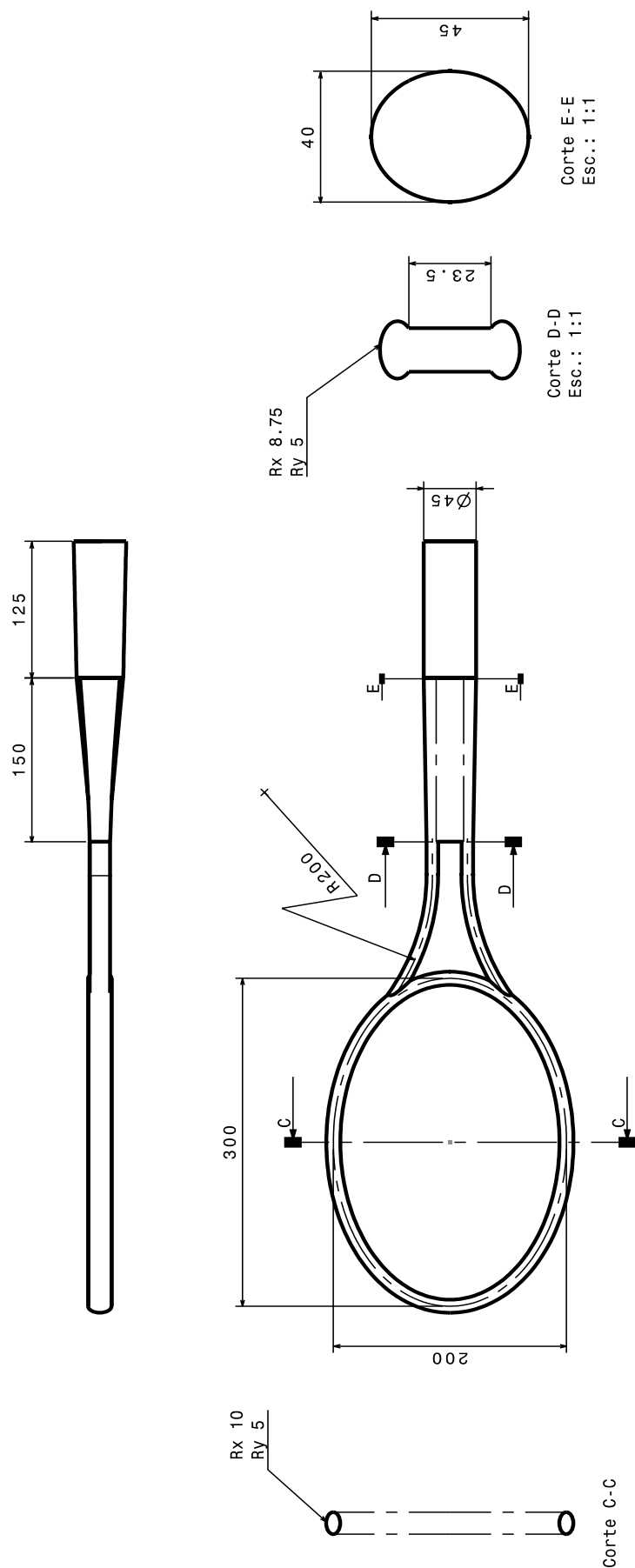
4. Criar o Sketcher para a Sweep



Guia do Sweep

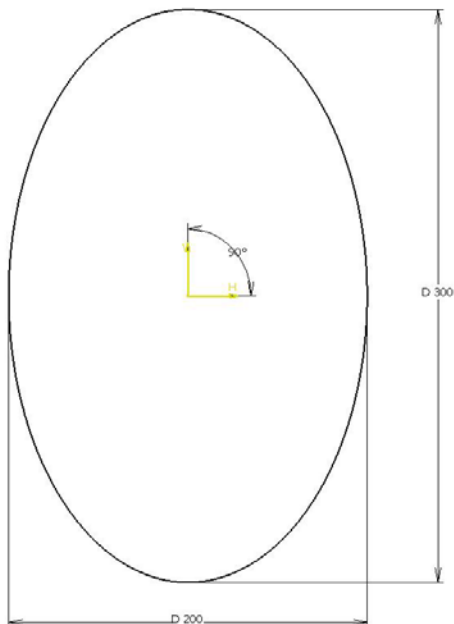
5. Criar o Perfil do Sweep**6. Usar o comando Split para retirar a porção interna do sweep.**

Faça a peça abaixo no módulo *Wireframe & Surface Design*.

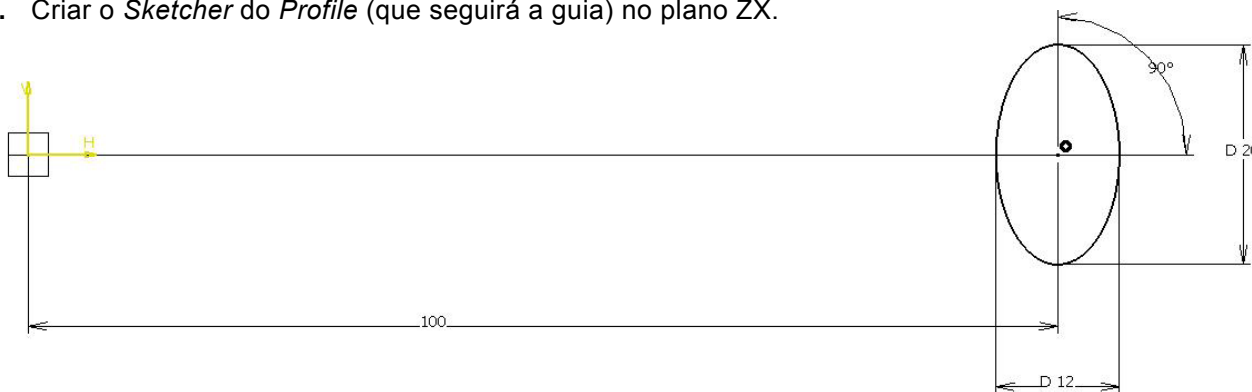


Para o primeiro *Sweep*, seguir os itens de 1 a 3.

1. Criar o *Sketcher* da curva guia no plano XY.

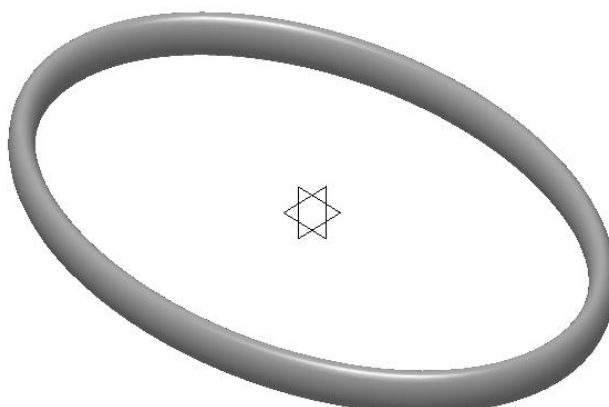


2. Criar o *Sketcher* do *Profile* (que seguirá a guia) no plano ZX.

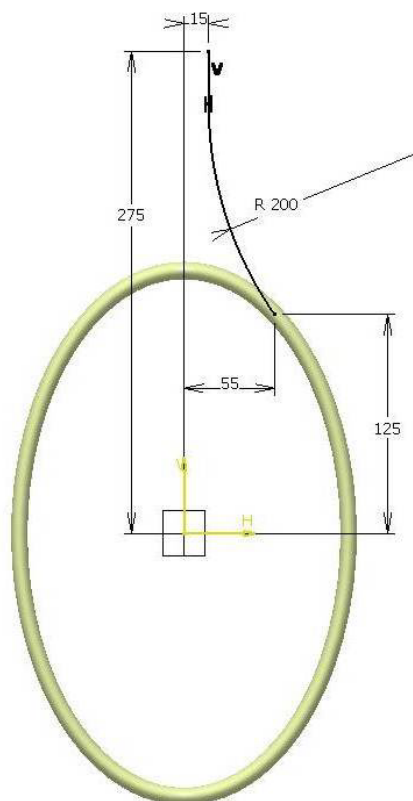


3. Através de o comando *Swept Surface Definition* criar a superfície abaixo, onde:

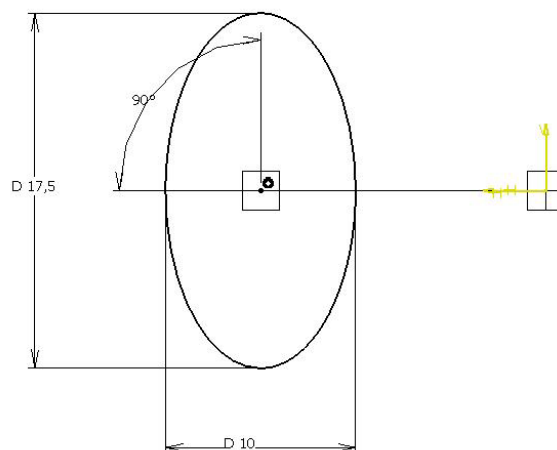
- *Profile*: passo 2
- *Guide*: passo 1



4. No plano XY, desenhar a curva abaixo:



5. Criar um plano normal à curva anterior (sobre o ponto final da parte “reta”), e nele, desenhar o *Sketcher* abaixo



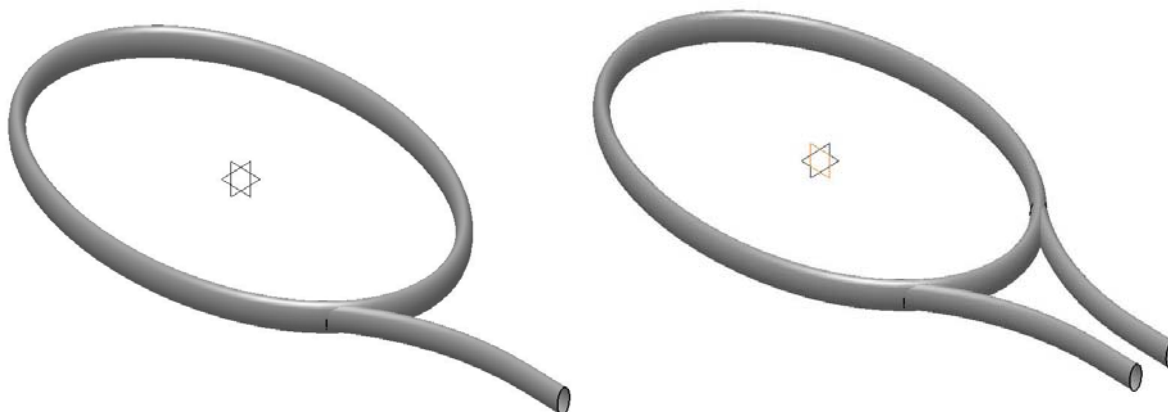
OBS.: O centro da elipse deve ser coincidente ao ponto final da curva

6. Através de o comando *Swept Surface Definition* criar a superfície abaixo, onde:

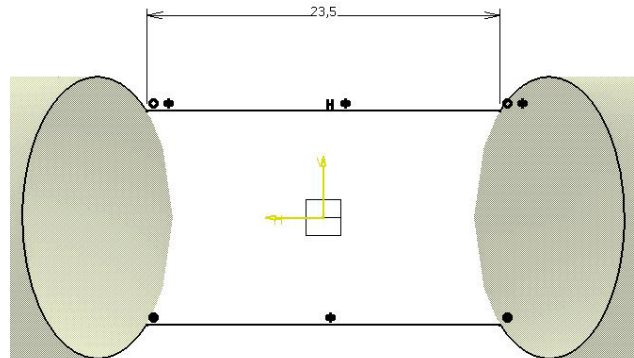
- *Profile*: passo 5
- *Guide*: passo 4



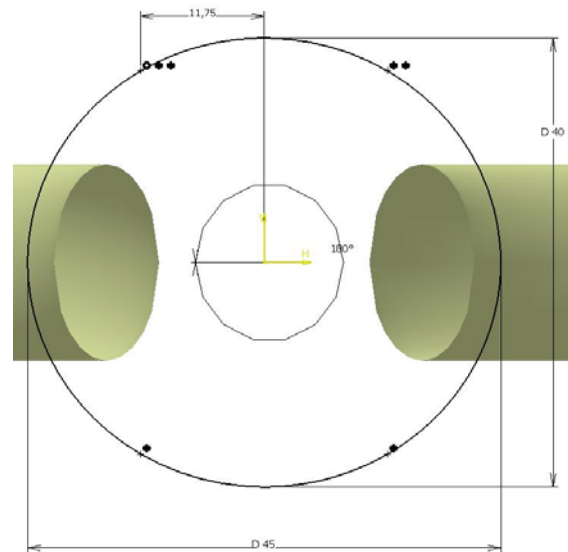
7. Com o comando *Symmetry*, fazer a simetria do *Swept Surface* através do plano YZ, como mostrado à seguir:



8. Criar um *Sketch* no **Plane.1** (criado no passo 5) usando linhas e o comando *Project 3D Elements* selecionando as duas elipses.



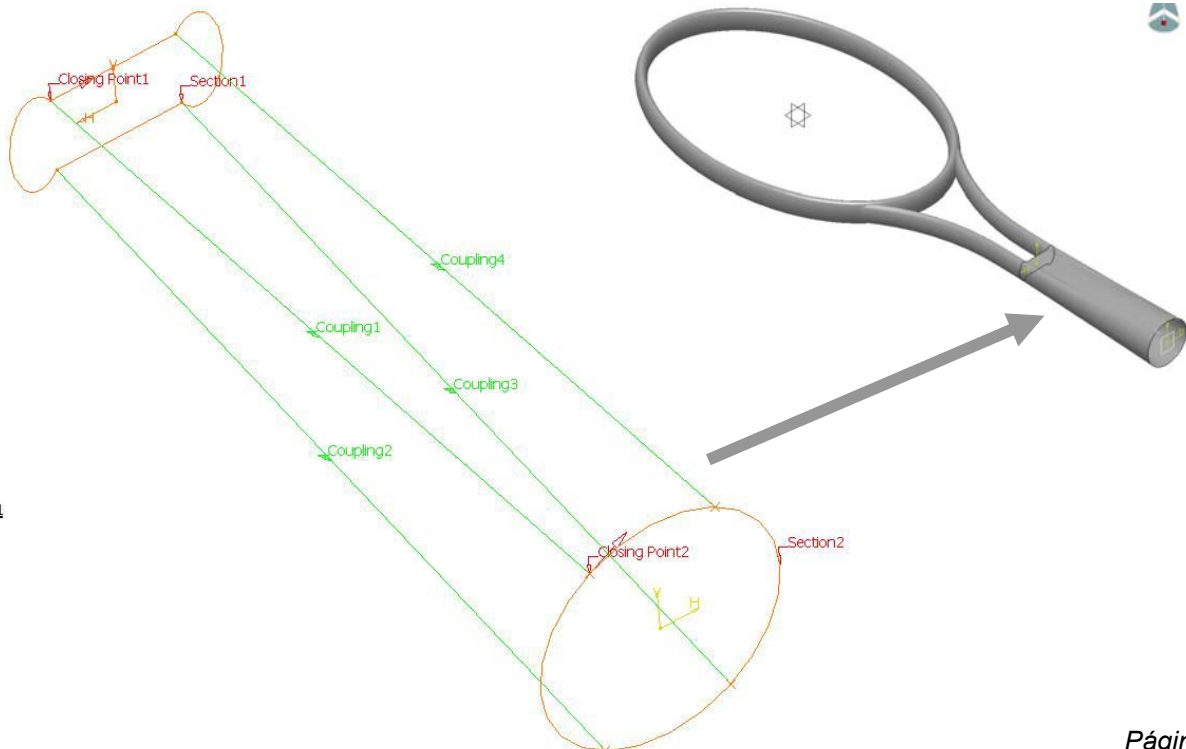
9. Criar um plano paralelo ao plano ZX de 425 mm. Criar sobre ele um novo *Sketcher* com uma elipse e quatro pontos.



10. Através de o comando *Multisections Surfaces* criar outra superfície selecionando os *sketchers* criados nos passos 8 e 9.

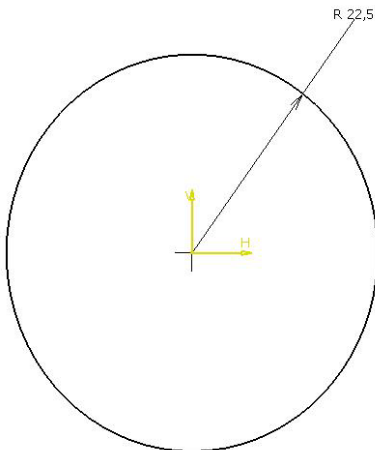


11. Será necessário reposicionar o **Closing point 2** clicando nele com o **BDM** escolhendo a opção *Replace*. Recolocá-lo conforme figura abaixo:

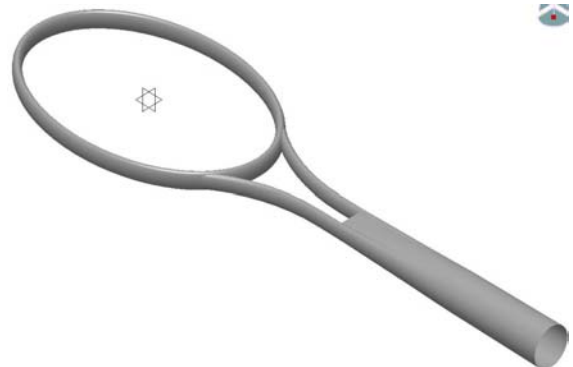


12. Na caixa de diálogo *Multisections Surfaces Definition* selecionar a tabela **Coupling** e em seguida o botão **Add**. Selecione o primeiro ponto da primeira secção e o primeiro da segunda até completar quatro *Couplings*, conforme figura anterior.

13. Criar um plano paralelo ao plano ZX a 550 mm, e nele criar o sketcher abaixo:



14. Através do comando *Blend Surface*, selecione o Sketcher criado no passo 9 e 13 para criar o final do cabo da raquete.



15. Fechar a base do cabo da raquete como comando *Fill*.



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PROVENZA, Francesco. **Desenhista de Máquinas**

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Edição 1989, São Paulo, Editora F. Provenza, 1989.

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