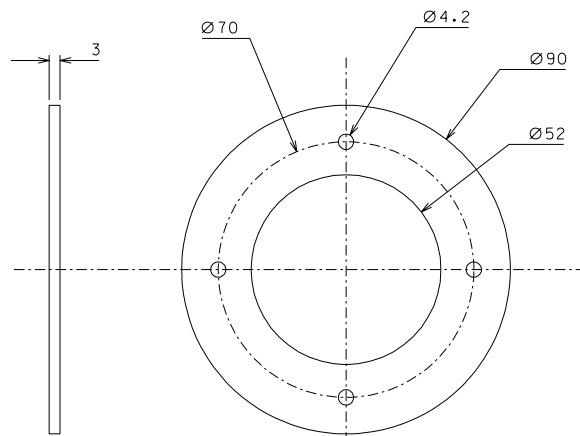


66



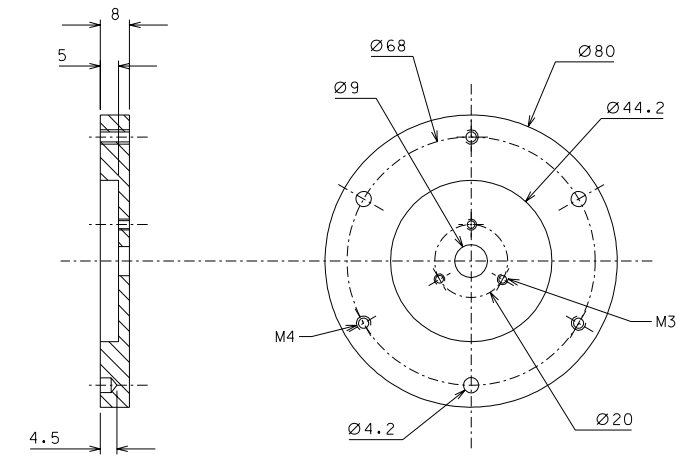
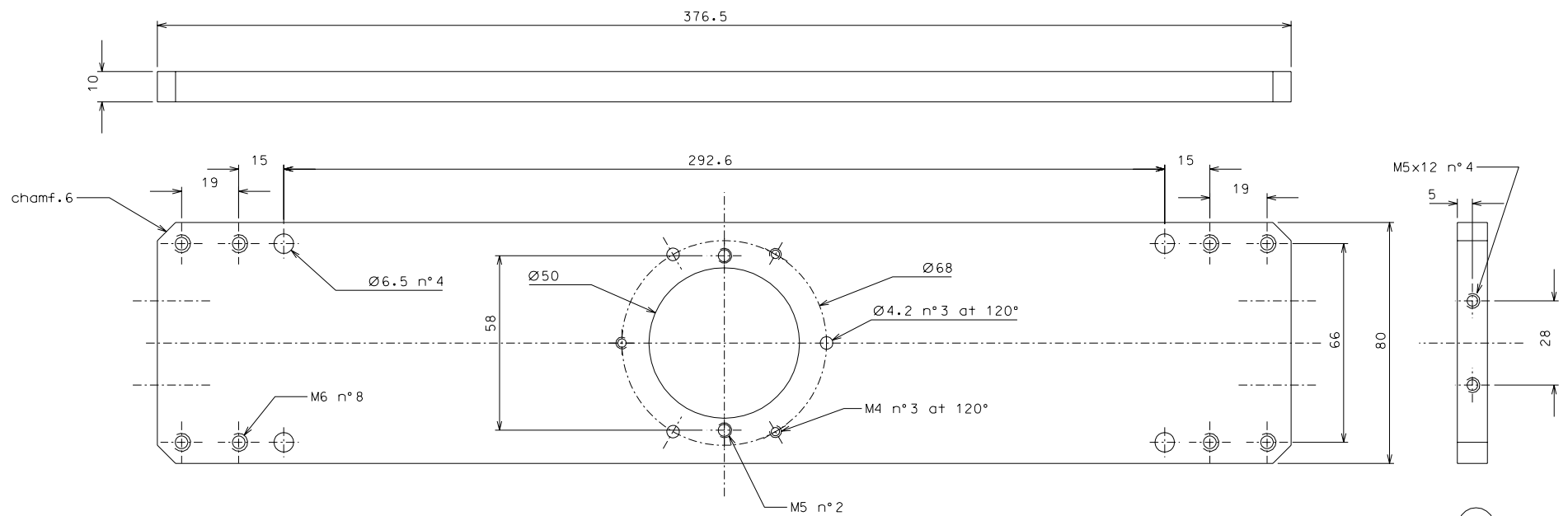
65

ref.	note	date	signature
modifications			

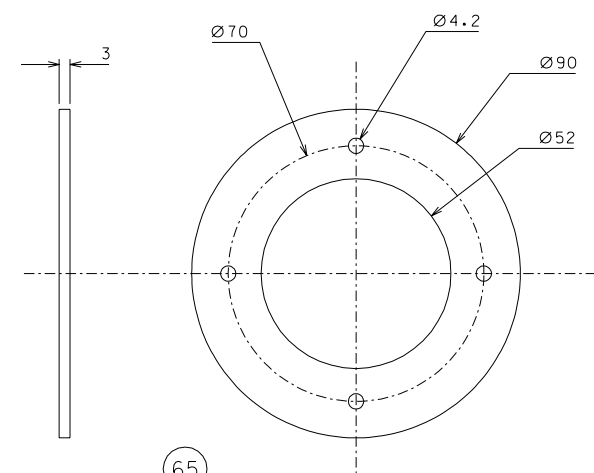
67	4	AISI 304	1:1				
66	4	AISI 304	1:1				
65	4	AISI 304	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000
Linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			

	LIGO PROJECT		designed for R. De Salvo	
			draw. by PROMEC	
		draw. Laser, 029		
title		LASER		date 11-09-04
		DETAILS		scale 1:1
				detail from 024
				issue A
				replaces draw. n°
				A 2



66

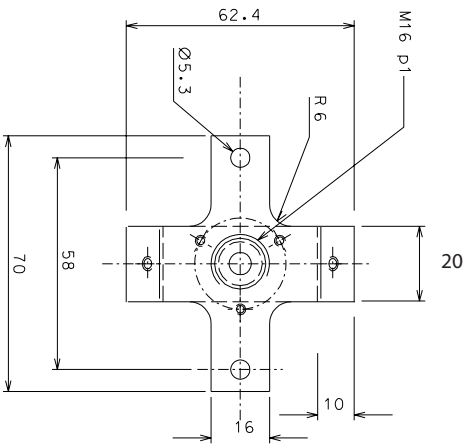


65

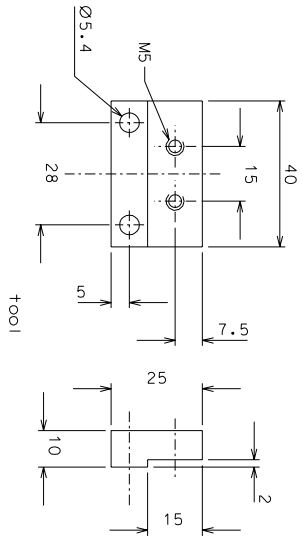
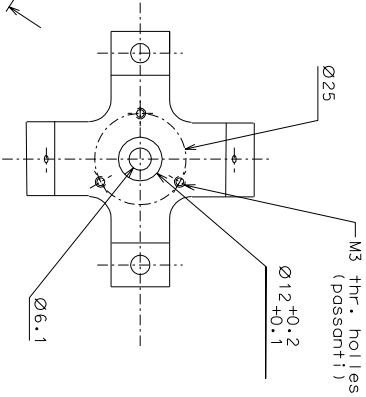
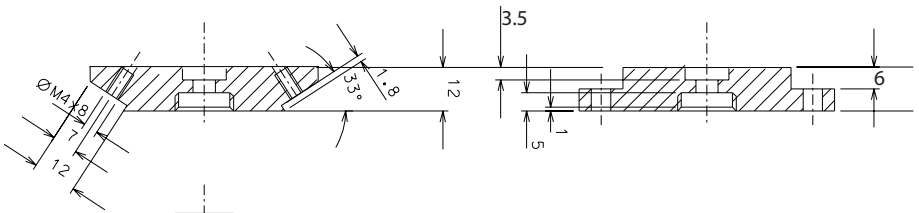
ref.	note	date	signature
modifications			

67	4	AISI 304	1:1				
66	4	AISI 304	1:1				
65	4	AISI 304	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

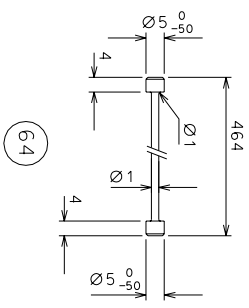
General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
Linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2	± 3
Angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side				
				LIGO PROJECT designed for R. De Salvo draw. by PROMEC n° draw. Laser. 029				
title LASER DETAILS				date 11-09-04 scale 1:1 detail from 024 issue A replaces draw. n° A 2				



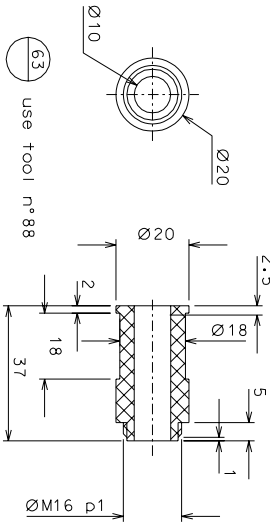
62



tool



64



63 use tool n° 88

ref.	note	date	signature
	modifications		

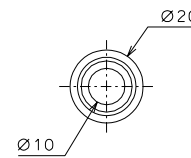
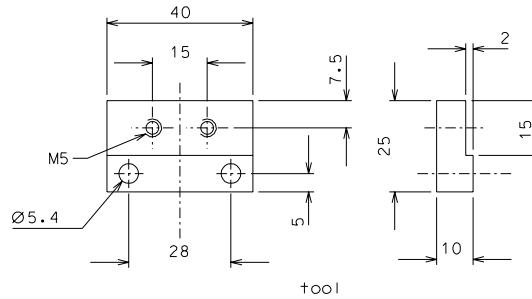
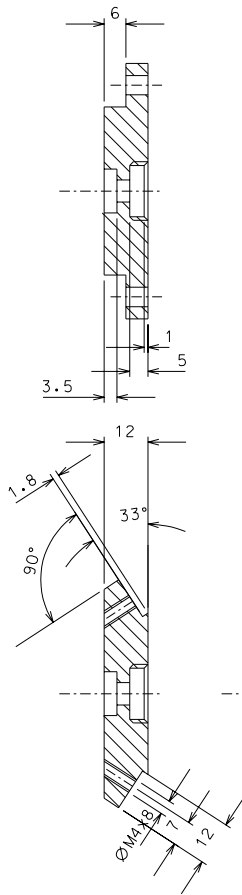
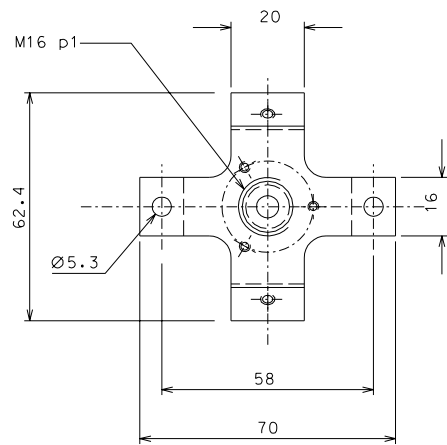
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
64	8	ALSI 304	1:1				
64	4	marking	1:1				
63	4	peek 1000	1:1				
62	4	ALSI 304	1:1				

Dimensions	< 6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	> 4000
Linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
Angular Toli.	± 1'	± 30"	± 30"	± 10"				

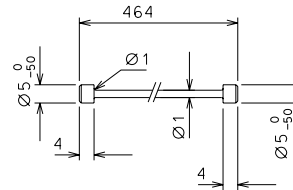
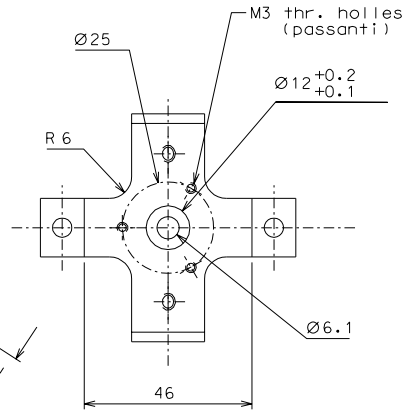
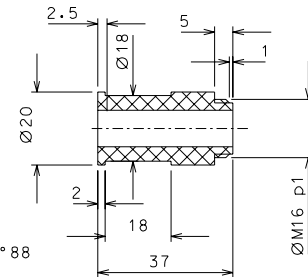
LASER

DETAILS

designed for	R. De Solvo
drawn by	PROMEC
scale	1:1
date	11-09-04
from	024
issue	B
ref. no.	A 2



63 use tool n°88



ref.	note	date	signature
modifications			

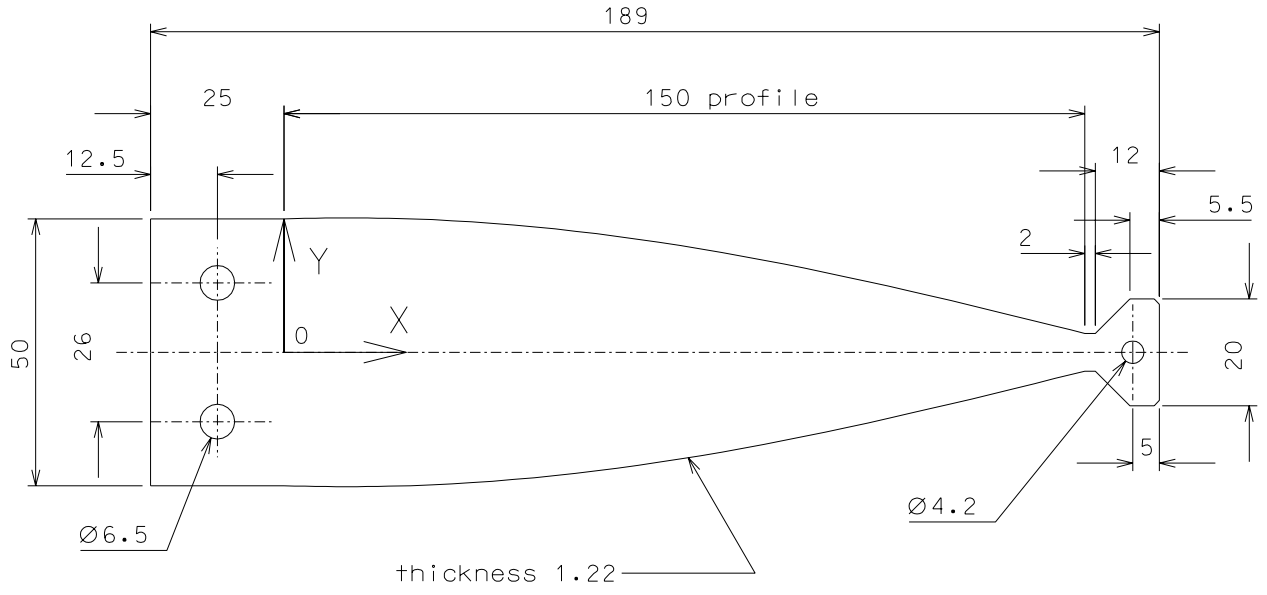
tool	pieces	mat. and treatments	scale
8	4	AISI 304	1:1
64	4	maraging	1:1
63	4	peek 1000	1:1
62	4	AISI 304	1:1

ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63						
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-4000
Linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2
Angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side		

	LIGO PROJECT		designed for R. De Salvo	
			draw. by PROMEC	
		n° draw. Laser.028		
title		LASER DETAILS		
		date 11-09-04	scale 1:1	
		from 024	issue B	
		replaces draw. n°		A 2

X	Y
0	25.00
11.71	25.18
23.43	24.99
35.14	24.43
46.86	23.50
58.57	22.22
70.29	20.61
82.00	18.70
93.71	16.52
105.43	14.11
117.14	11.50
128.86	8.74
140.57	5.87
150.00	3.54



61	8	maraging	1:1
ref.	pieces	mat. and treatments	scale

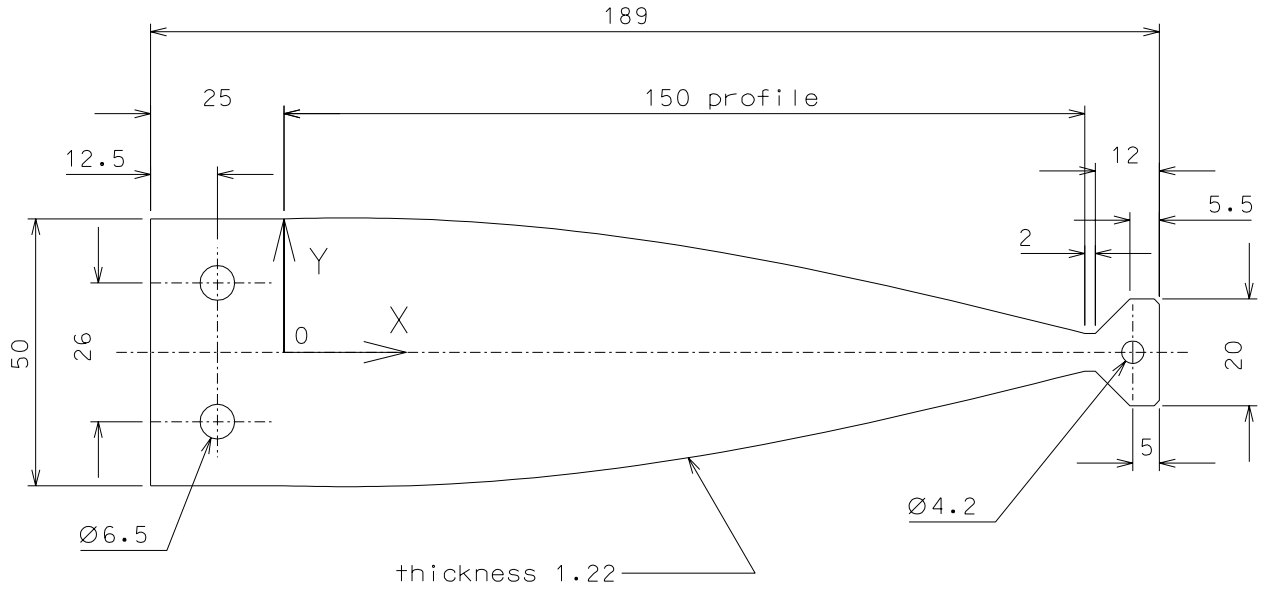
ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63								
Dimensions	< 6	>6-30	>30-120	>120-315	>315-1000	>1000-2000	>2000-4000	>4000
linear TOLL.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular TOLL.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

	LIGO PROJECT	designed for R. De Salvo	
		draw. by PROMEC	
title LASER DETAILS	n°draw. Laser.027		
	date 11-09-04	scale 1:1	
	detail from 024	issue B	
	replaces draw. n° 017	A 3	

ref.	note	date	signature
modifications			

X	Y
0	25.00
11.71	25.18
23.43	24.99
35.14	24.43
46.86	23.50
58.57	22.22
70.29	20.61
82.00	18.70
93.71	16.52
105.43	14.11
117.14	11.50
128.86	8.74
140.57	5.87
150.00	3.54

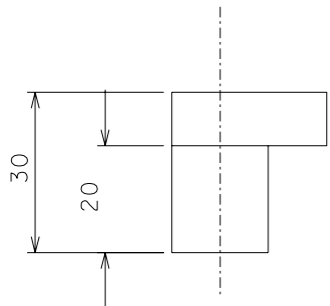
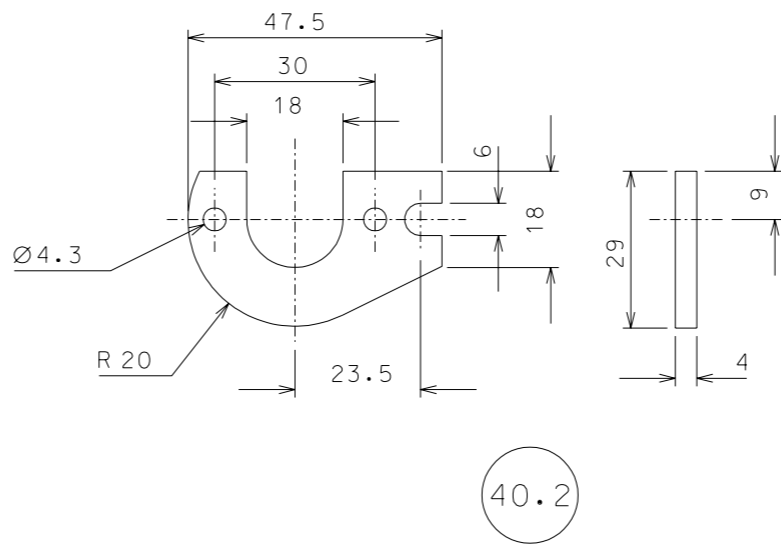
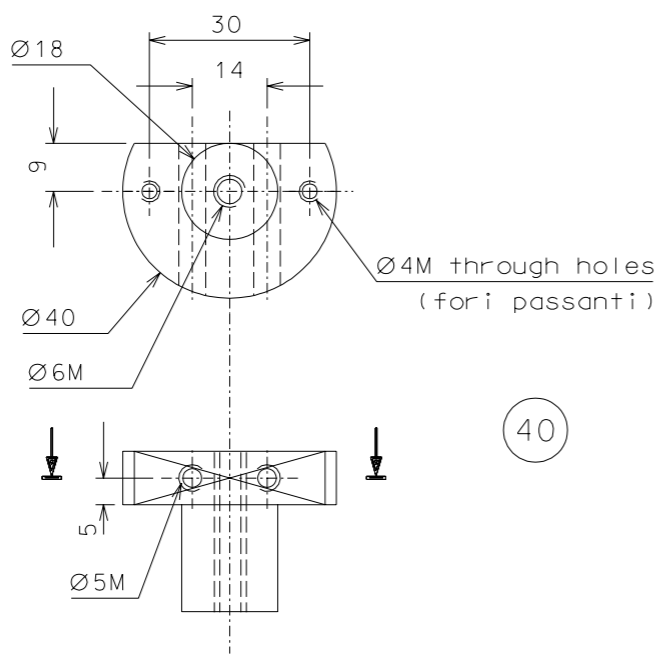
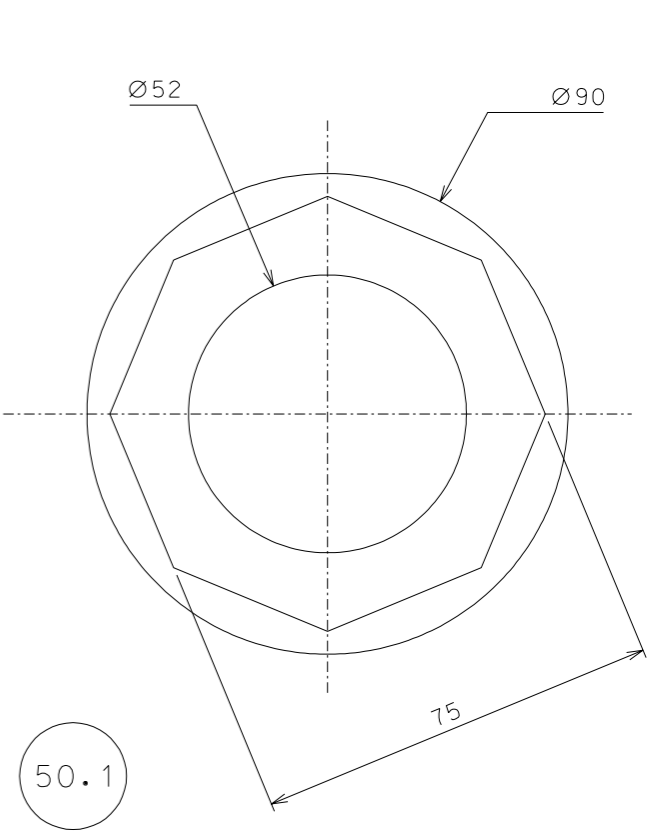
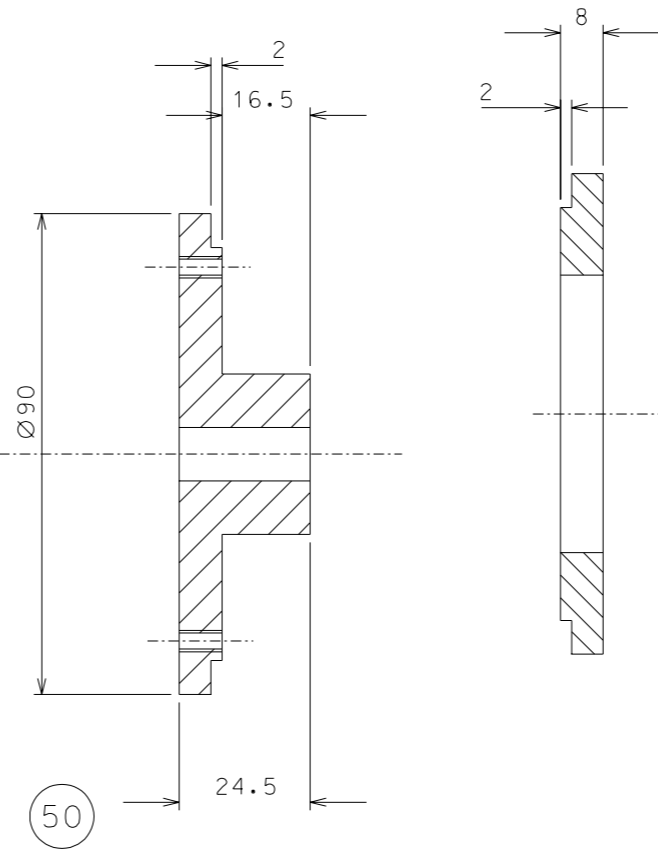
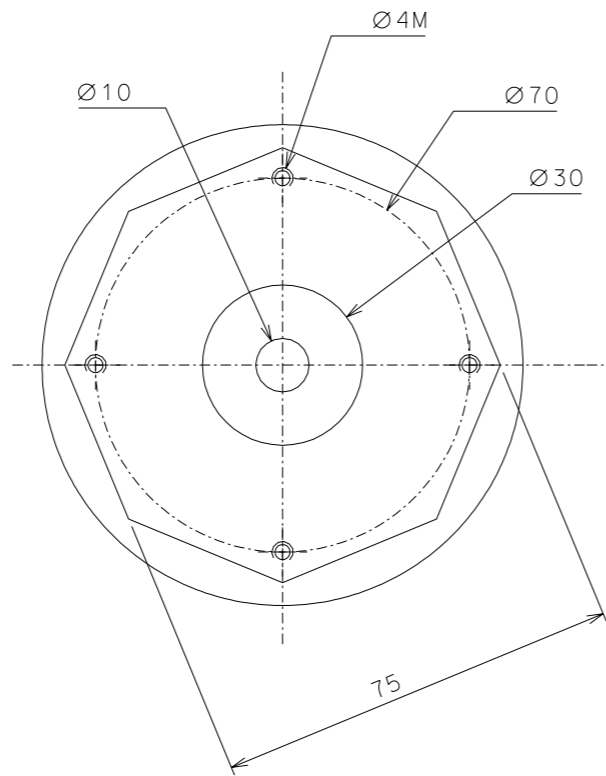
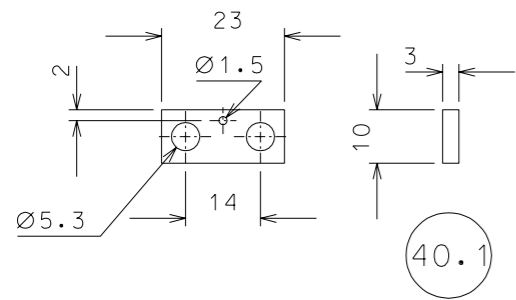


61	8	maraging	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63								
Dimensions	< 6	>6-30	>30-120	>120-315	>315-1000	>1000-2000	>2000-4000	>4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

		LIGO PROJECT	designed for R. De Salvo	
			draw. by PROMEC	
title		LASER DETAILS	n°draw. Laser.027	
			date 11-09-04	scale 1:1
			detail from 024	issue B
			replaces draw. n° 017	A 3

ref.	note	date	signature
modifications			

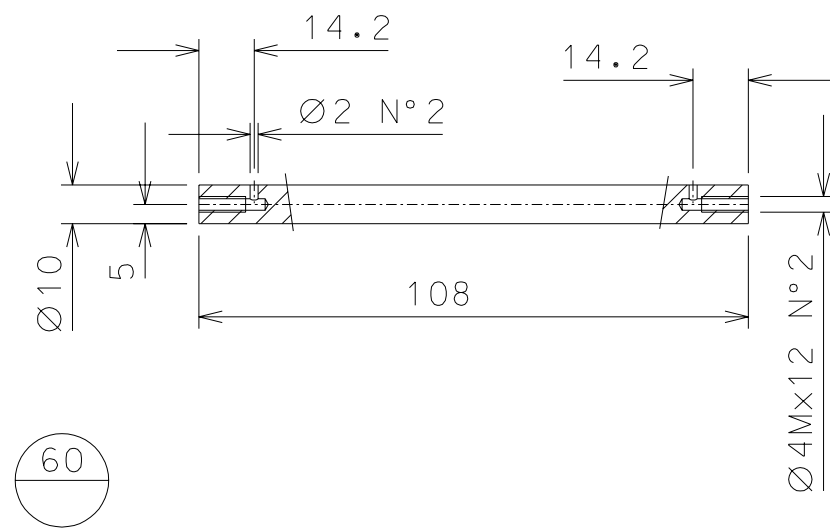
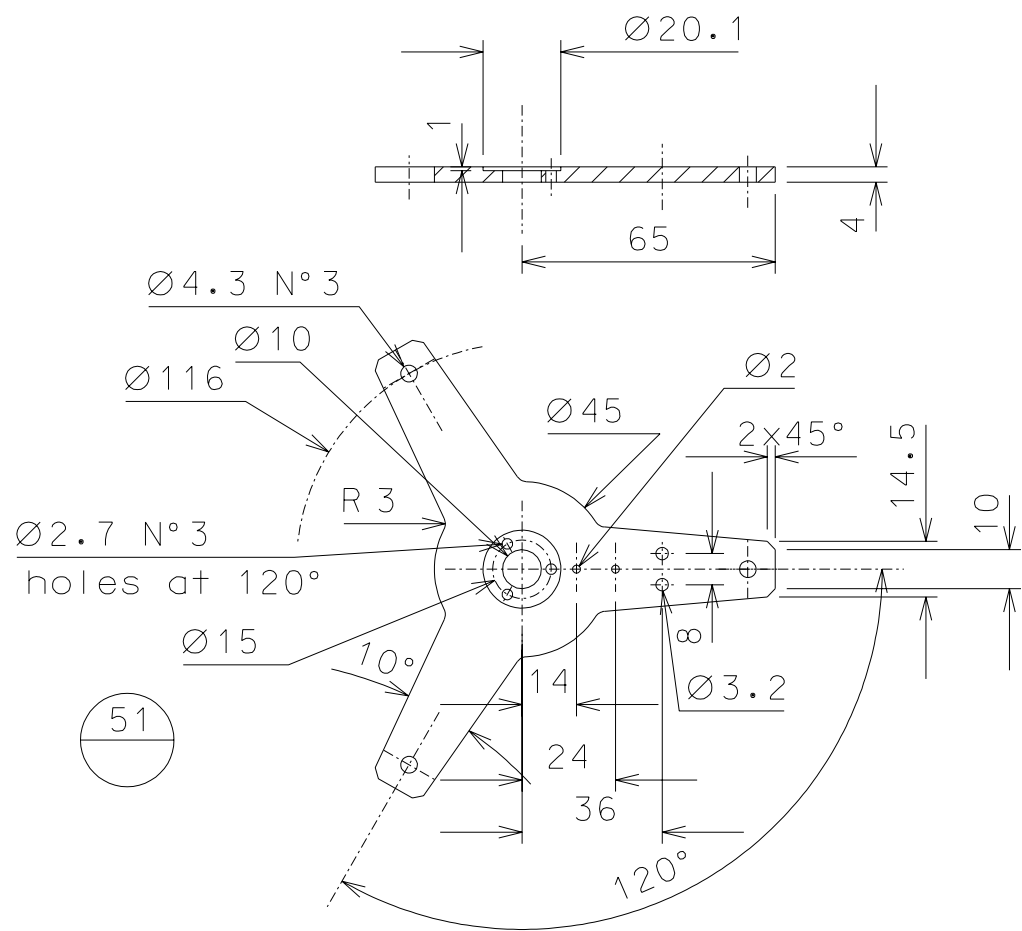


ref.	note	date	signature
modifications			

ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
50.1	4	ARMCO steel	1:1				
50	4	ARMCO steel	1:1				
40.2	4	bronze	1:1				
40.1	4	AISI 304	1:1				
40	4	peek	1:1				

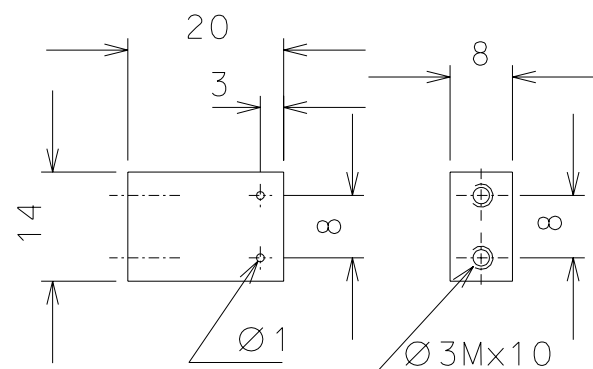
General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

	LIGO PROJECT		designed for R. De Salvo	
			draw. by PROMEC	
			n°draw. Laser.026	
	title LASER DETAILS		date 19-03-04	scale 1:1
		detail from 001	issue A	
		replaces draw. n°	A 2	



51

60



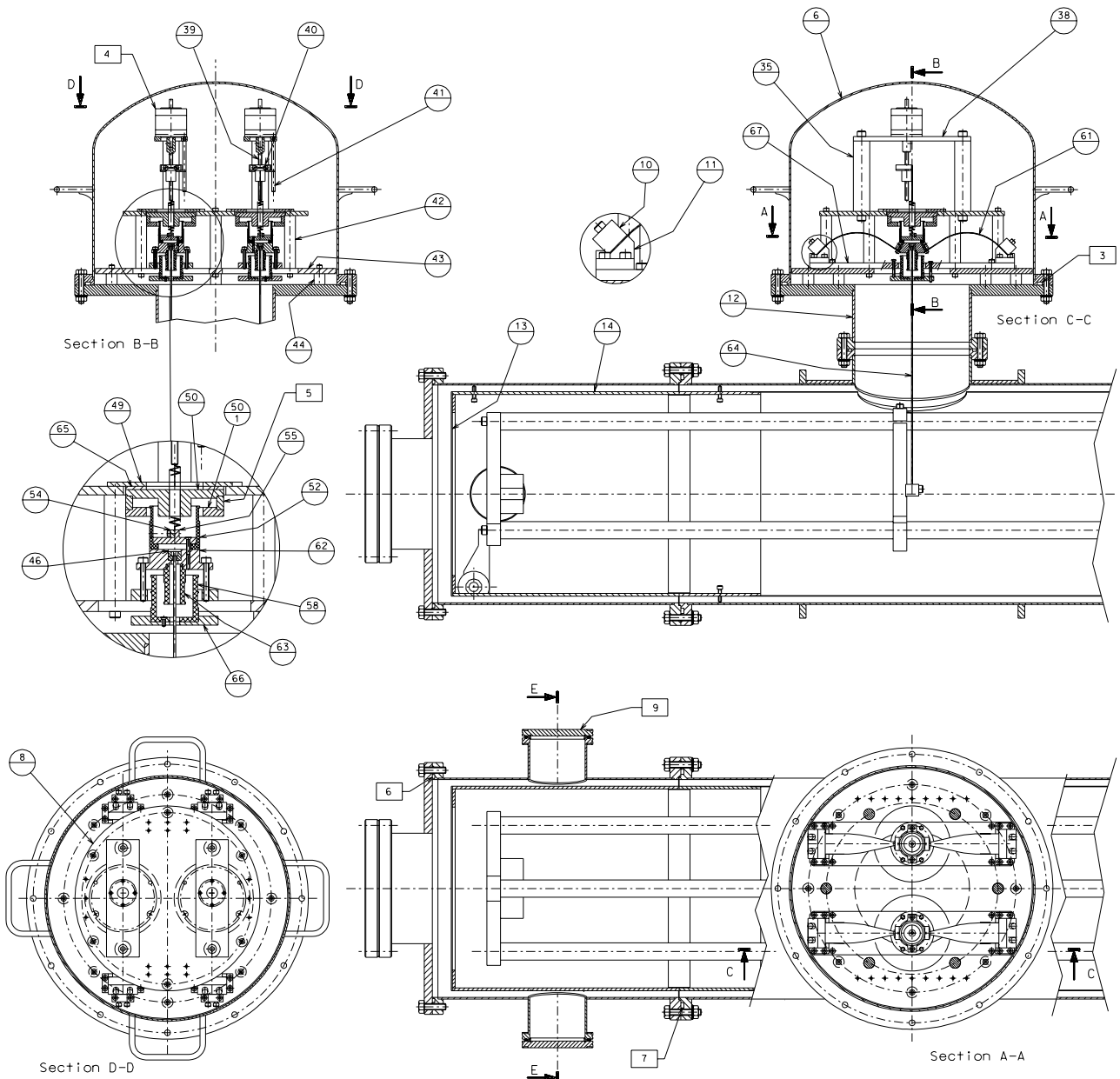
51
1

ref.	note	date	signature
modifications			

ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
60	12	AISI 304	1:2				
51.1	4	AISI 304	1:2				
51	4	peek	1:2				

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

	<h1>LIGO PROJECT</h1>		designed for R. De Salvo	
			draw. by PROMEC	
<h2>LASER DETAILS</h2>		n° draw. Laser.025		
		date 19-03-04	scale 1:2	
		detail from 001	issue A	
		replaces draw. n° A 3		



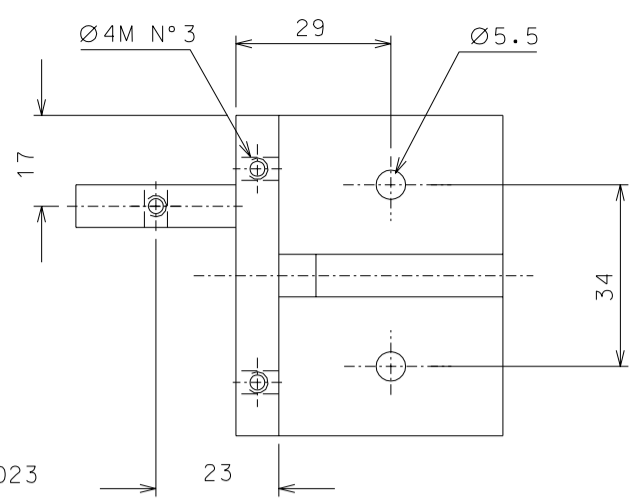
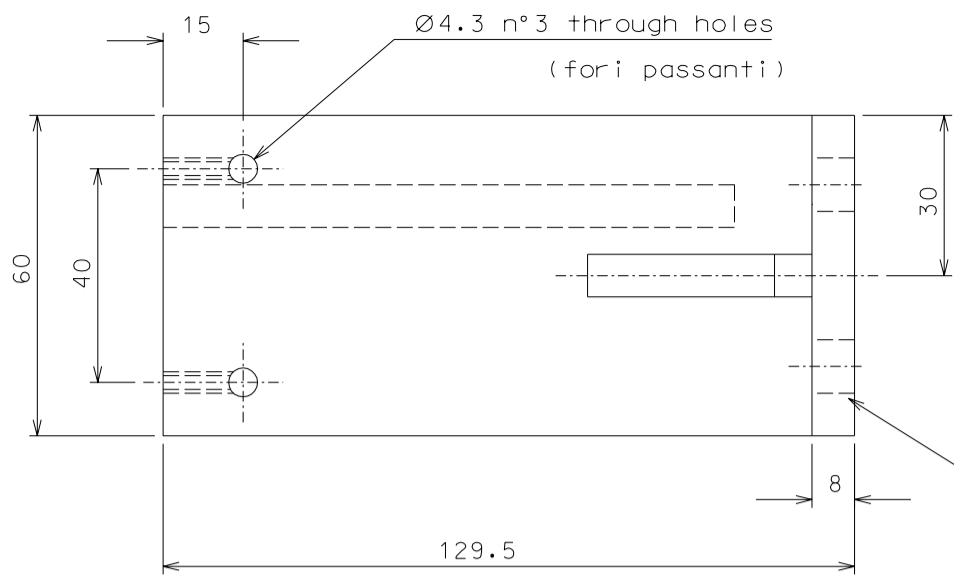
By market

- 3 OR 81800 n°2 pc
- 4 Stepping motor Type Vexta PK 264-01B
- 5 Bunting NEB 3590 n°16 pc
- 6 OR 61600 n°2 pc
- 7 OR 81650 n°2 pc
- 8 Pneurap DN 40 KF n°2 pc
- 9 DN 100 ISO-K n°4 pc

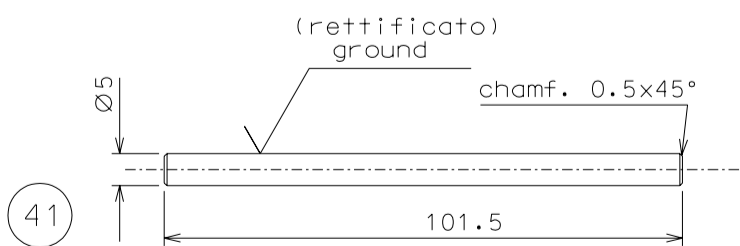
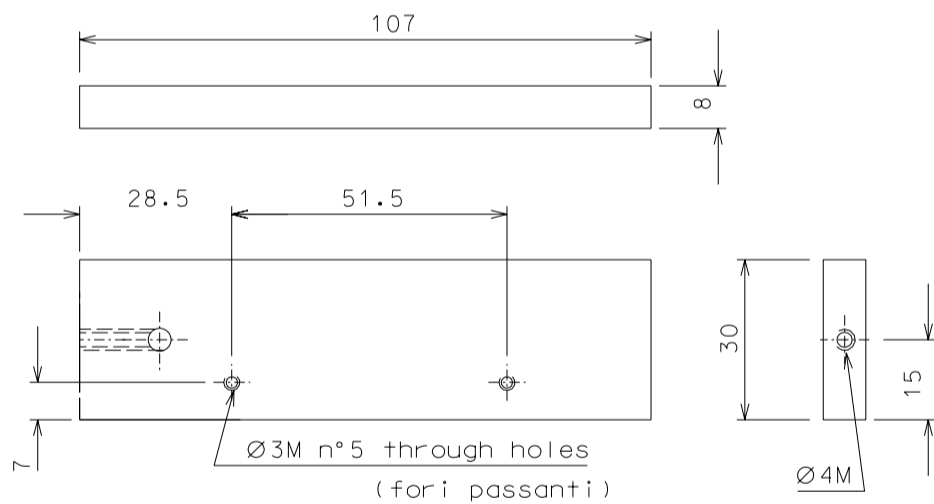
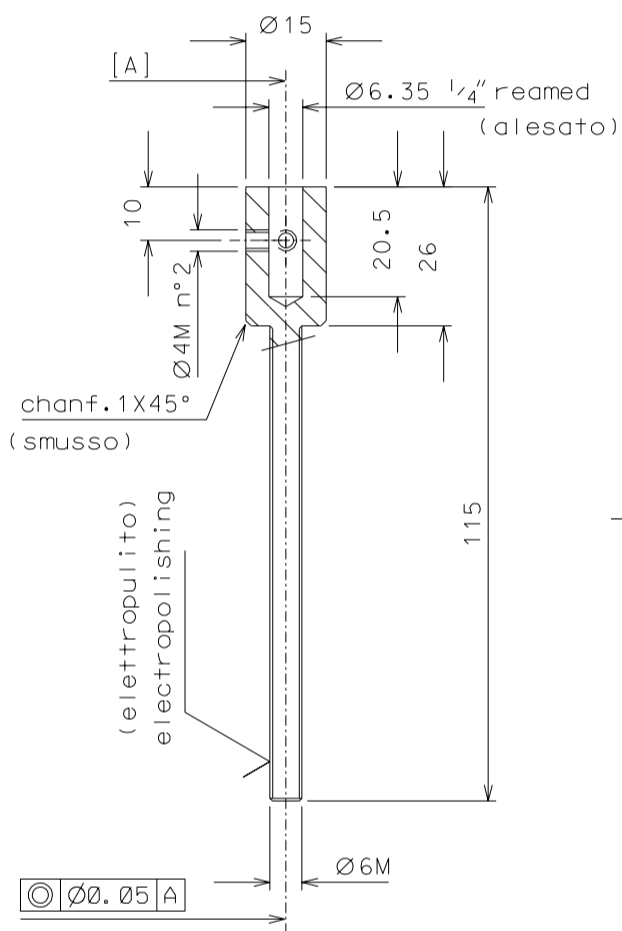
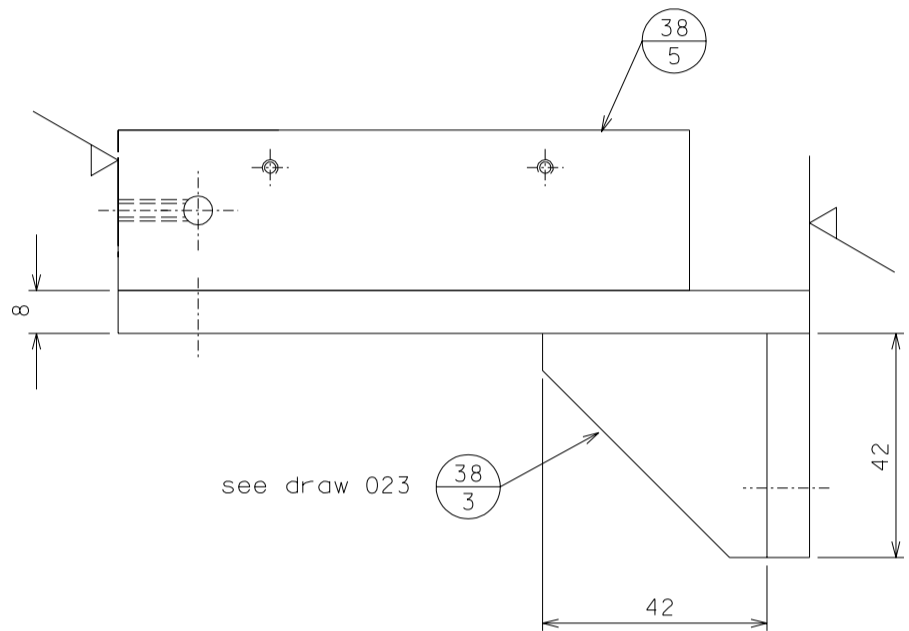
ref.	note	date	signature
modifications			

44	016	Spacer	67	029	support blades
43	021	Inner big plate	66	029	support coil
42	016	Spacer	65	029	spacer magnet
41	023	Torque rod	64	028	suspension wire
40	026	Nut	63	028	LVDI primary
39	023	Screw	62	028	1/2 cup retainer
38	023	Motor flange	61	027	suspension blade
35	023	Calum support	58	022	LVDI secondary
14	014	Thermal shield end pipe	55	022	Spring holder
13.1	016	Thermal cap	54	022	Spring clamp
13	016	Thermal cap	52	022	Coil spool
12	015	Vacuum collar	50.1	026	Magnet
11	018	Sliding clamp	50	026	Magnet
10	018	Clamp cover	49	016	Support plate magnet
8	016	Load disk	46	010	1/2 cup
6	020	Vacuum bell			

	LIGO PROJECT	designed for R. De Salvo
	NEW PARTIAL ASSEMBLY	drawn by PROMEC
title	LASER	cat. num. LASER.024
		date 11-09-04
		scale 1:4
		issue B
		revision 001
		A 1



38.4 welded structure (struttura saldata) $2 \sqrt{10-20}$ GTAW

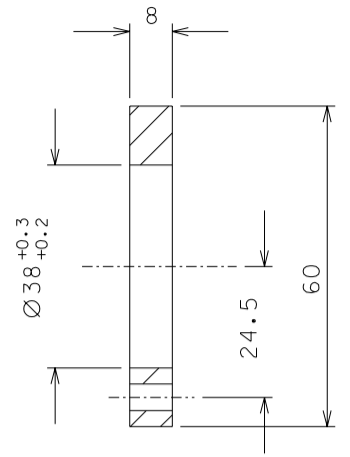
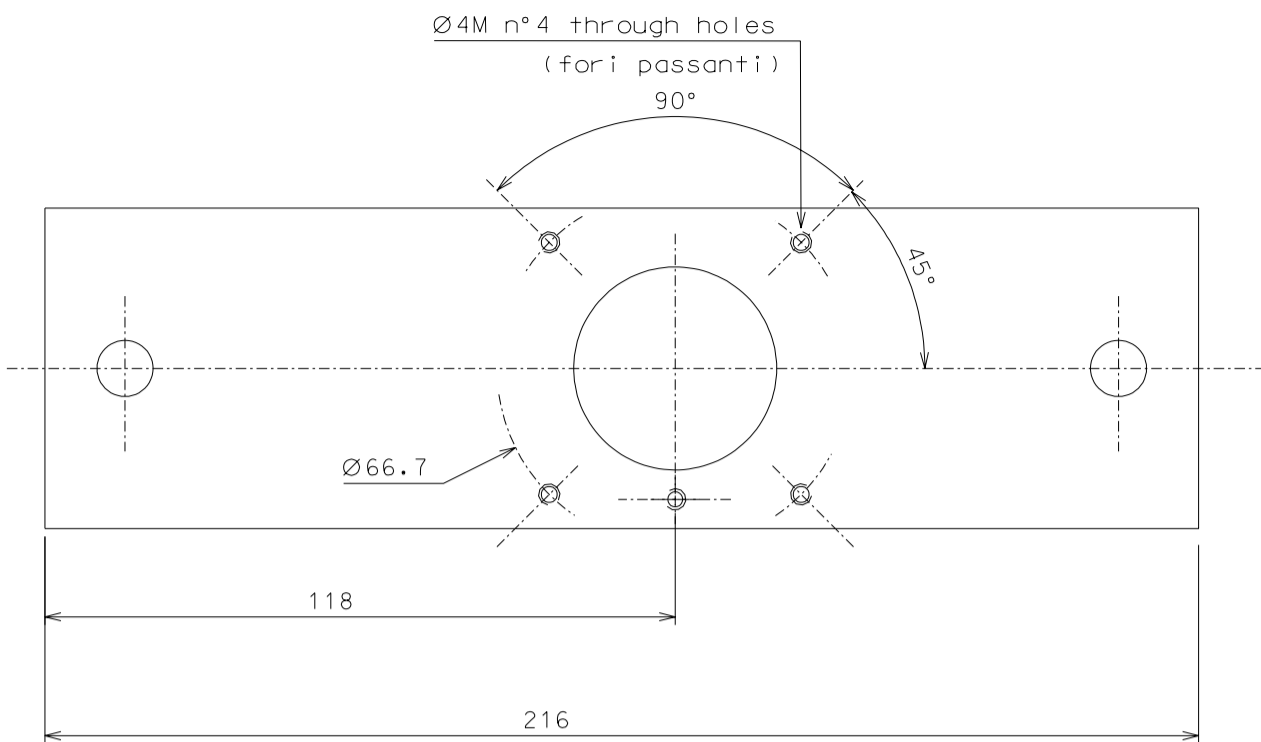


ref.	note	date	signature
modifications			

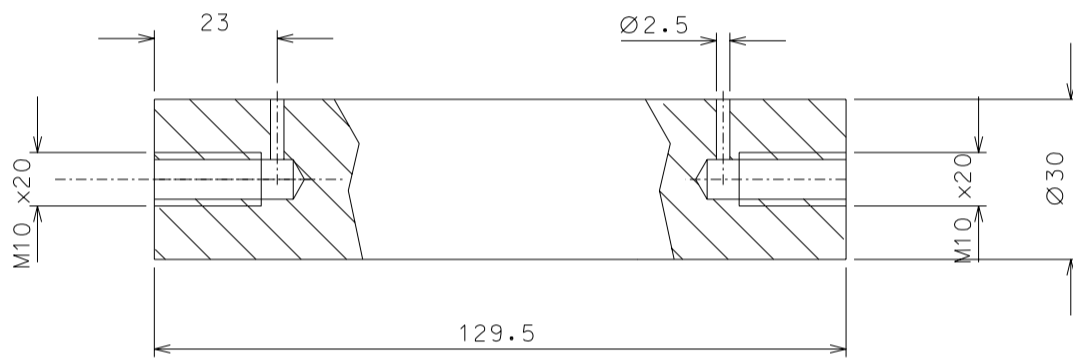
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
41	4	AISI 304	1:1				
39	4	"	1:1				
38.5	4	AISI 304 L	1:1				
38.4	4	"	1:1				

General machining tolerances UNI 5307-53								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

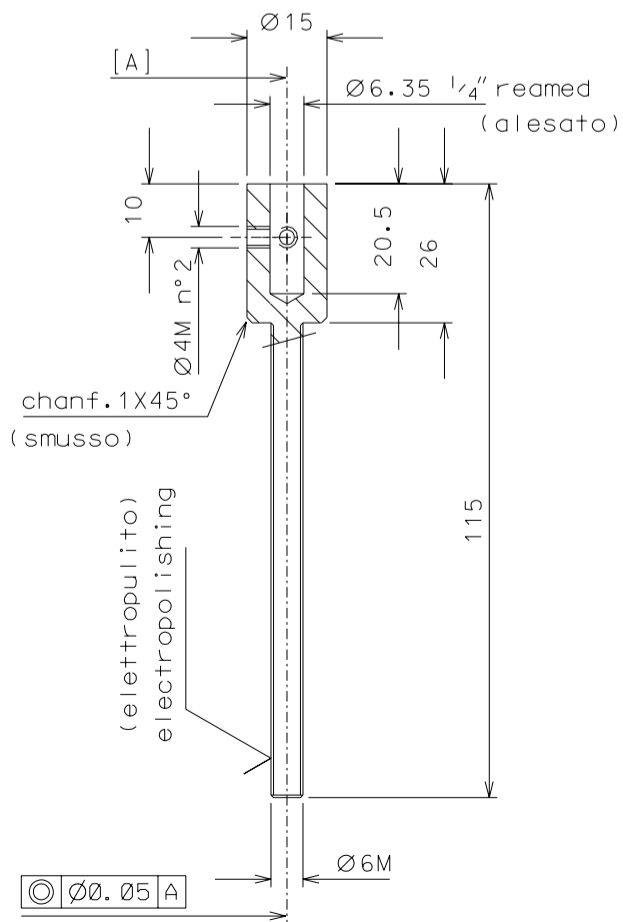
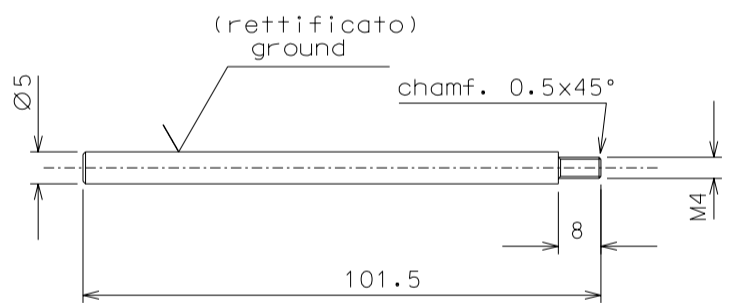
title LASER DETAILS	LIGO PROJECT		designed for R. De Salvo		
			draw. by PROMEC		
			n° draw. Laser.024		
			date 19-03-04 scale 1:1		
		detail from 001		issue A	
		replaces draw. n°		A 2	



38



35



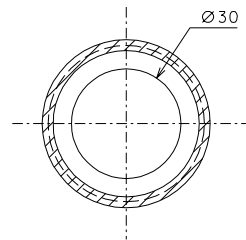
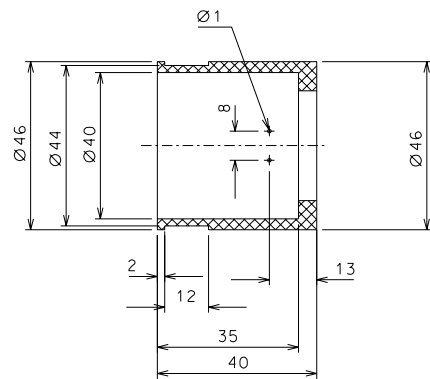
39

ref.	note	date	signature
modifications			

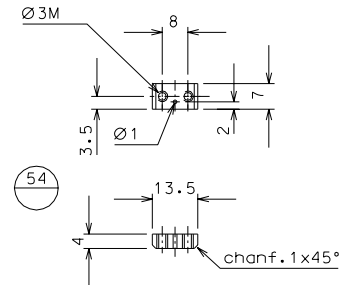
ref.	pieces	mat. and treatments	scale
41	4	AISI 304	1:1
39	4	"	1:1
38	4	AISI 304 L	1:1
35	4	AISI 304	1:1

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	$\pm 1'$	$\pm 30'$	$\pm 20'$	$\pm 10'$ referred to the shortest side				

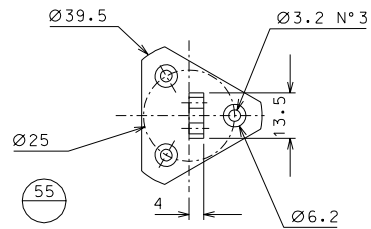
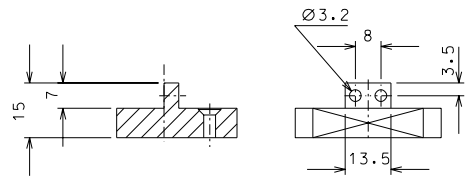
LIGO PROJECT		designed for R. De Salvo	
draw. by PROMEC		n° draw. Laser. 023	
title LASER DETAILS		date 19-03-04	scale 1:1
replaces draw. n°		detail from 001	issue A
		A 2	



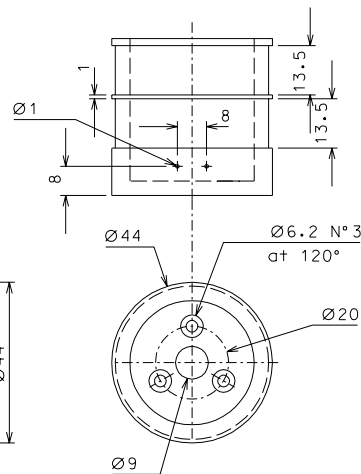
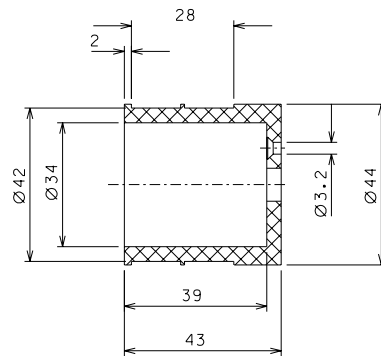
52 use tool n° 86, 86.1



54



55

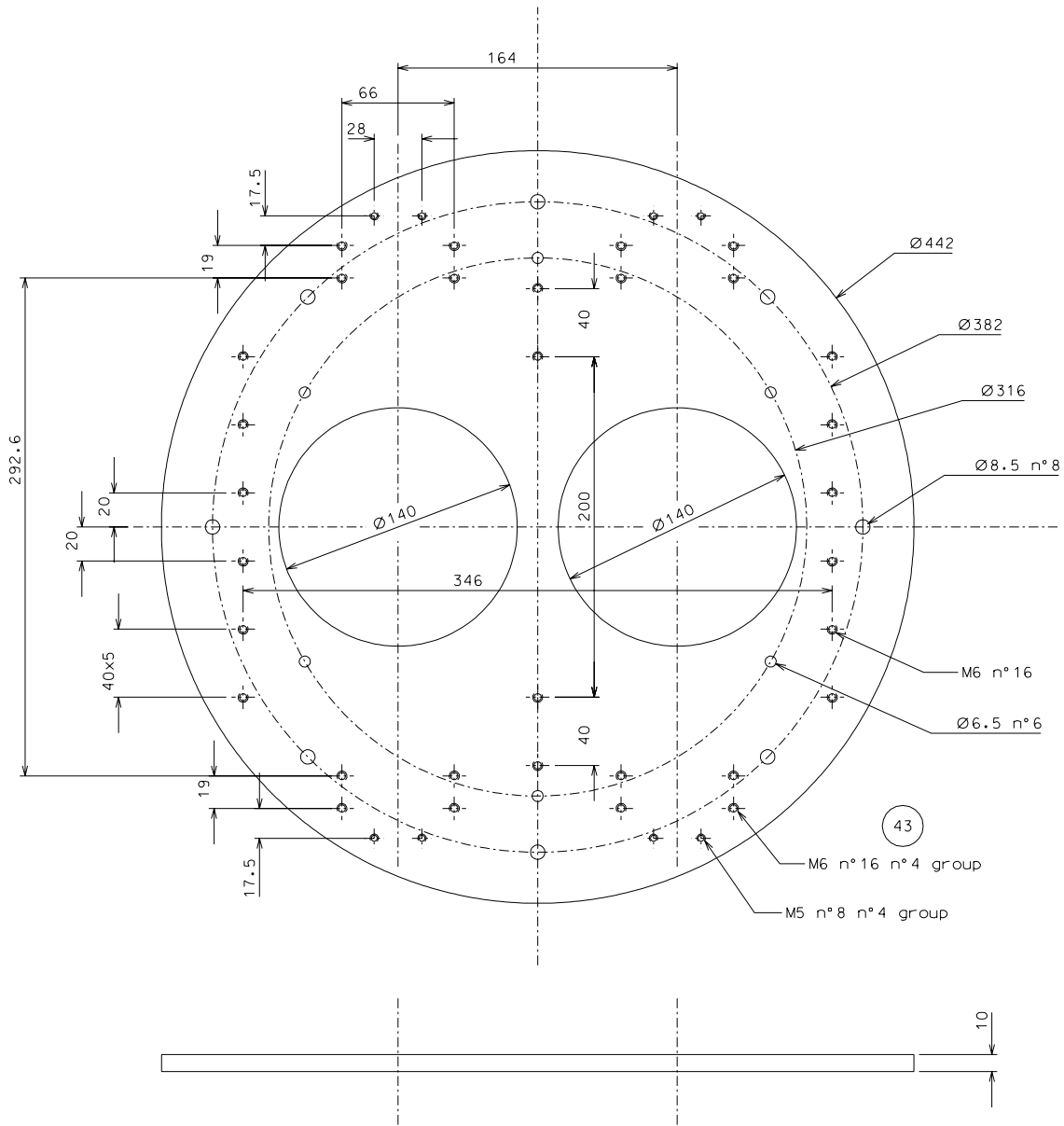


58 use tool n° 87

ref.	note	date	signature
modifications			

58	4	peek 1000	1:1				
55	4	AISI 304	1:1				
54	4	AISI 304	1:1				
52	4	peek 1000	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000
Linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			
				designed for R. De Salvo draw. by PROMEC n° draw. Laser 022			
LIGO PROJECT				title LASER DETAILS			
date 19-03-04 scale				detail from 024 issue A			
replaces draw. n°				A 2			

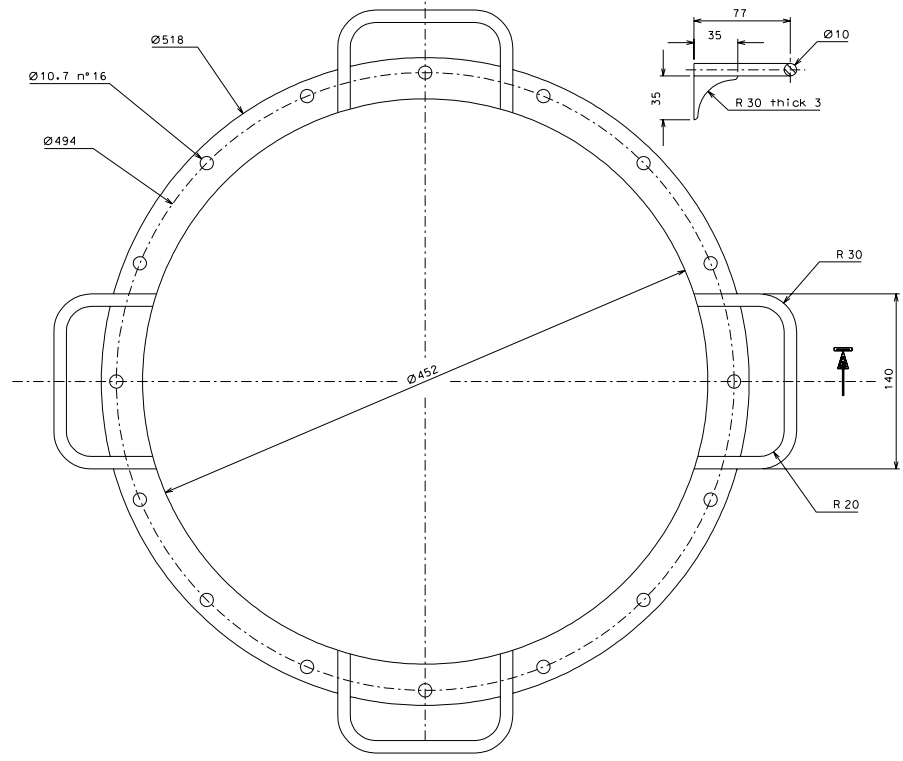
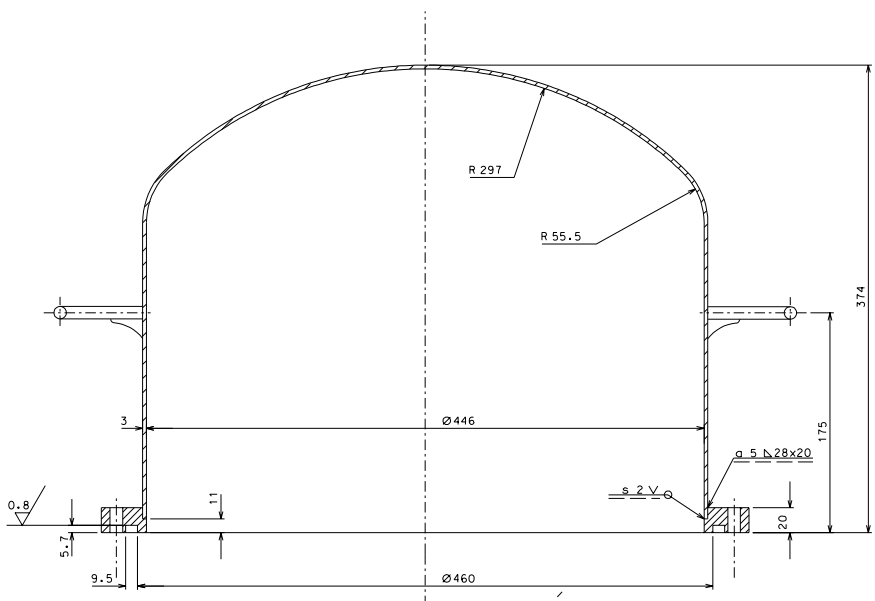


ref.	note	date	signature
modifications			

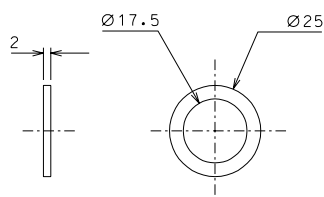
43	2	AISI 304	1:2				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63								
Dimensions	< 6	>6-30	>30-120	>120-315	>315-1000	>1000-2000	>2000-4000	>4000
Linear Toli.	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3
angular Toli.	±1	±30'	±20'	±10' referred to the shortest side				

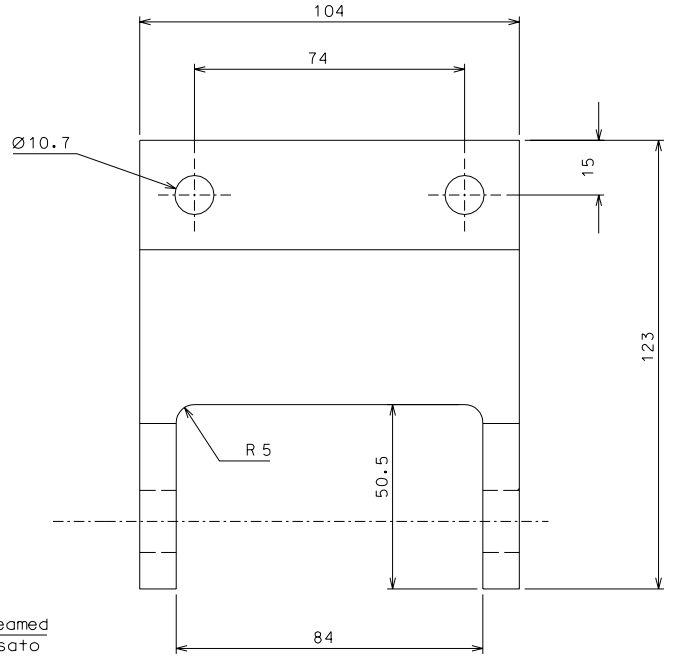
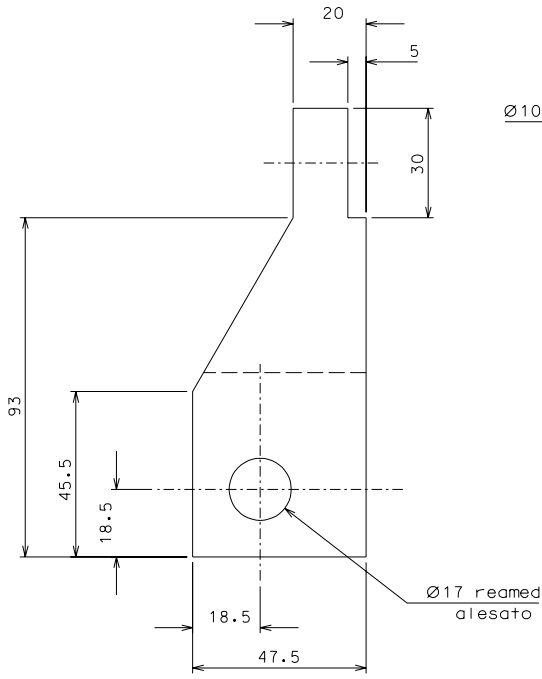
	LIGO PROJECT	designed for R. De Salvo	
		draw. by PROMEC	
		n°draw. Laser-021	
		date 19-03-04	scale 1:2
		optical from 024	issue A
		replaces draw. n°	A 2



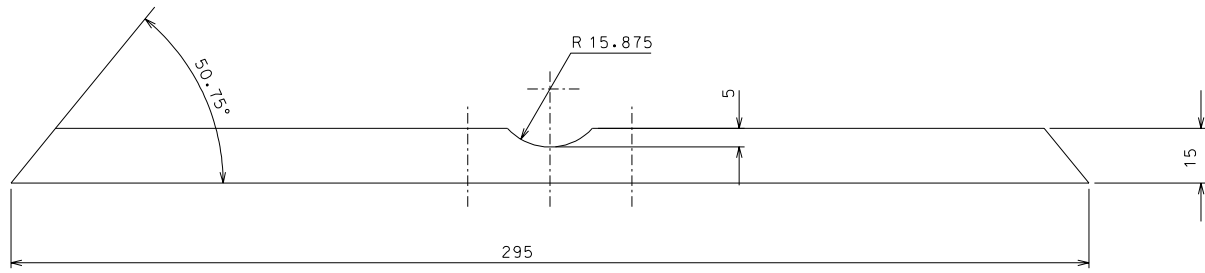
ref.	none	date	signature
modifications			
6	2	AISI 304 L	1±2
ref. classes	ref. and treatments	date	ref. classes
General machining tolerances UNI 5301-43 Dimension: ≤ 6 $6-30$ $30-120$ $120-315$ $315-1000$ $1000-2000$ $2000-4000$ ≥ 4000 Linear tol.: ± 0.1 ± 0.2 ± 0.3 ± 0.5 ± 0.8 ± 1.2 ± 2 ± 3 Angular tol.: $\pm 1'$ $\pm 30'$ $\pm 20'$ $\pm 10'$ - referred to the shortest side			
designed for R. De Sglio drawn by PROMEC program. L. Oser. 020			
title LASER DETAIL		case 18-03-04 sheet 1±2 project 024 issue A order n° A 1	



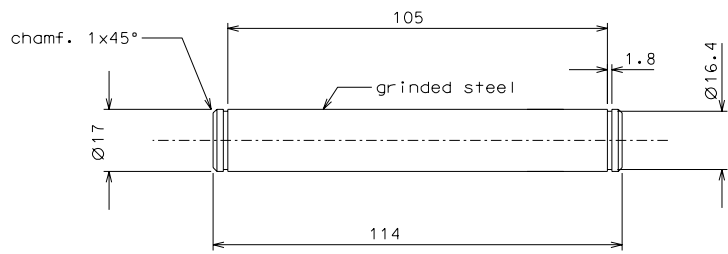
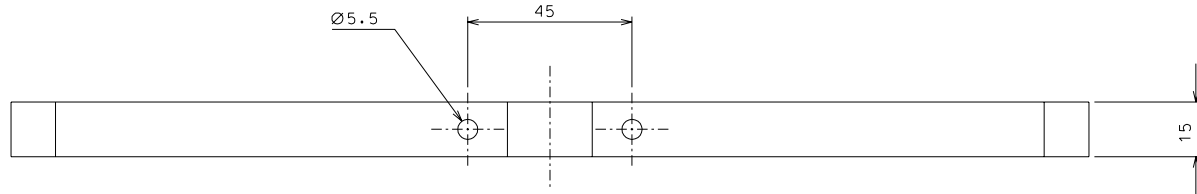
17.1



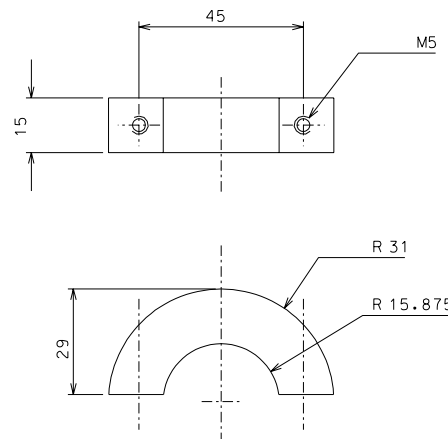
17



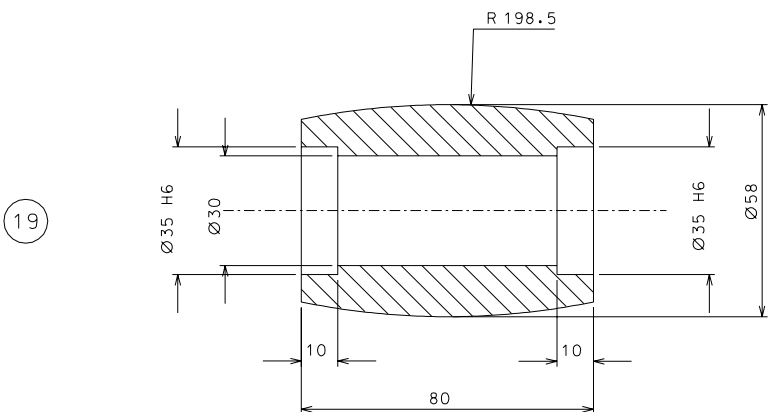
15



18



16

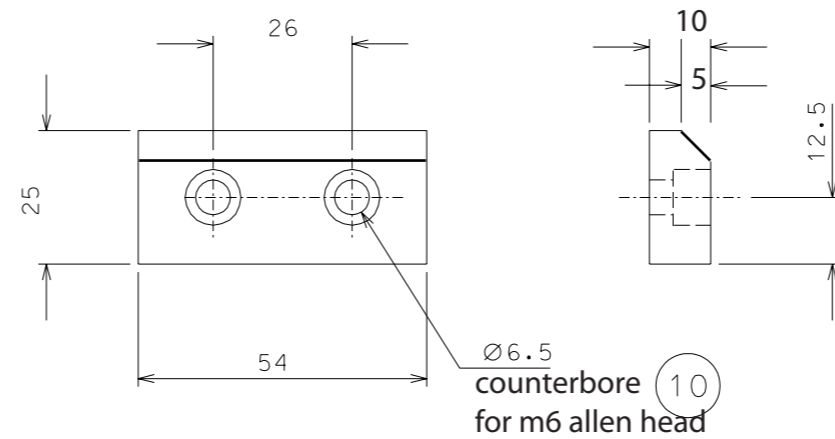
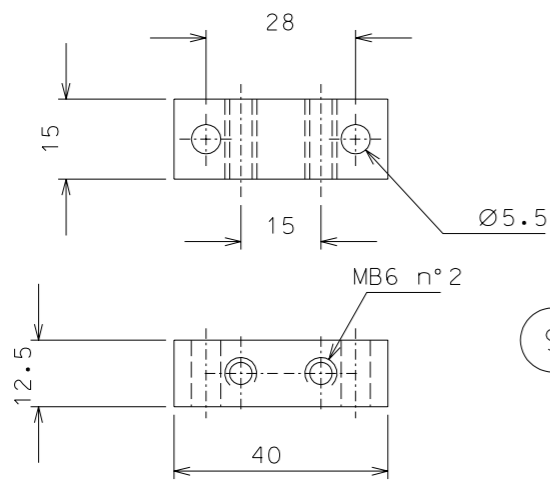
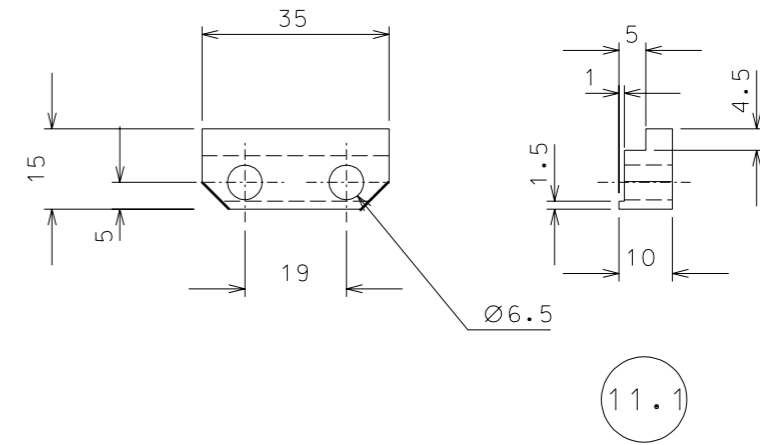
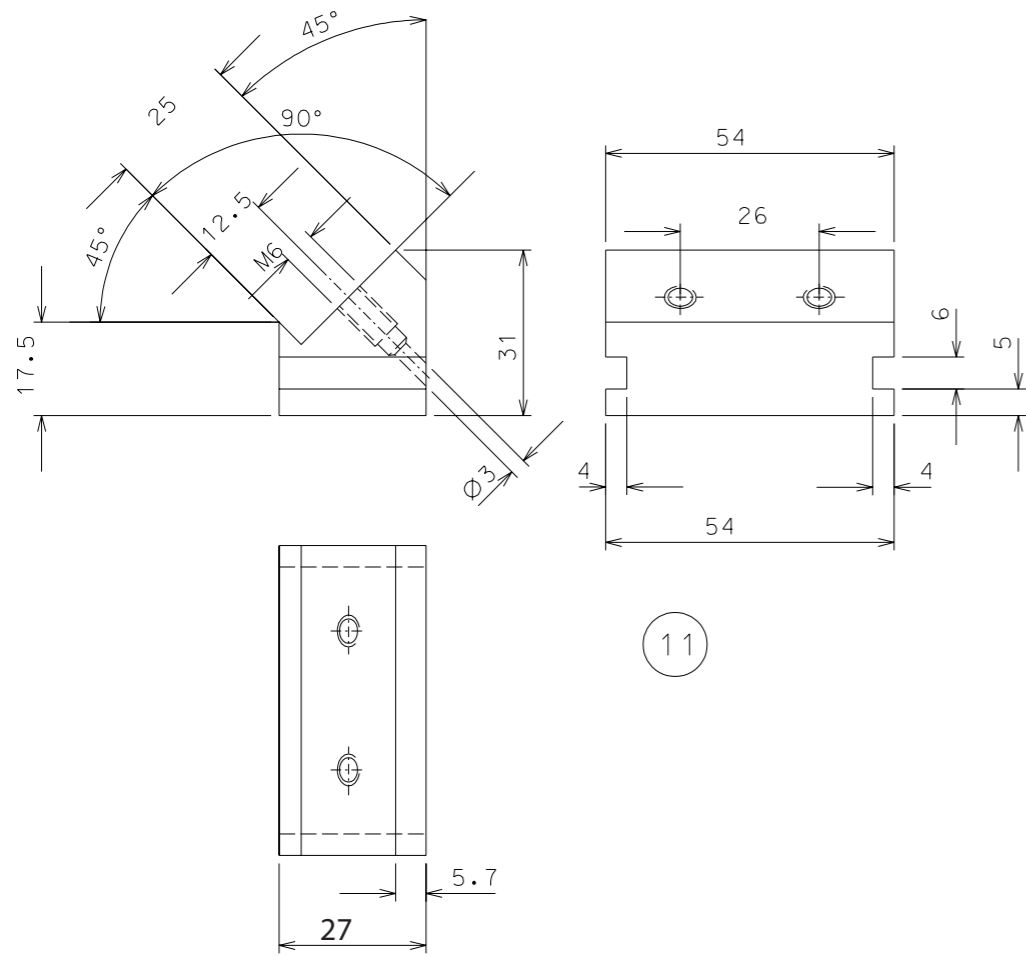


19

ref.	note	date	signature
modifications			

18	2	steel	1:1				
17.1	4	EN 6082	1:1				
17	2	EN 6082	1:1				
16	2	EN 6082	1:1				
15	2	EN 6082	1:1	19	2	Nylon	1:1
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	6-30	30-120	120-315	315-1000	1000-2000	> 2000-4000
Linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2
Angular Toli.	± 1'	± 30'	± 20'	referred to the shortest side			
designed for R. De Salvo							
draw. by PROMEC							
n° draw. Laser. 019							
title LASER							
DETAILS				date 10-02-04		scale 1:1	
				detail from 002		issue A	
				replaces draw. n°		A 1	

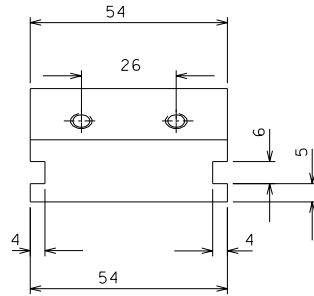
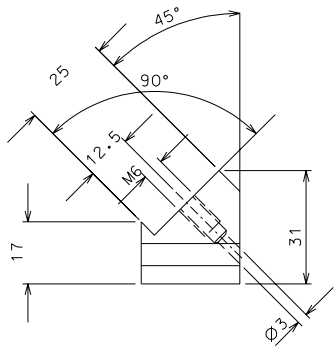


ref.	note	date	signature
modifications			

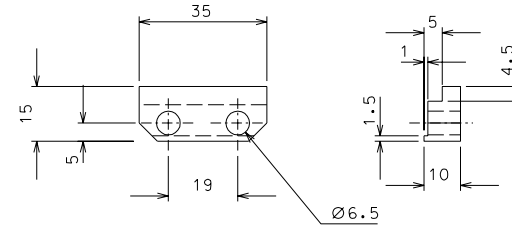
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
11.1	16	Nickel plated steel	1:1				
11	8	Nickel plated steel	1:1				
10	8	Nickel plated steel	1:1				
9	8	Nickel plated steel	1:1				

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

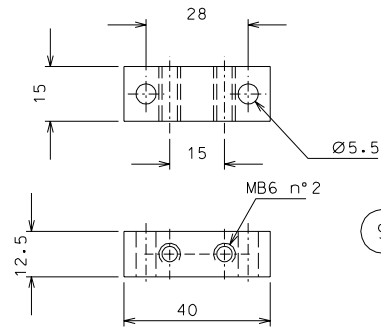
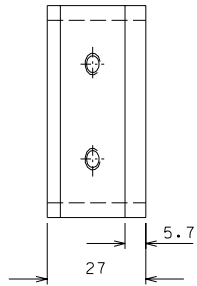
	LIGO PROJECT	designed for R. De Salvo	
		draw. by PROMEC	
title LASER DETAILS	n°draw. Laser.018		
	date 5-02-04	scale 1:1	
	detail from 001	issue A	
	replaces draw. n°	A 2	



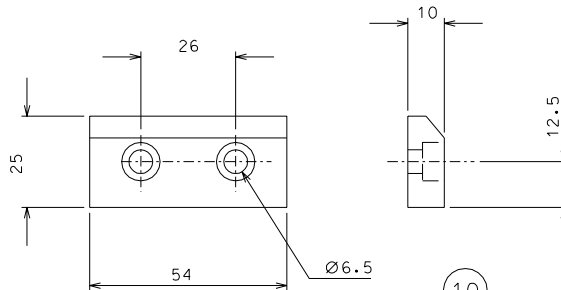
11



11.1



9



10

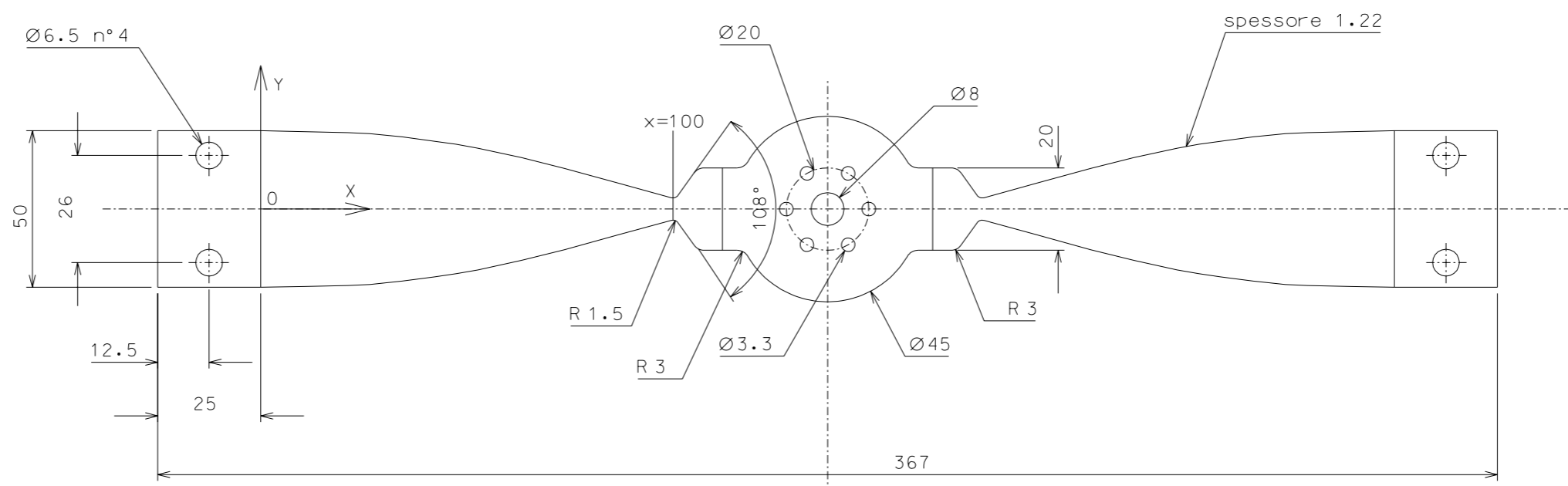
ref.	note	date	signature
modifications			

ref.	pieces	mat. and treatments	scale
11.1	16	Nickel plated steel	1:1
11	8	Nickel plated steel	1:1
10	8	Nickel plated steel	1:1
9	8	Nickel plated steel	1:1

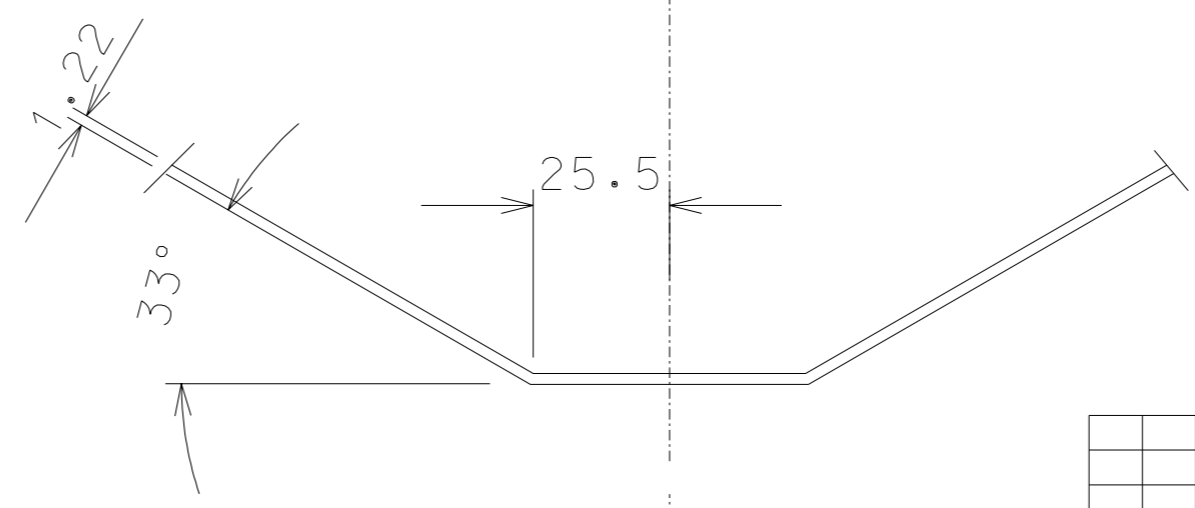
General machining tolerances UNI 5307-63							
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-4000	> 4000
Linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 3
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			

	LIGO PROJECT	designed for R. De Salvo
		draw. by PROMEC
		n° draw. Laser. 018
		date 5-02-04 scale 1:1
		detail from 001 issue A
		replaces draw. n° A 2

LASER
DETAILS



X	Y
0.00	25.00
24.55	24.40
28.94	21.67
61.13	19.41
85.53	13.00
116.00	3.55

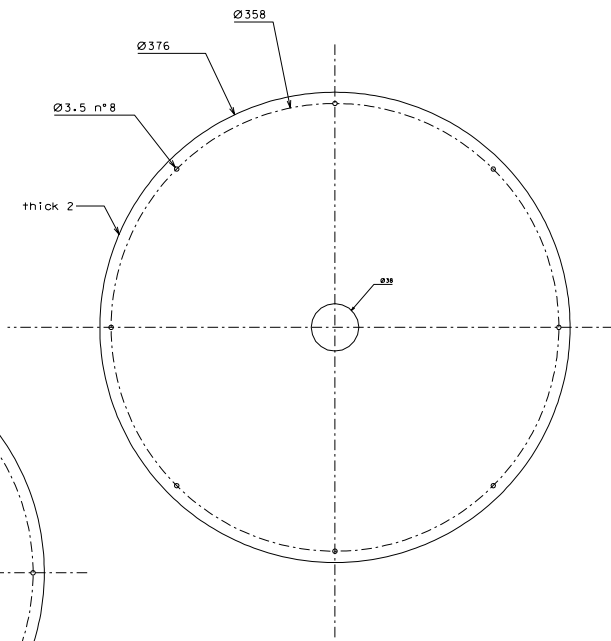
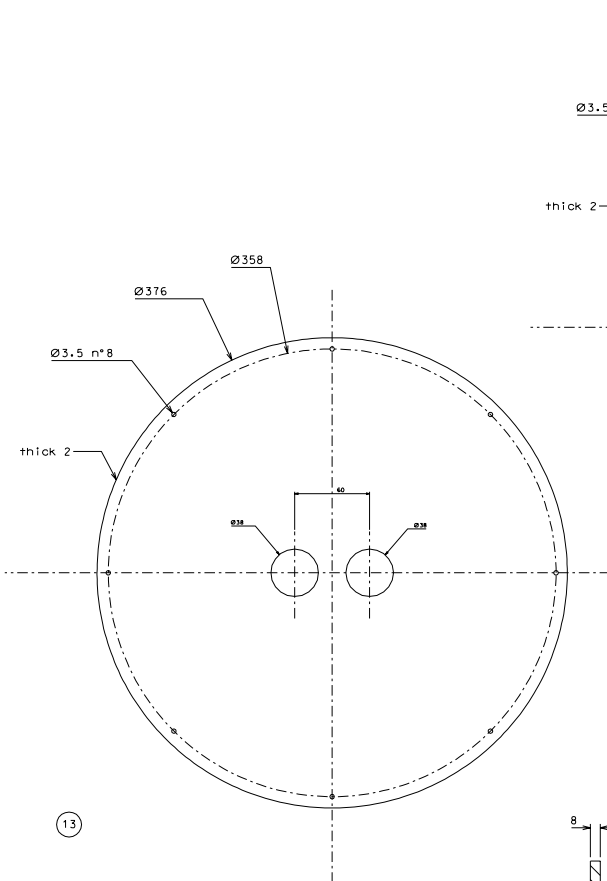


7	4	maraging	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side			

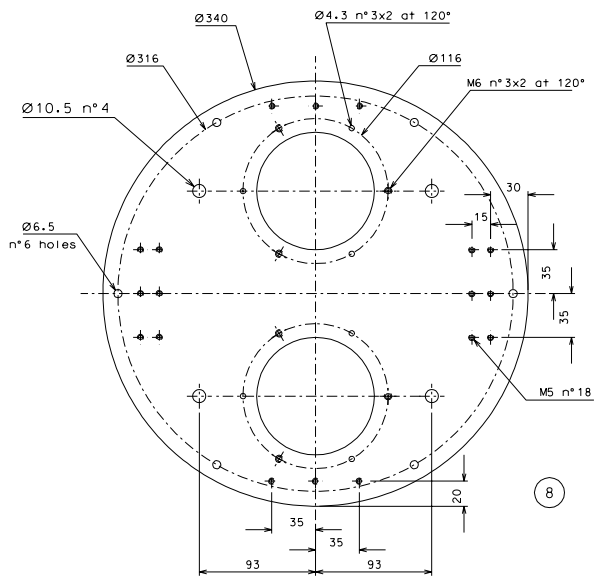
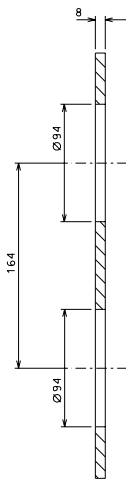
ref.	note	date	signature
modifications			

	LIGO PROJECT	designed for R. De Salvo	
		draw. by PROMEC	
		n°draw. Laser.017	
title	LASER BLADE	date 5-02-04	scale 1:1
		detail from 001	issue A
		replaces draw. n°	A 2

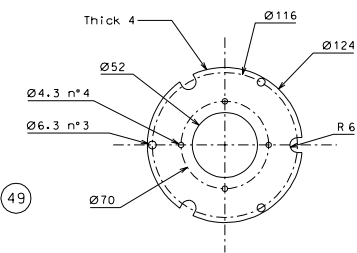


13

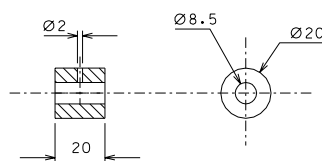
13.1



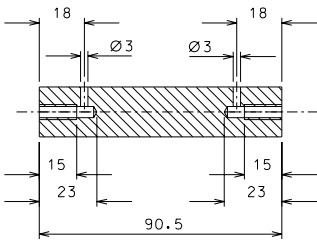
8



49



44



42

ref.	note	date	signature
modifications			

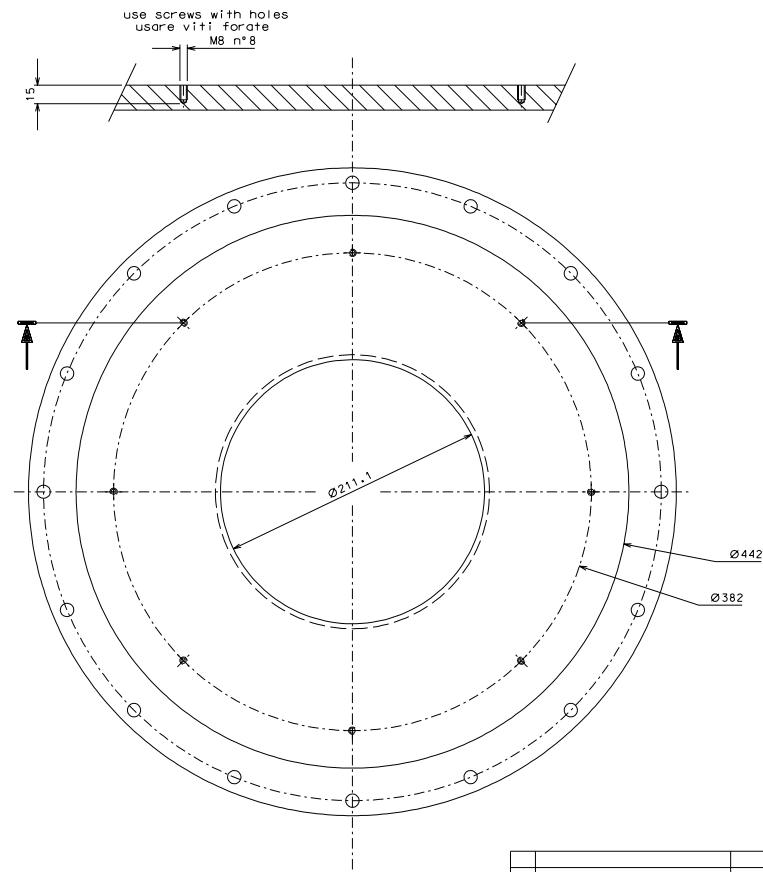
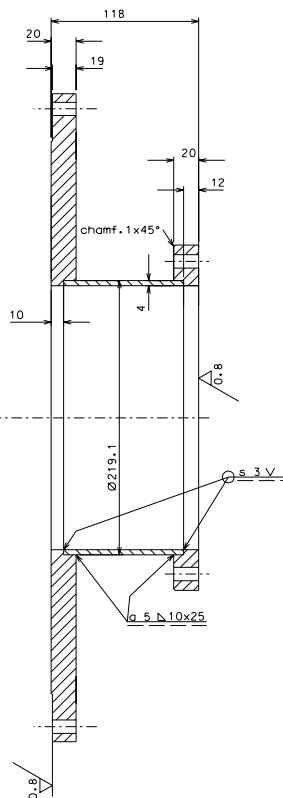
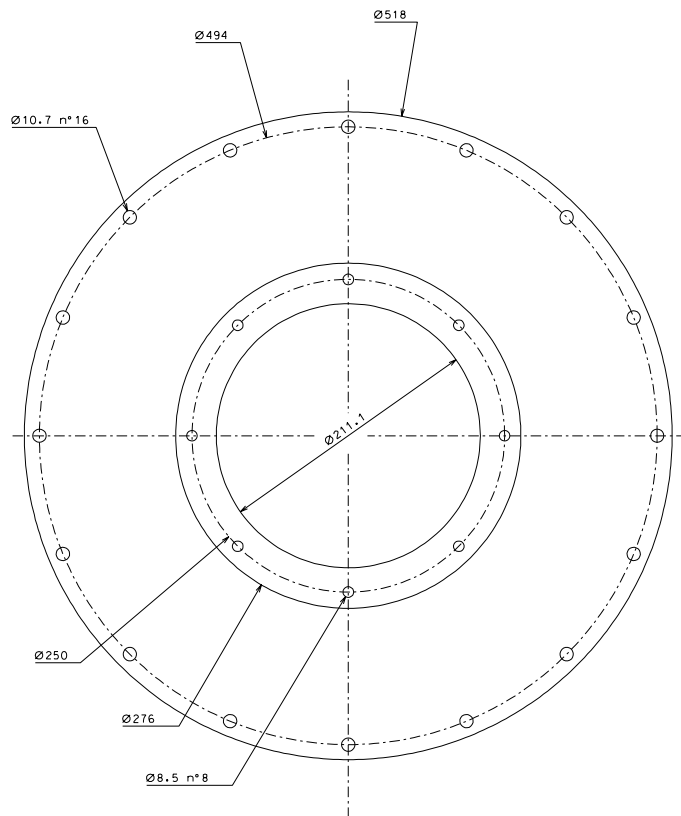
ref.	pieces	mat.	tr.	tr.	tr.	tr.	tr.	tr.	tr.
4.4	16	AISI304	1:1						
4.2	12	AISI304	1:1						
13.1	1	EN 6082	1:2						
1.3	1	EN 6082	1:2						
8	2	AISI 304 L	1:2	49	4	AISI304	1:2		

General machining tolerances UNI 5301-43										
Dimension	< 6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	> 4000		
Linear dim.	±0.1	±0.2	±0.3	±0.5	±1.0	±1.2	±1.5	±2	refer to the shortest side	
Angular dim.	±1'	±30'	±20'	±10'						

designed by R. De Salvo
 drawn by PROMEC
 program LOGO 016

title LASER PROJECT
 details

date 19-03-04 issue 1:2
 project 024 issue A
 revision
 date n° A 1



ref.	note	date	signature
modifications			

ref.	plate	mat. and treatments	scale	ref.	plate
12	2	AISI 304 L	1:2		
ref.	plate	mat. and treatments	scale	ref.	plate

General machining tolerances UNI 5101-85

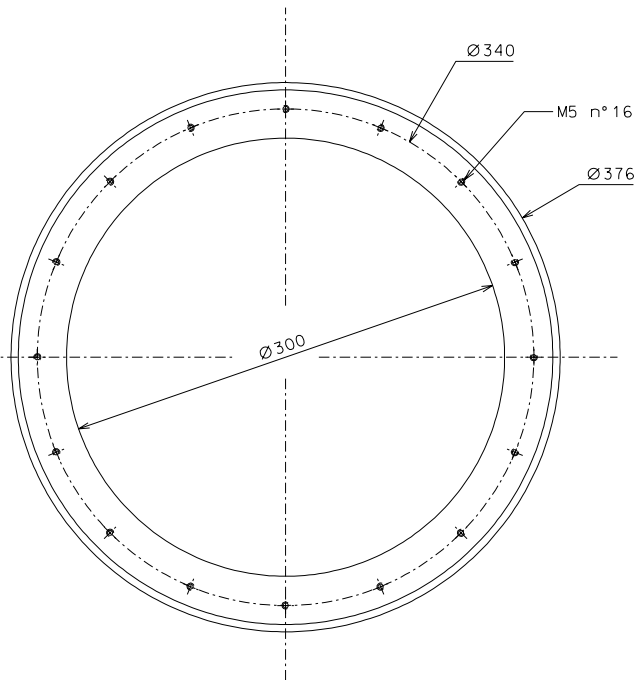
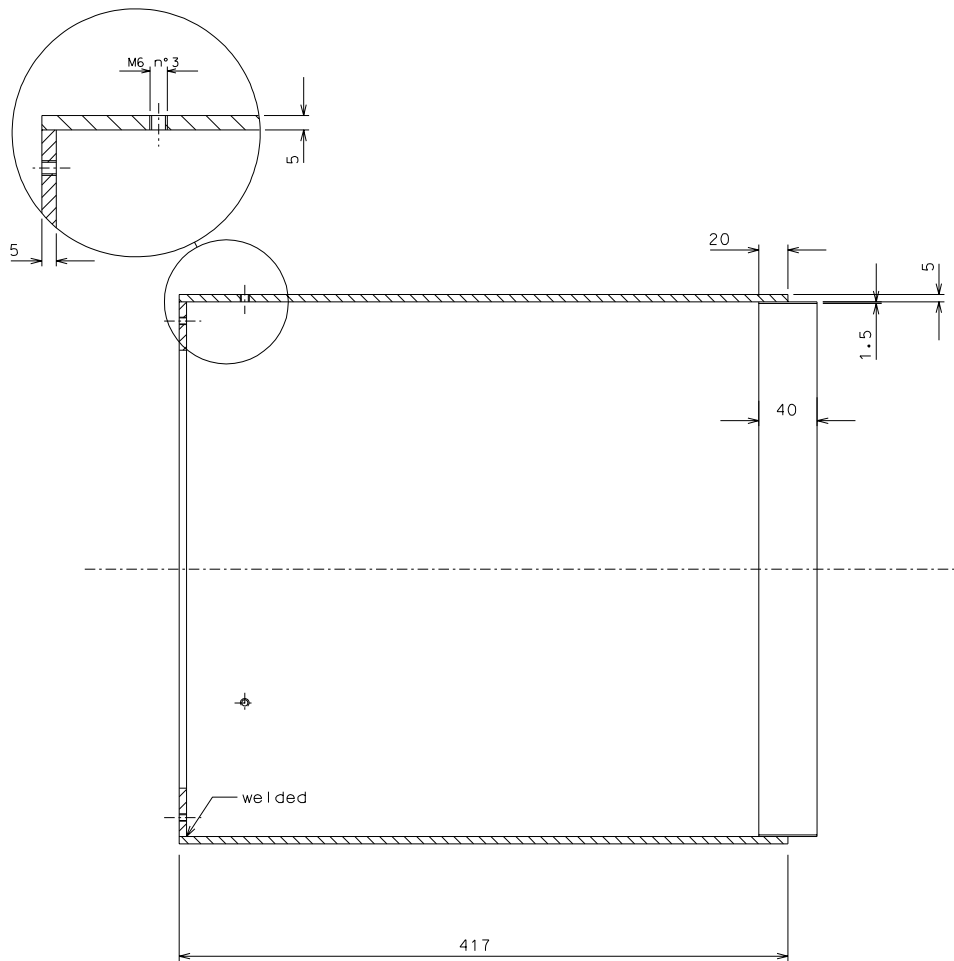
dimensions	< 4	4-30	30-100	100-315	315-1000	1000-4000	> 4000
linear tol.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2
angular tol.	± 1'	± 30'	± 20'	± 10'	related to the shortest side		

designed for R. De Solvo
 drawn by PROMEC
 program LASER-015

LIGO PROJECT

title LASER
 DETAIL

date	9-02-04	scale	1:2
sheet	024	page	A
revision		draw. n°	A 1

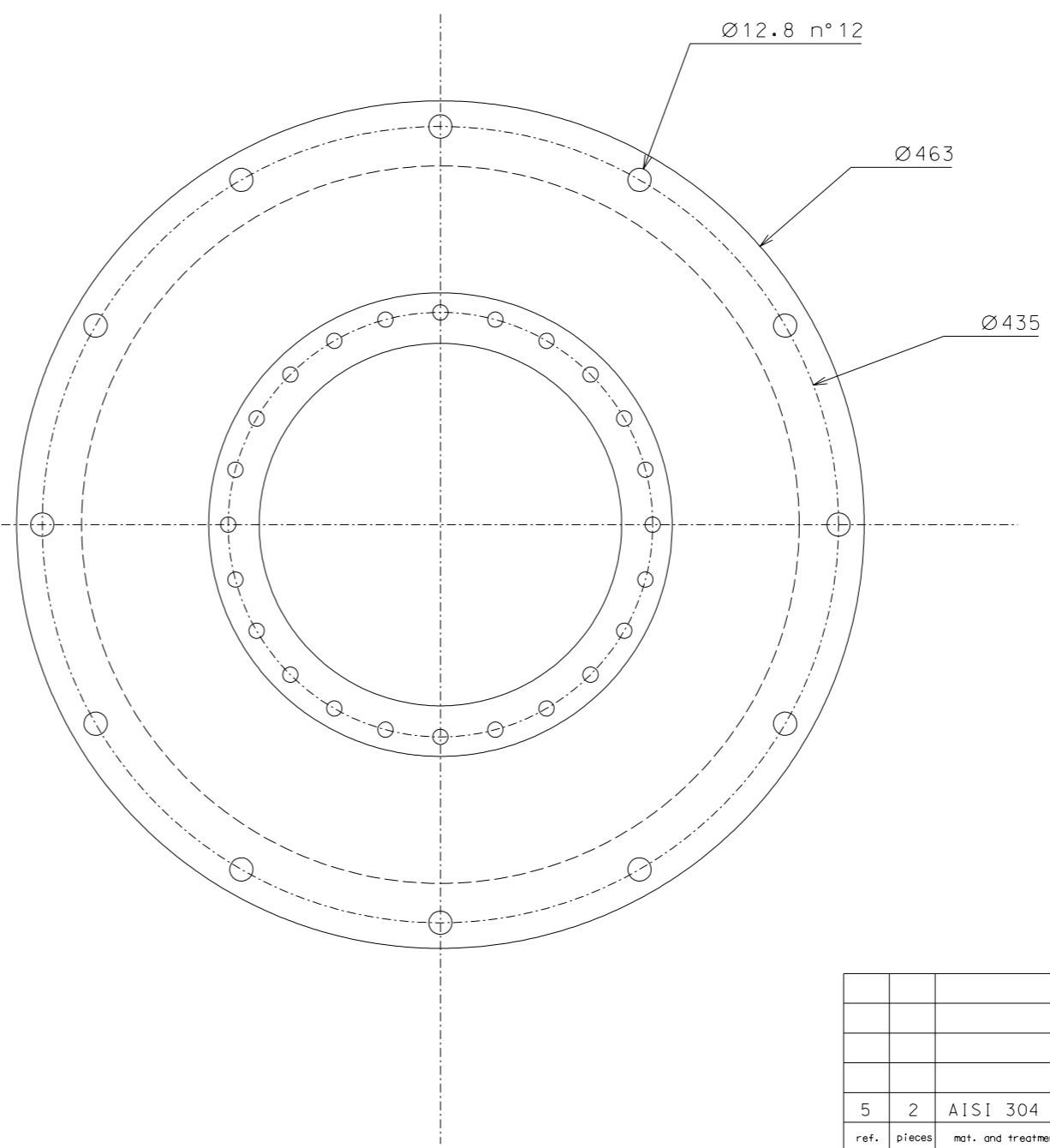
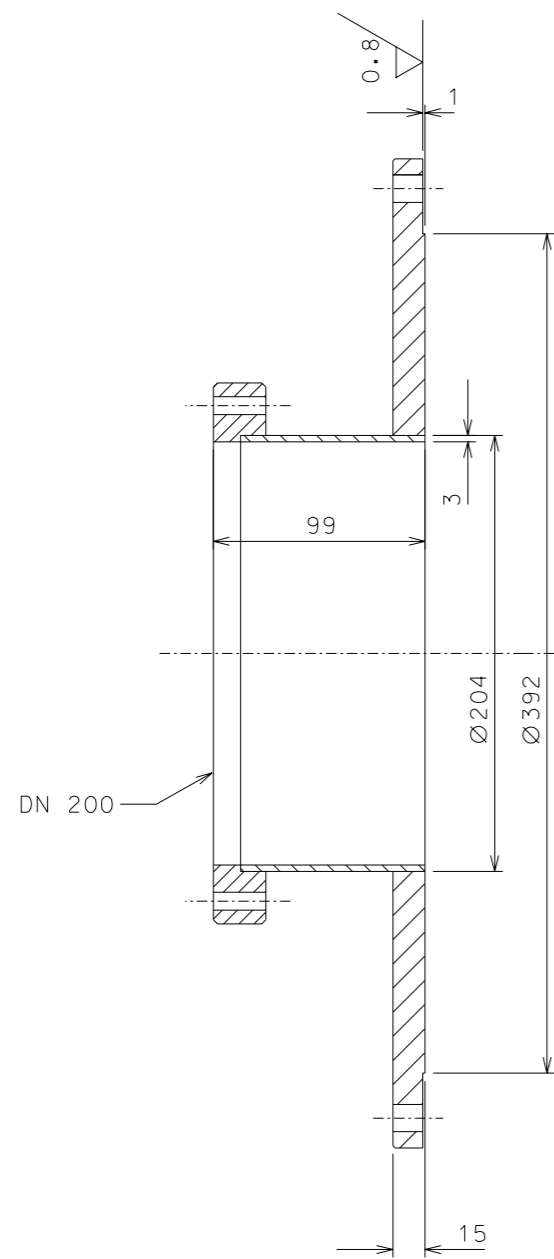


14	2	EN 5083	1:2.5				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000
linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			

ref.	note	date	signature
modifications			

	LIGO PROJECT		designed for R. De Salvo
			draw. by PROMEC
title LASER DETTAGLI	n° draw. Laser.014		date 12-02-04
	scale 1:2.5		detail from 024
	replaces		issue A
	draw. n°		A 2

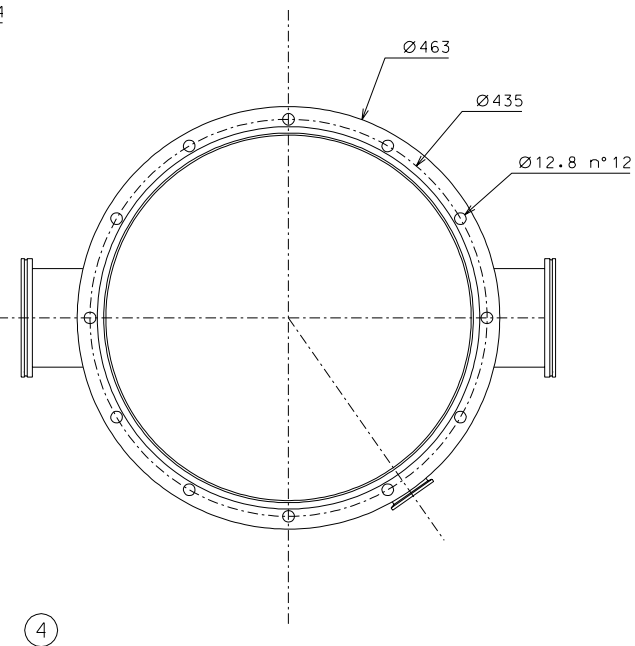
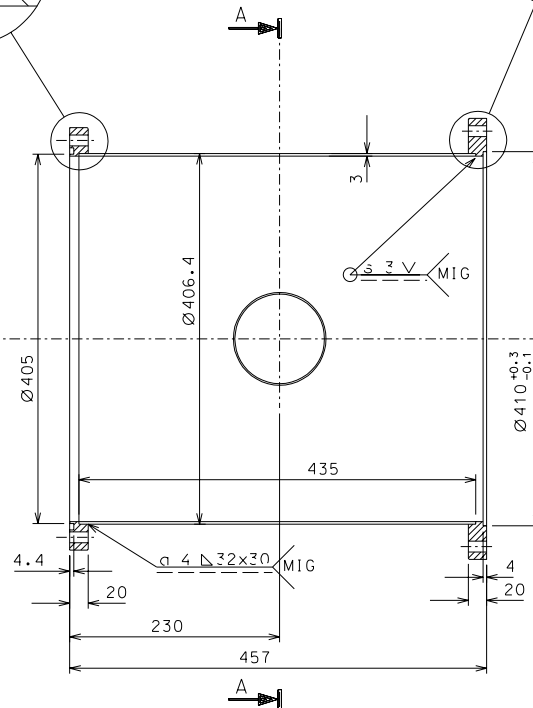
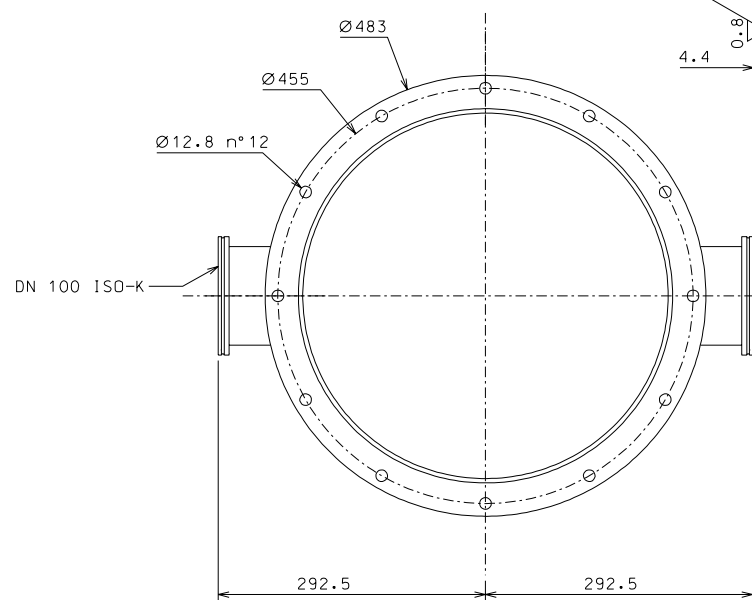
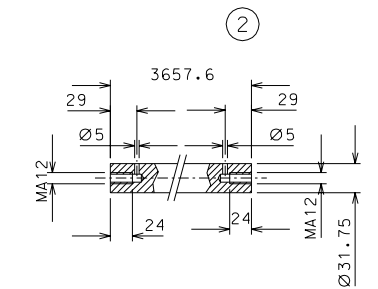
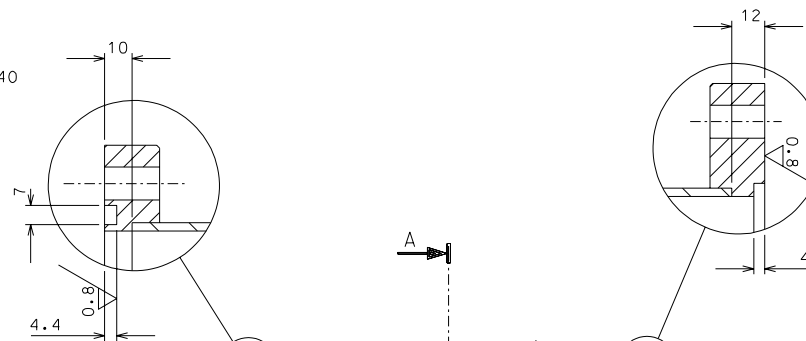
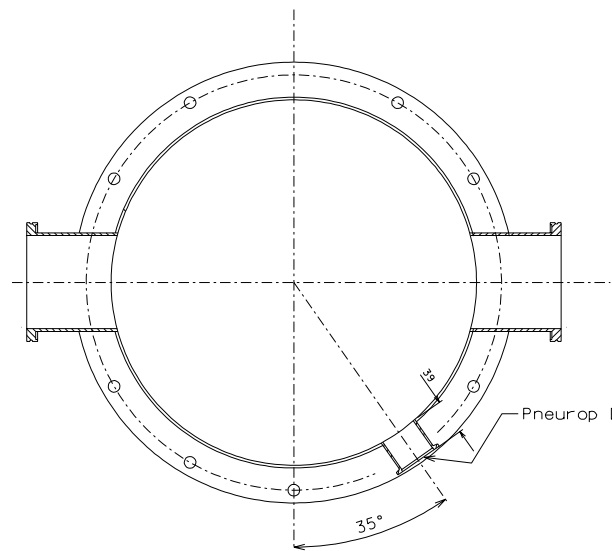
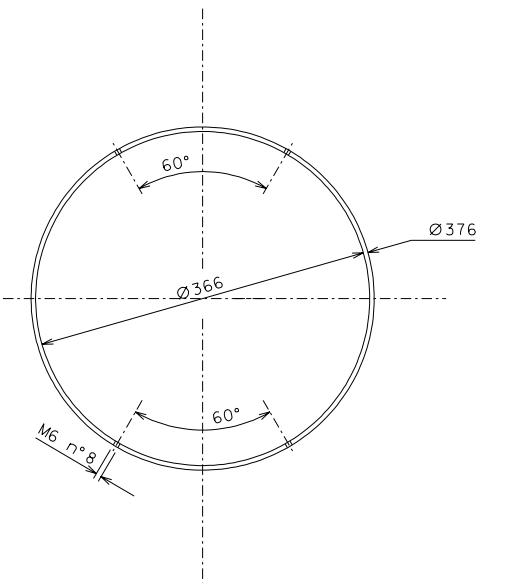
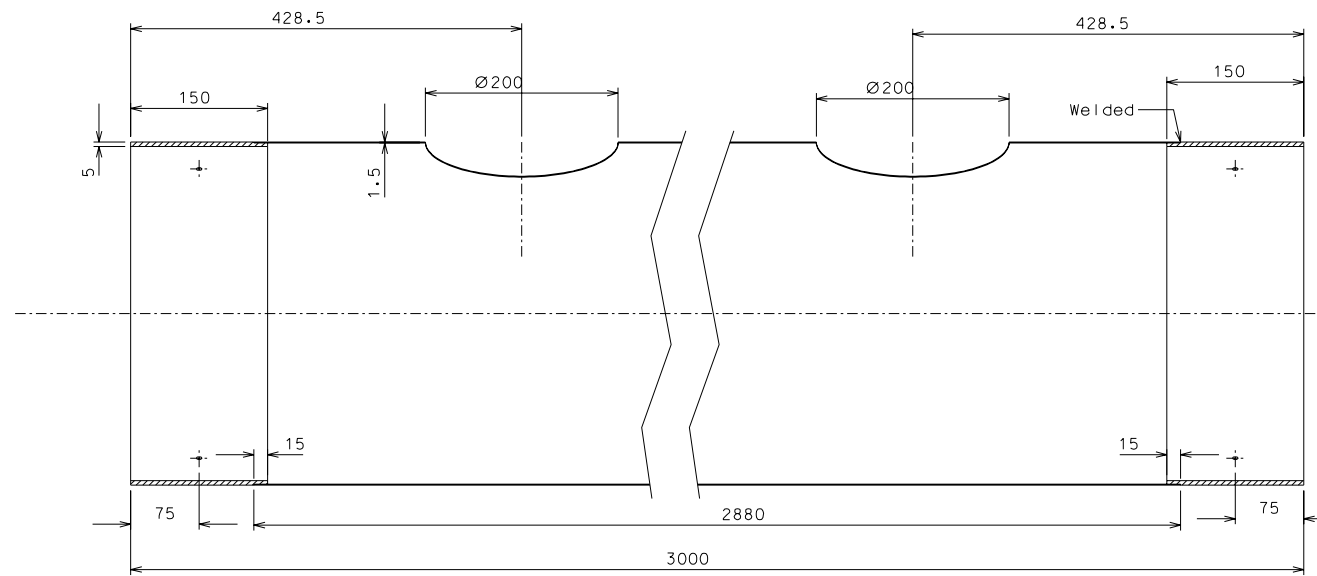
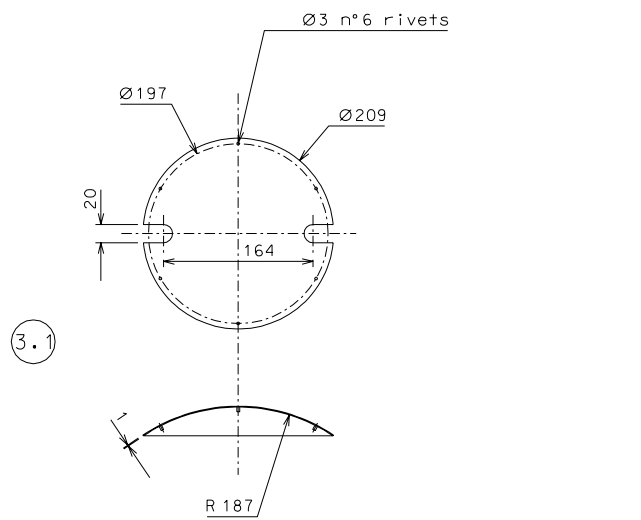


5	2	AISI 304 L	1:2.5				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear TOLL.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular TOLL.	± 1	± 30'	± 20'	± 10'				referred to the shortest side

ref.	note	date	signature
modifications			

	LIGO PROJECT	designed for R. De Salvo	
	LASER DETAIL	draw. by PROMEC	
n°draw. Laser.013			
date 5-02-04		scale 1:2.5	
detail from 000		issue A	
replaces draw. n°		A 2	

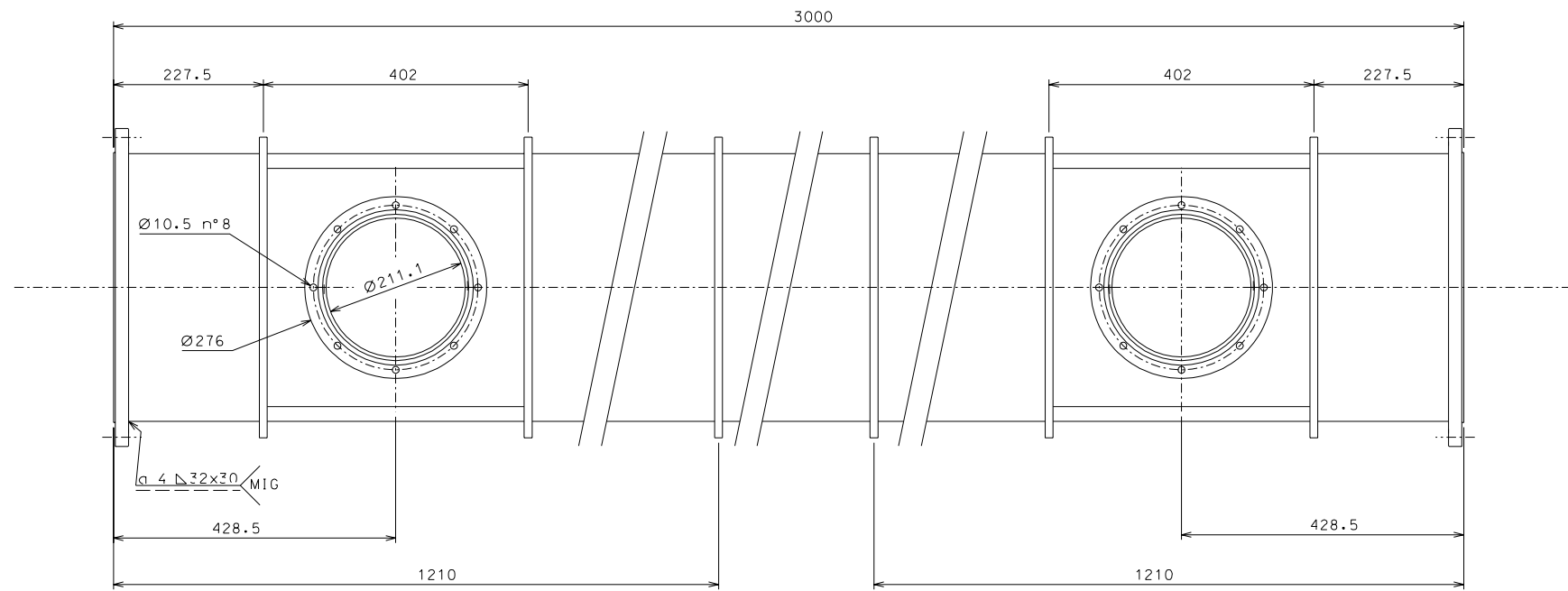
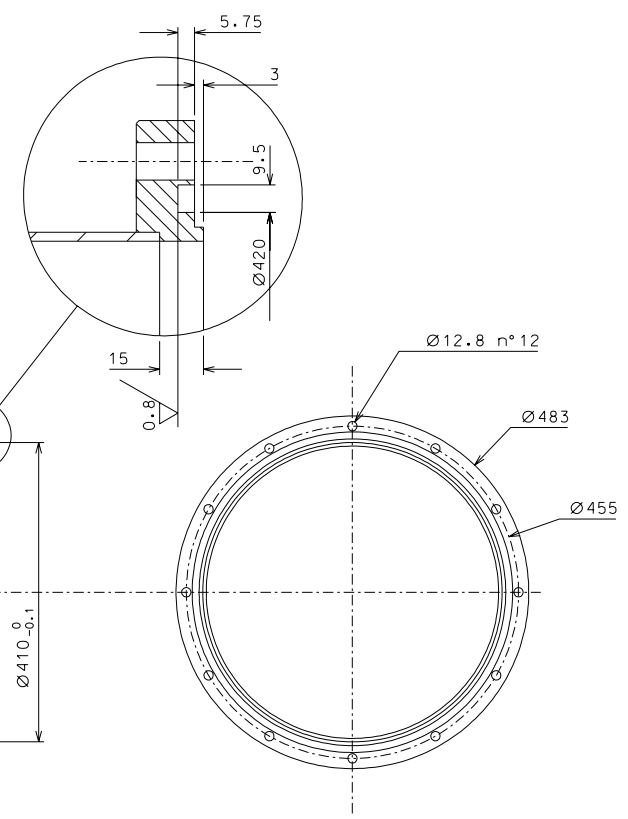
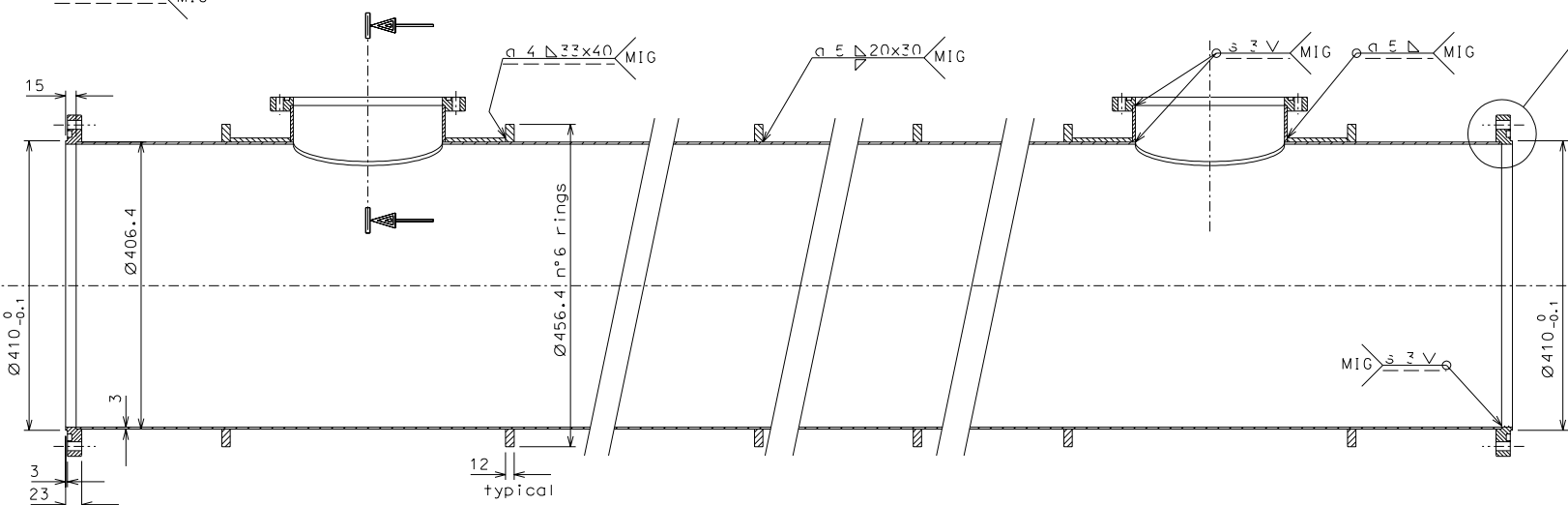
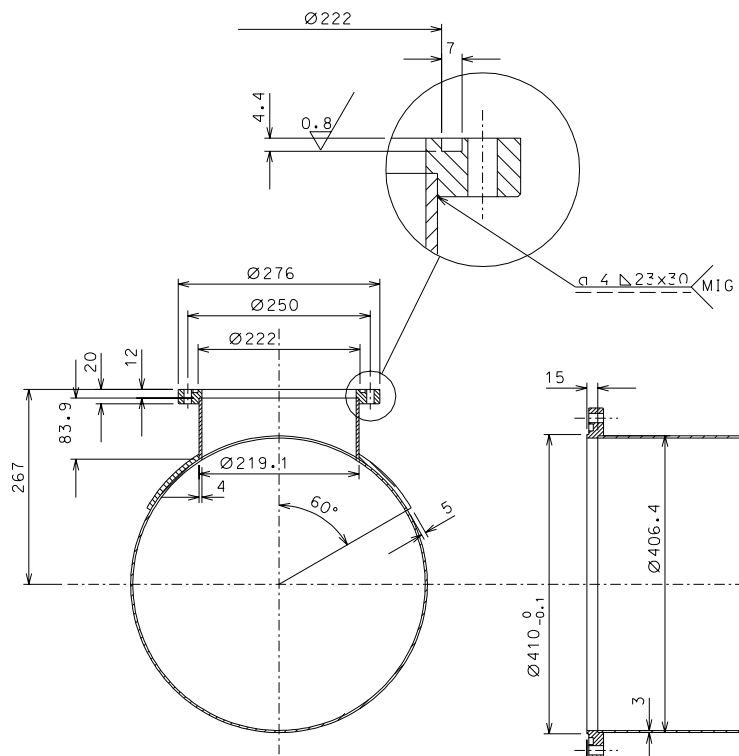


ref.	note	date	signature
modifications			

ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
4	2	AISI 304 L	1:4				
3.1	2	EN 5083	1:4				
3	1	EN 5083	1:4				
2	3	Invar	1:4				

General machining tolerances UNI 5301-63							
Dimensions	< 6	6-30	30-120	120-315	315-1000	1000-2000	> 2000-4000
Linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			

designed for	R. De Salvo
draw. by	PROMEC
n° draw.	LASER-012
date	12-02-04
scale	1:4
title	LASER DETAILS
detail from	000
issue	A
replaces draw. n°	A 1

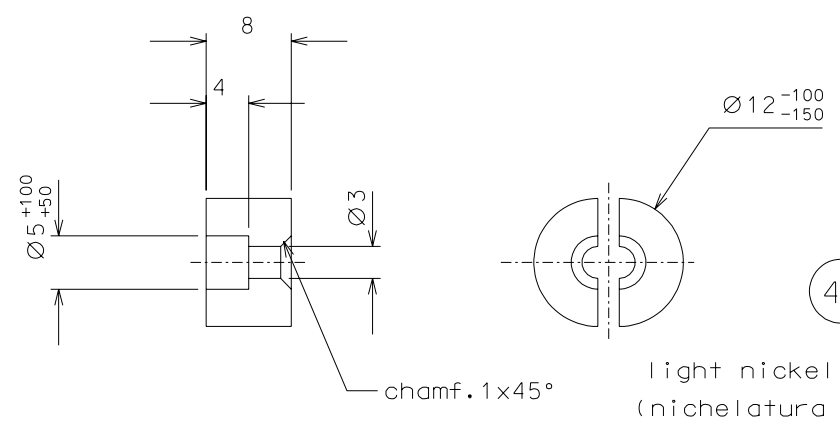


ref.	note	date	signature
modifications			

ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale
1	1	AISI 304 L	1:5				

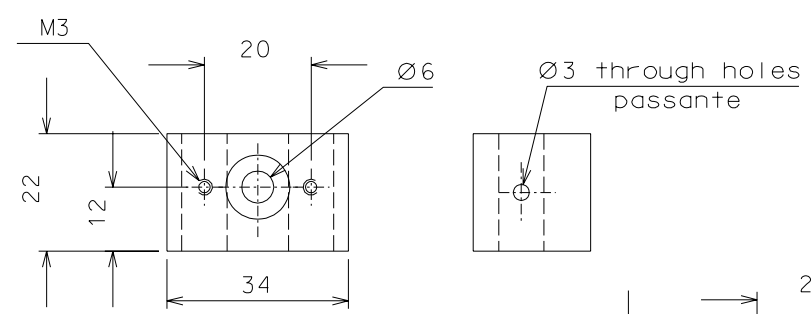
General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side				

title: LASER DETAILS
 date: 12-02-04
 scale: 1:5
 designed for: R. De Salvo
 draw. by: PROMEC
 n° draw.: LASER-011
 detail from: issue A
 replaces draw. n°: A 1

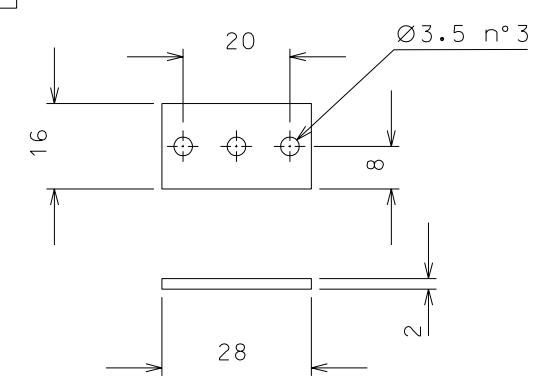
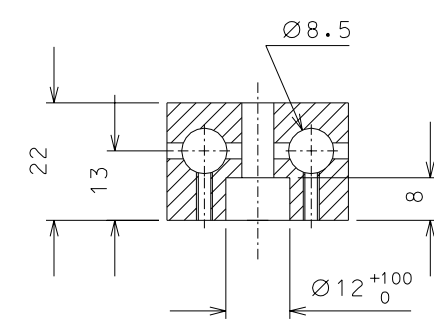


46

light nickel plated
(nichelatura leggera)



29

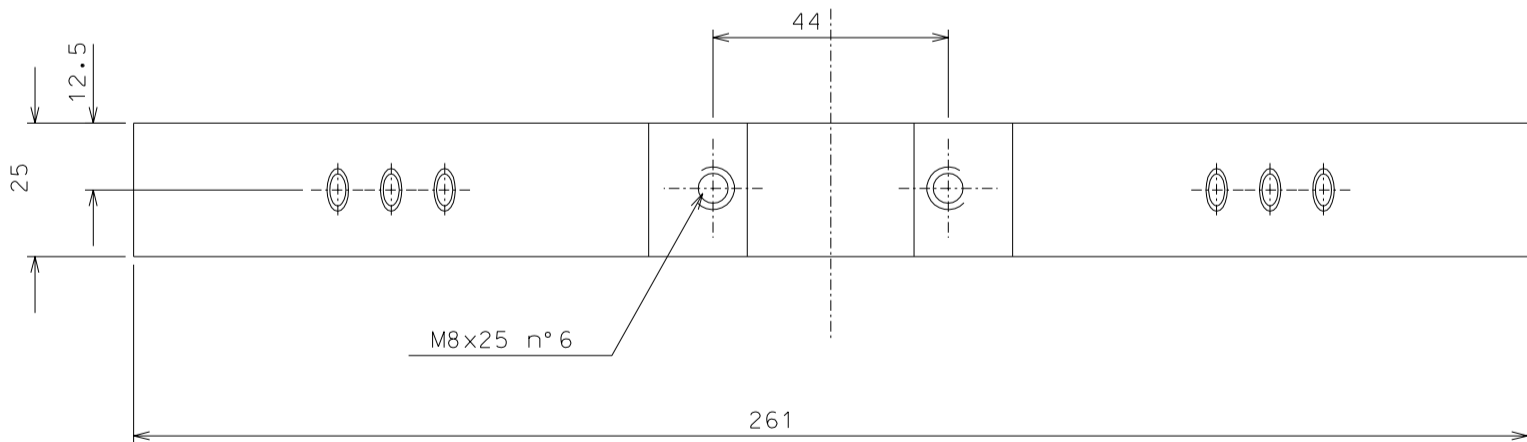
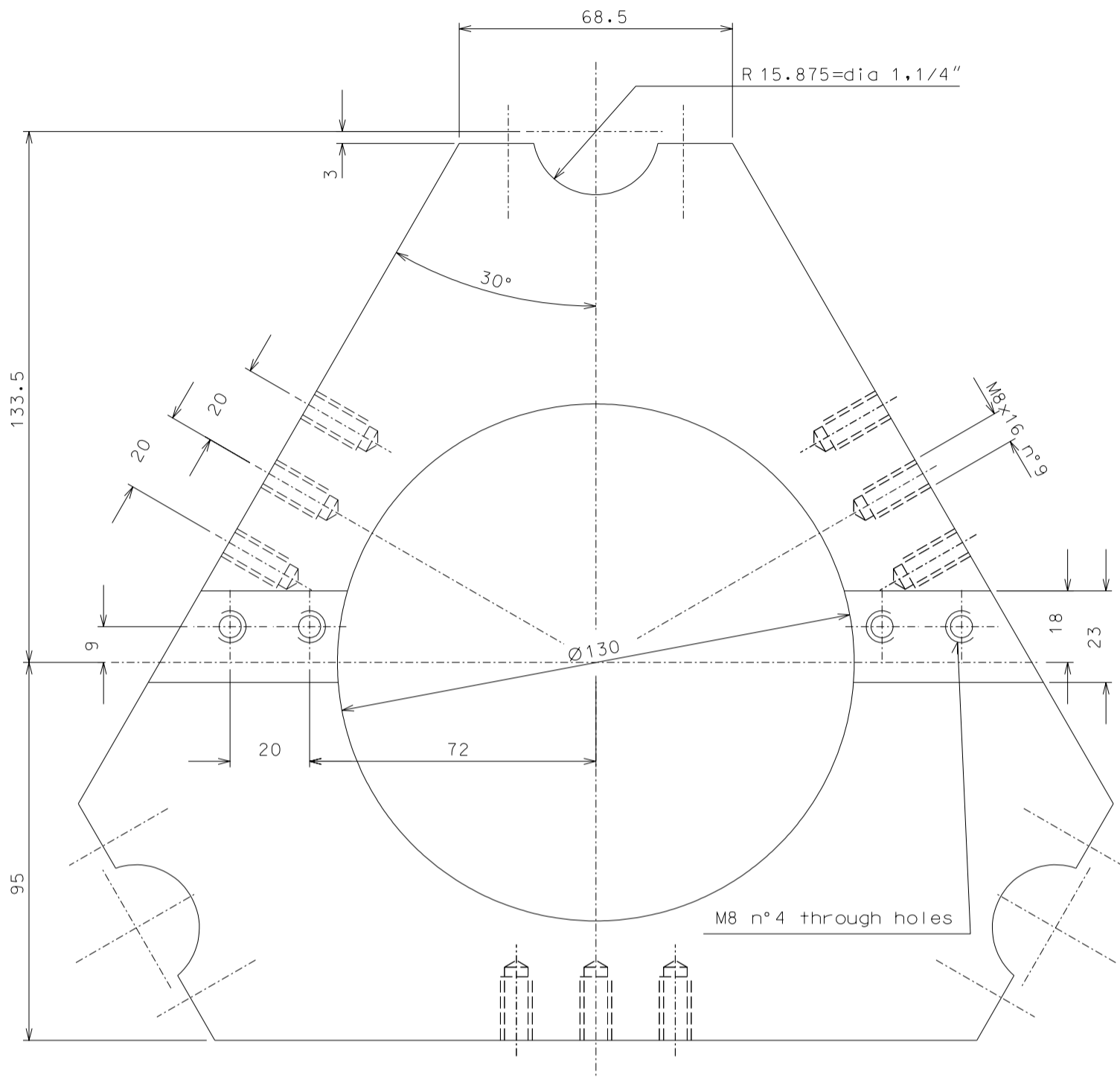


34

34	4	Nickel plated steel	1:1				
46	16	C40	2:1				
29	4	Nickel plated steel	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

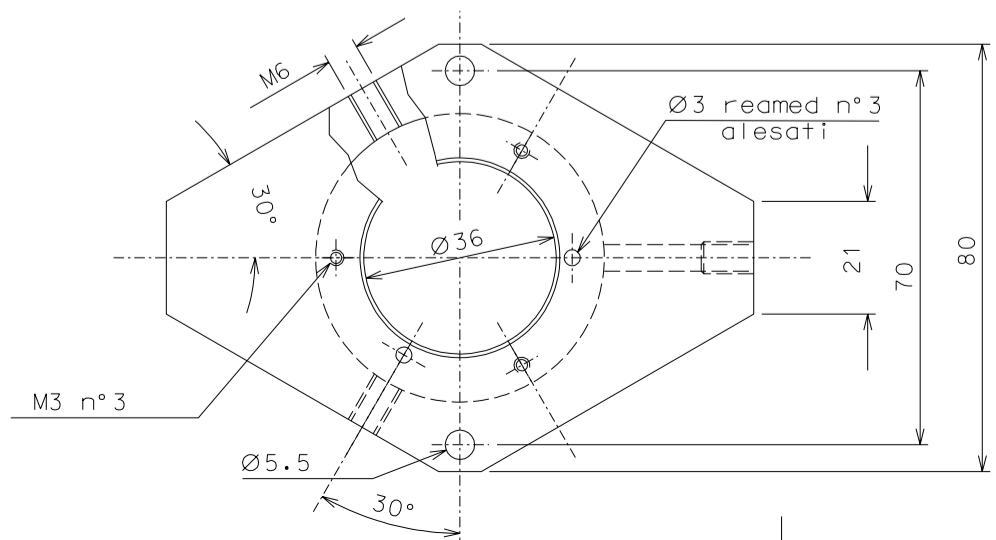
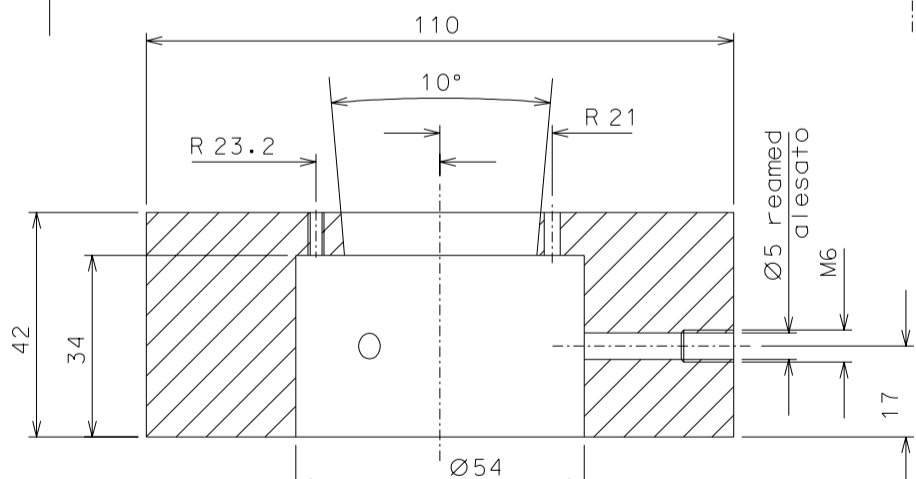
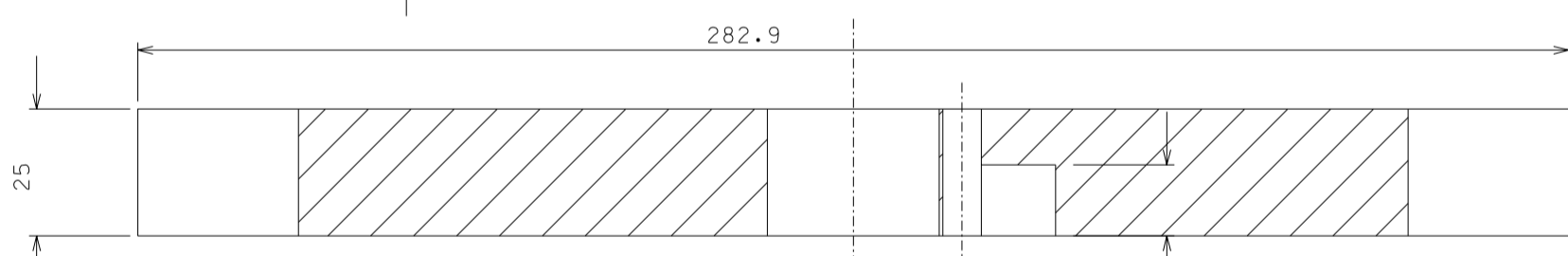
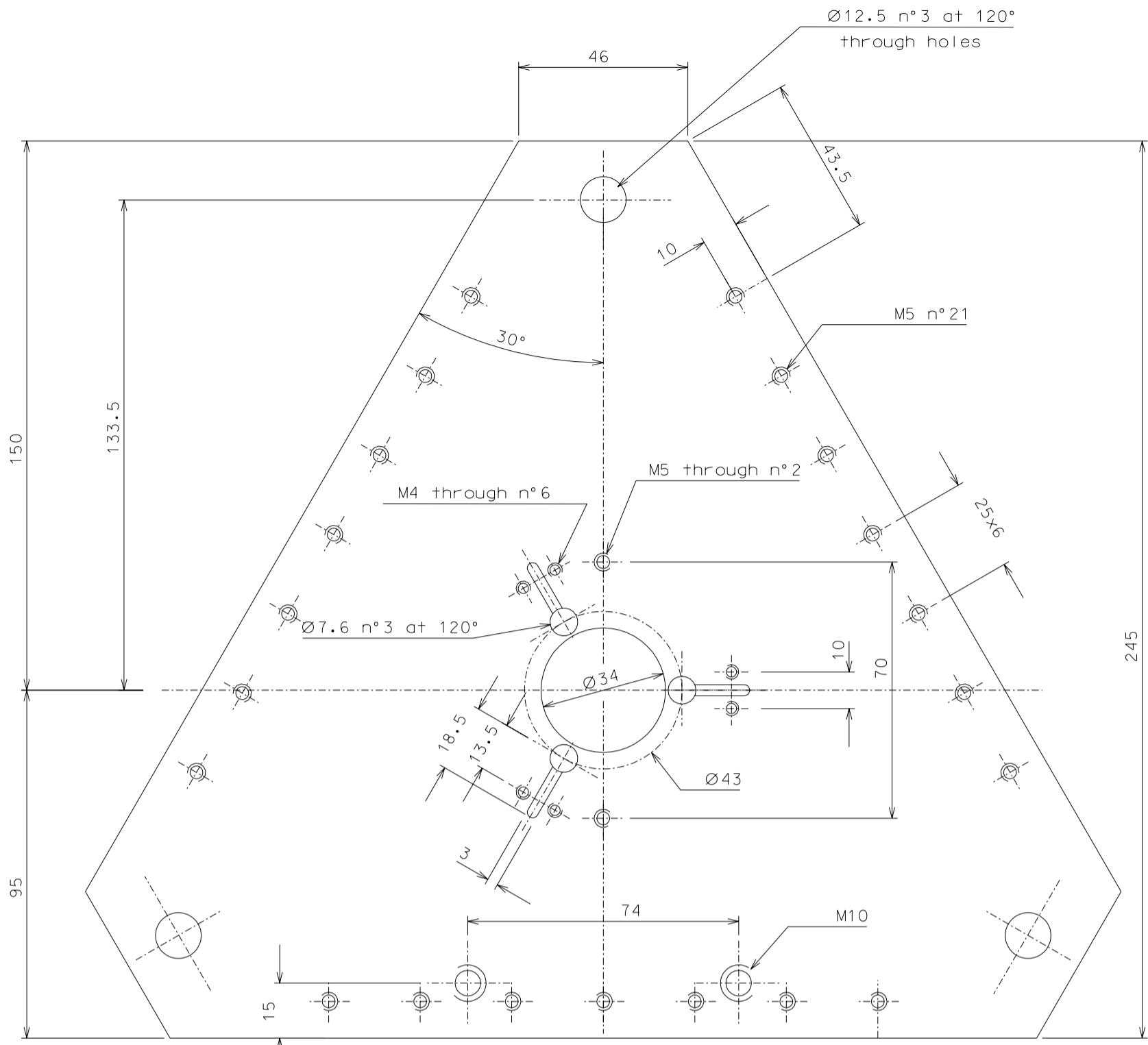
	LIGO PROJECT	designed for R. De Salvo	
		draw. by PROMEC	
title LASER DETAILS	n°draw. Laser.010		
	date 10-02-04	scale 1:1	
	detail from 024-005	issue A	
	replaces draw. n°		A 3



31	3	EN-6082	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63									
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000	
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3	
angular Toll.	± 1	± 30'	± 20'	± 10'					referred to the shortest side

PROMEC sr l <i>Bientina (Pisa)-Italia</i>	R. De Salvo designed for	
	draftsman G. Gennaro	
	n° draw. Laser.009	
	date 2-02-04	scale 1:1
	detail from 005	issue A
replaces draw. n°	A 2	



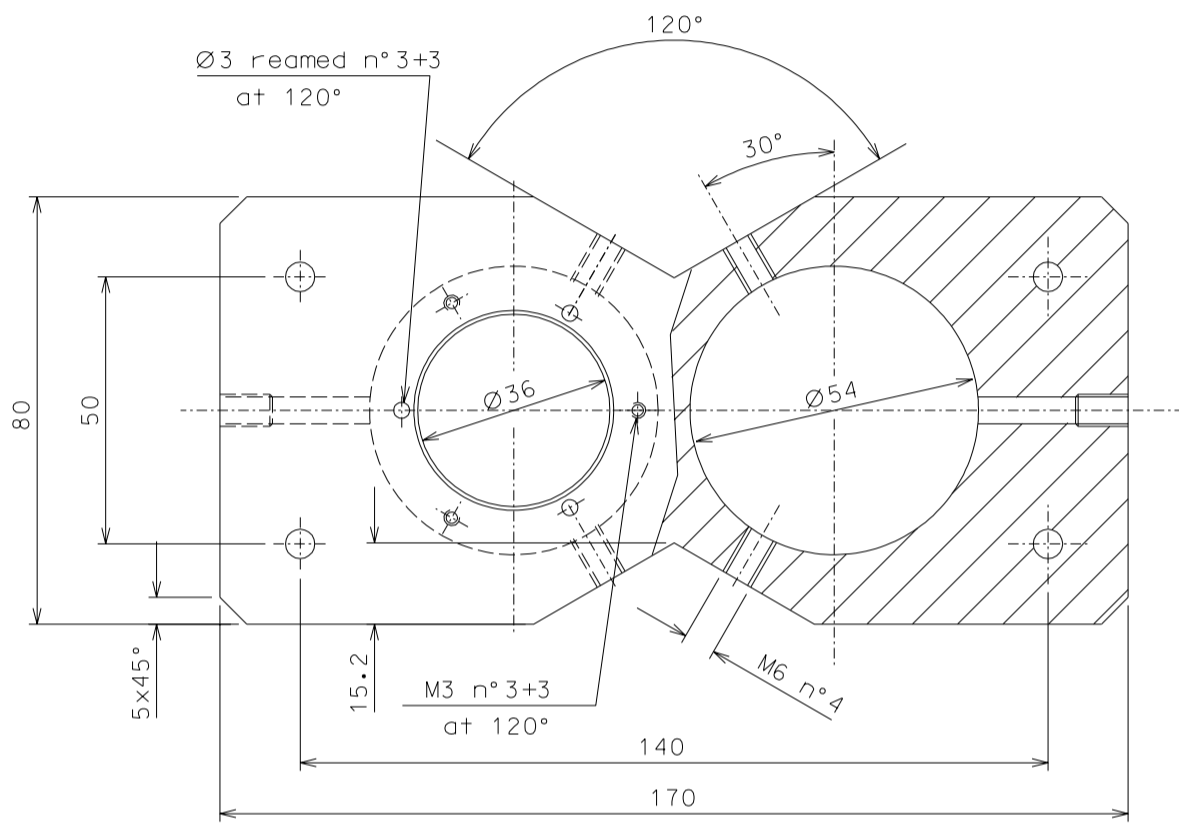
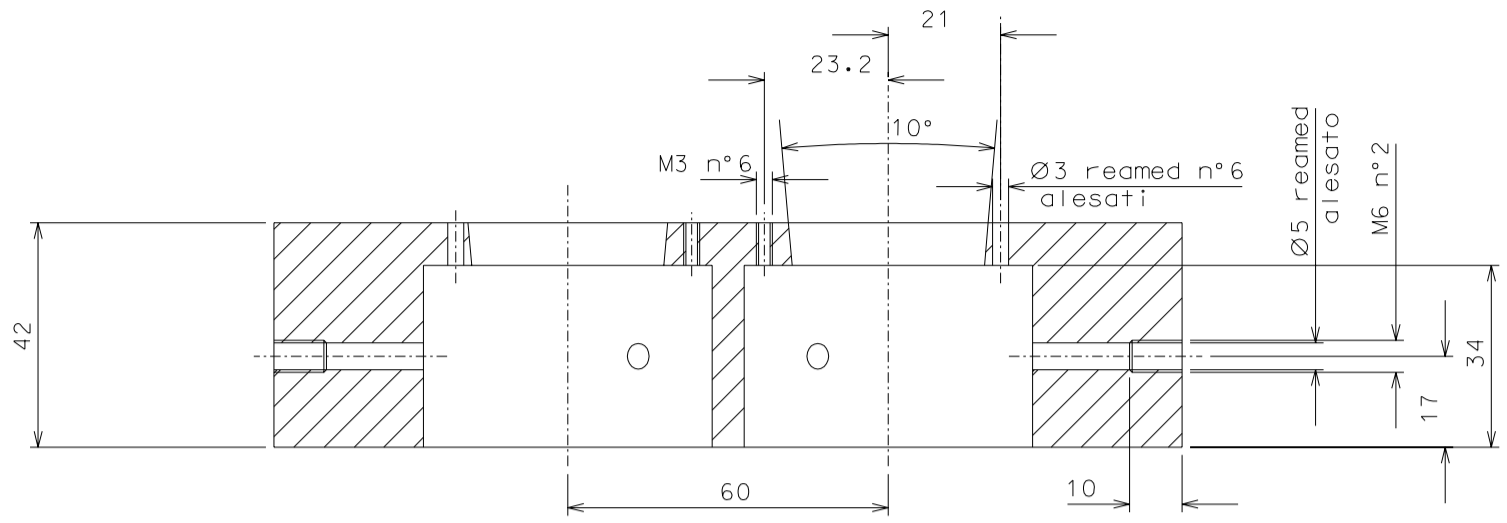
27

28

28	1	EN-6082	1:1				
27	1	EN-6082	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

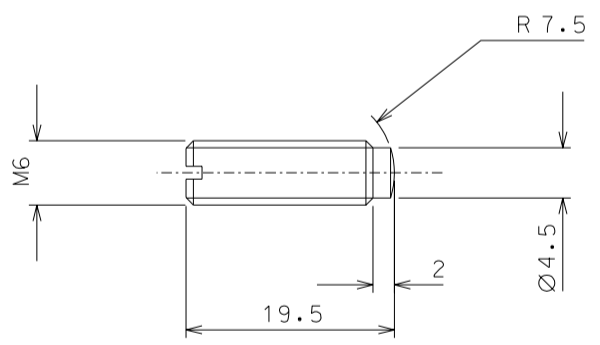
General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

PROMEC sr l <i>Bientina (Pisa)-Italia</i>	R. De Salvo designed for	
	draftsman G. Gennaro	
	n° draw. Laser.008	
	date 2-02-04	scale 1:1
title LASER DETAILS		detail from 004
replaces draw. n°		issue A
		A 2

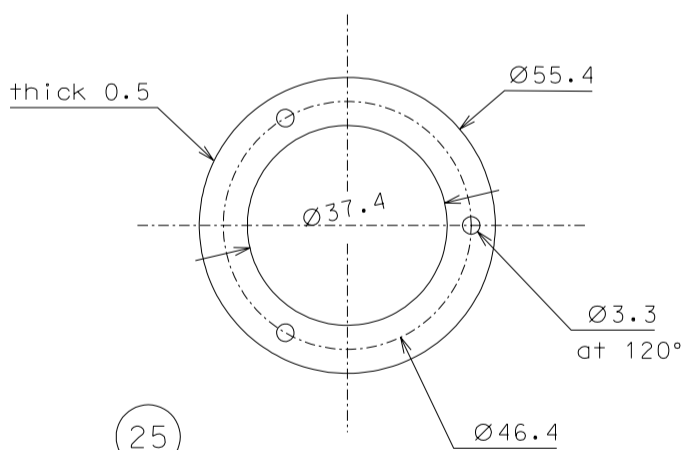


24

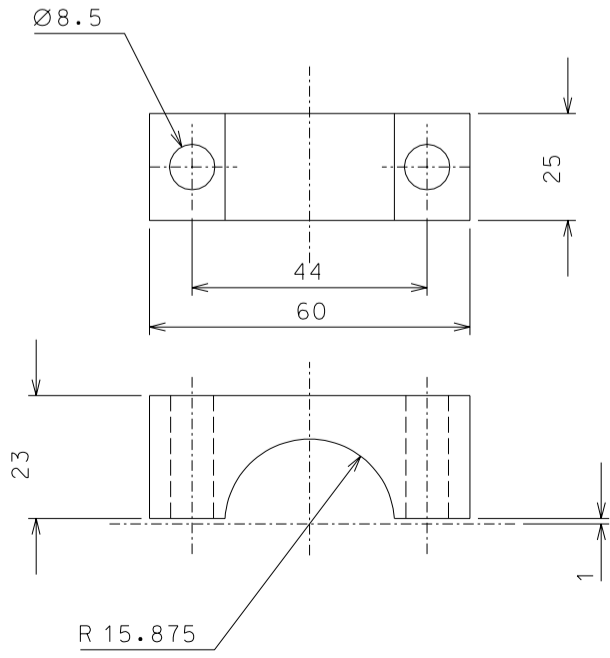
26



25



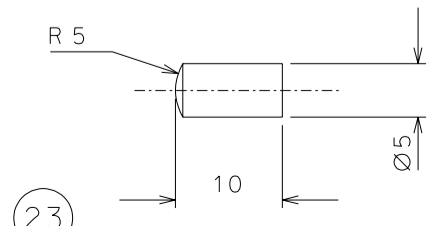
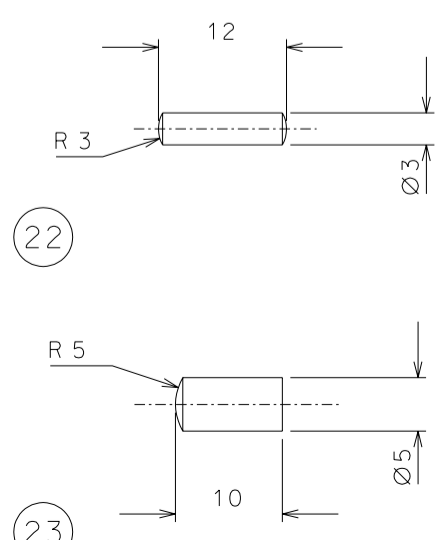
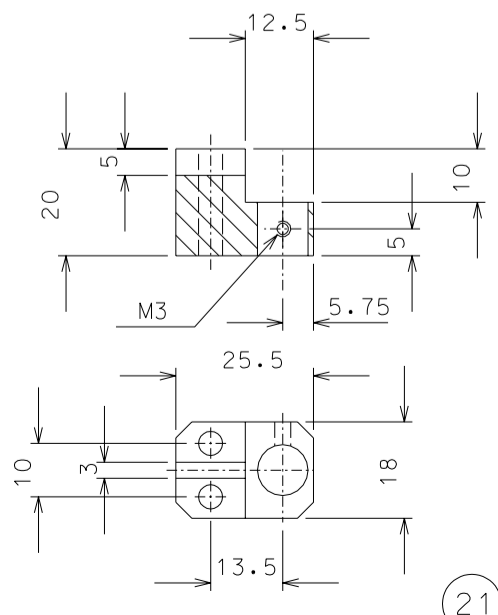
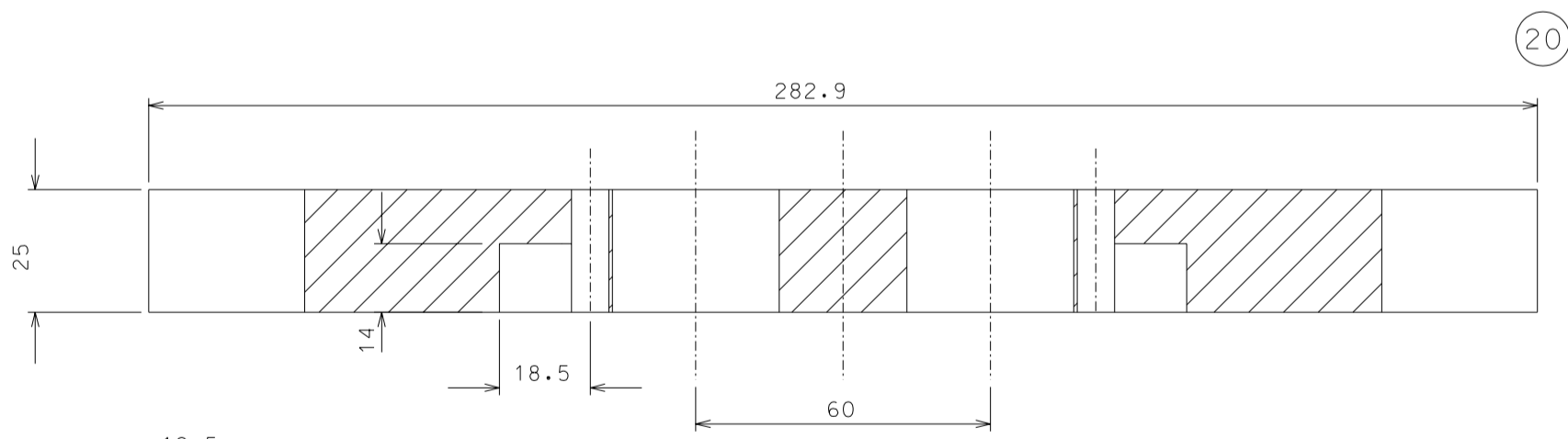
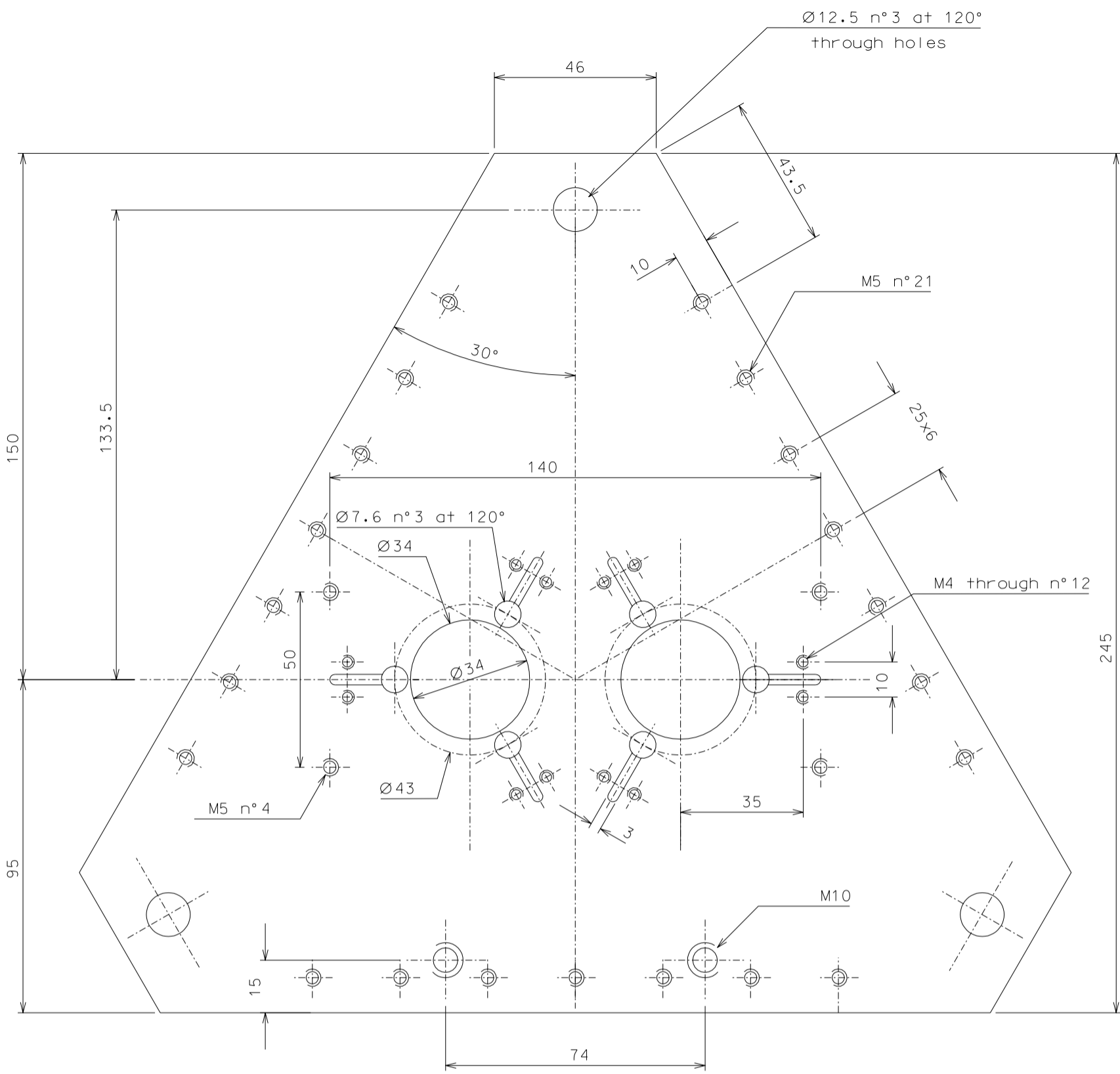
30



30	9	EN-6082	1:1				
26	6	peek	2:1				
25	3	copper-beryll.	1:1				
24	1	EN-6082	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toli.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

PROMEC sr l <i>Bientina (Pisa)-Italia</i>	R. De Salvo designed for	
	draftsman G. Gennaro	
	n° draw. Laser .007	
	date 31-12-03	scale 1:1
title LASER DETAILS		detail from 003-005
replaces draw. n°		issue A
		A 2



23	3	brass	2:1				
22	9	brass	2:1				
21	9	Nickel plated steel	1:1				
20	1	EN-6082	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63

Dimensions	< 6	>6-30	>30-120	>120-315	>315-1000	>1000-2000	>2000-4000	> 4000
linear Toll.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3
angular Toll.	± 1	± 30'	± 20'	± 10' referred to the shortest side				

PROMEC sr l
Bientina (Pisa)-Italia

R. De Salvo
designed for

draftsman G. Gennaro

n° draw. Laser.006

date 2-02-04 scale 1:1

detail from 003 issue A

replaces draw. n° A 2

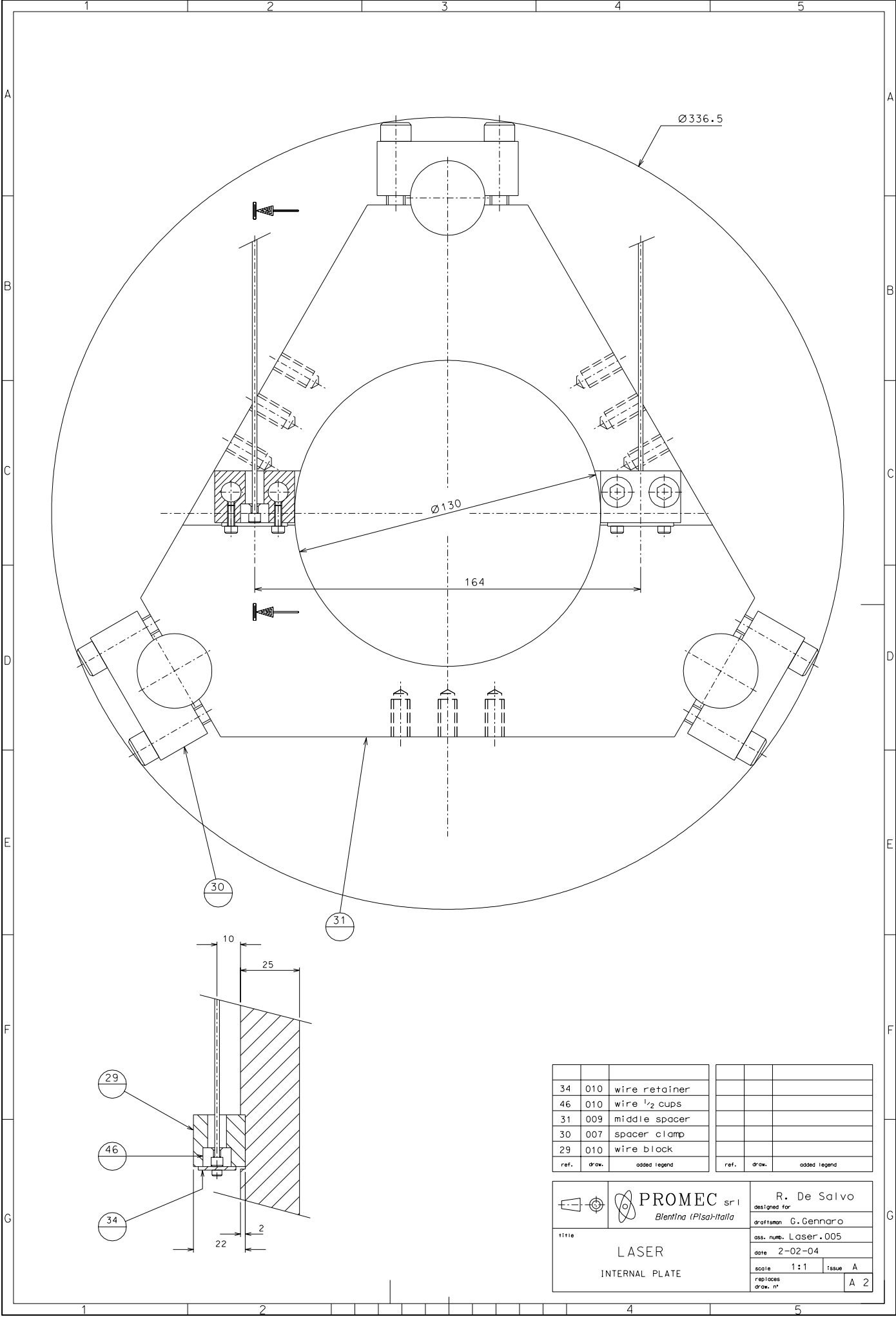
title
LASER
DETAILS

20

22

21

23



Ø336.5

Ø130

164

30

31

29

46

34


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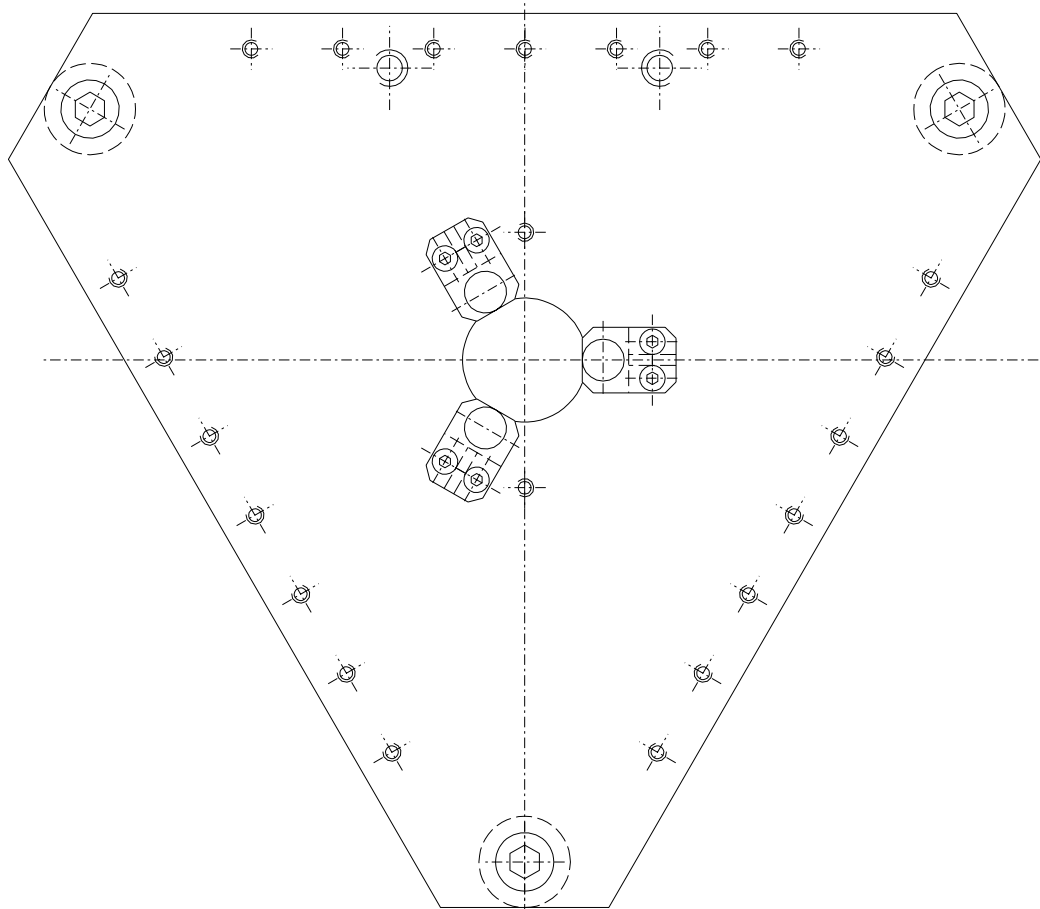
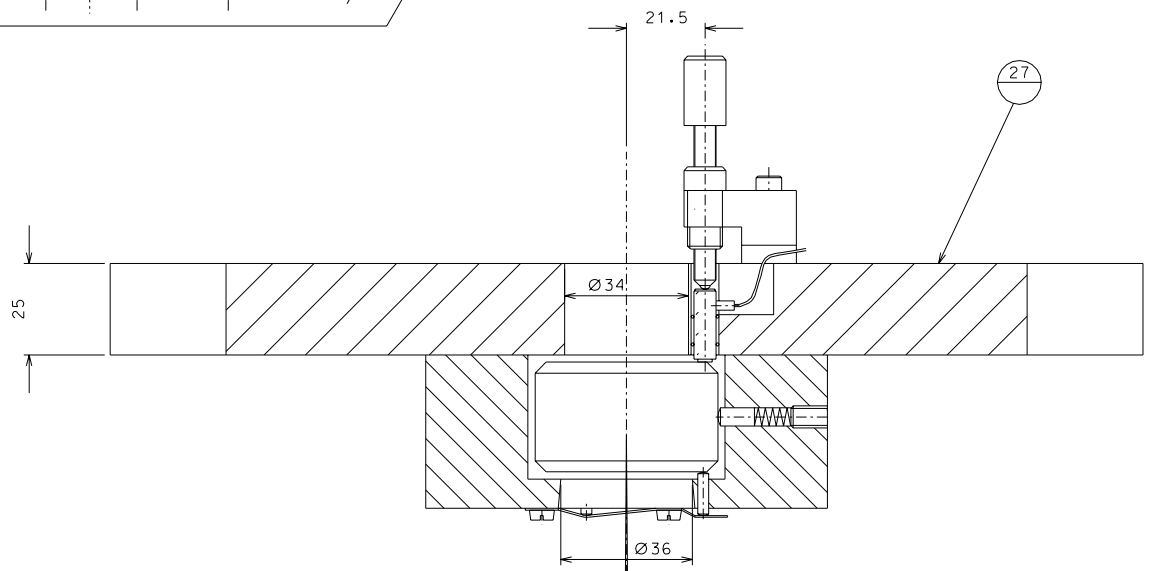
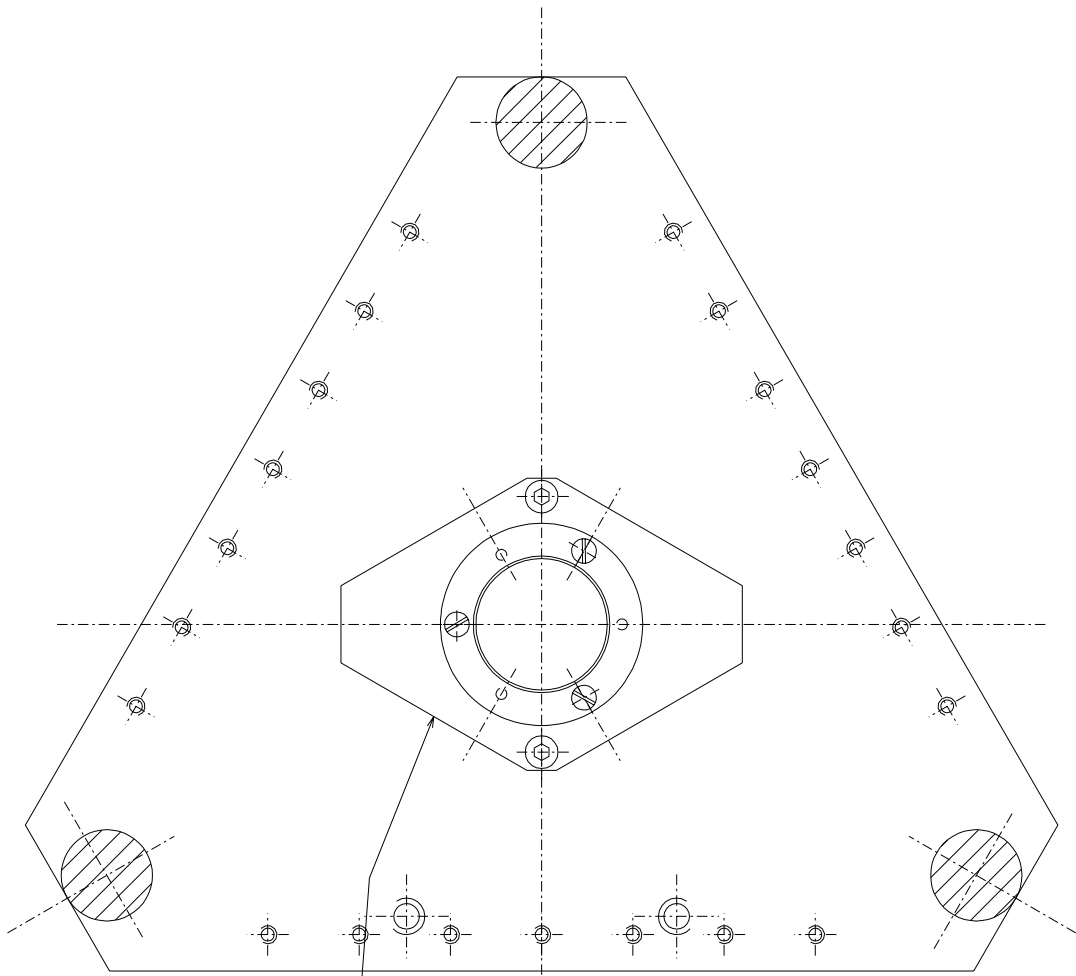
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22

2

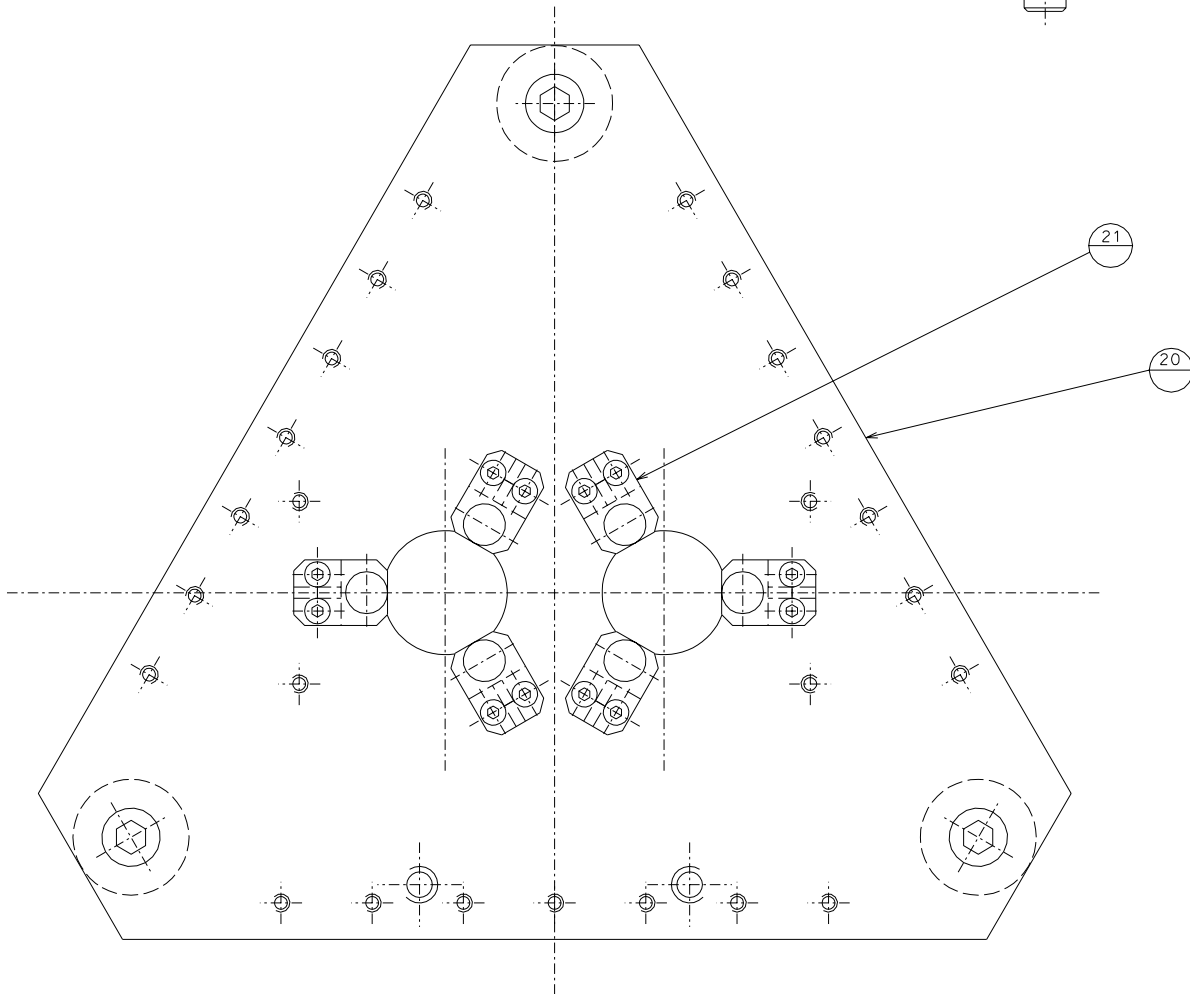
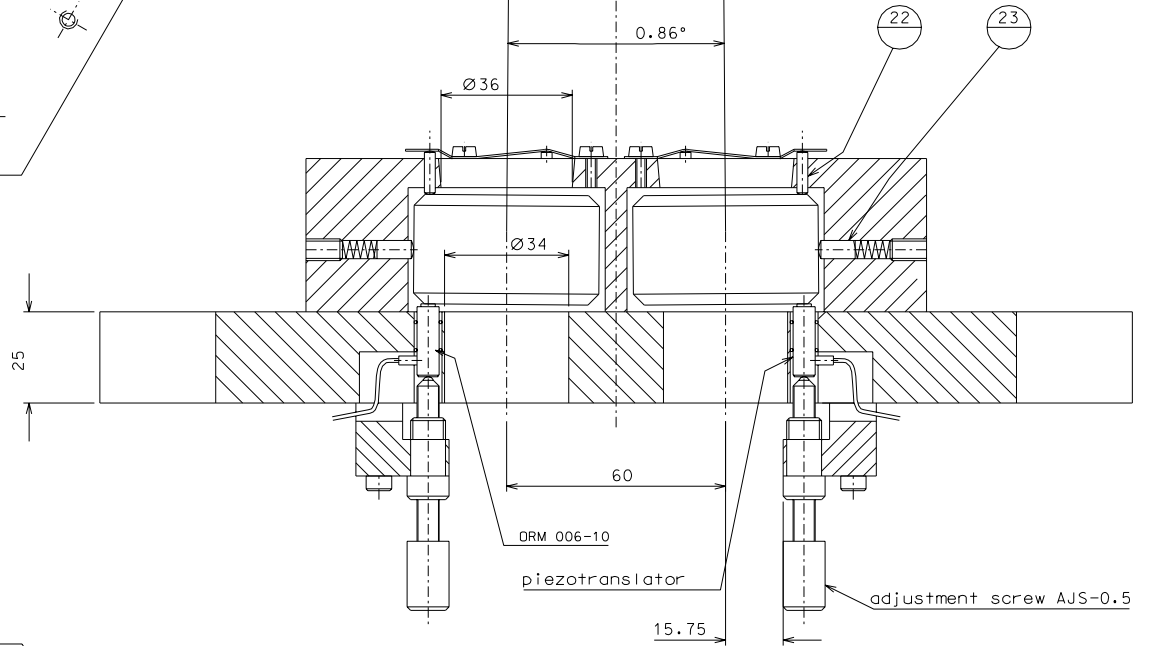
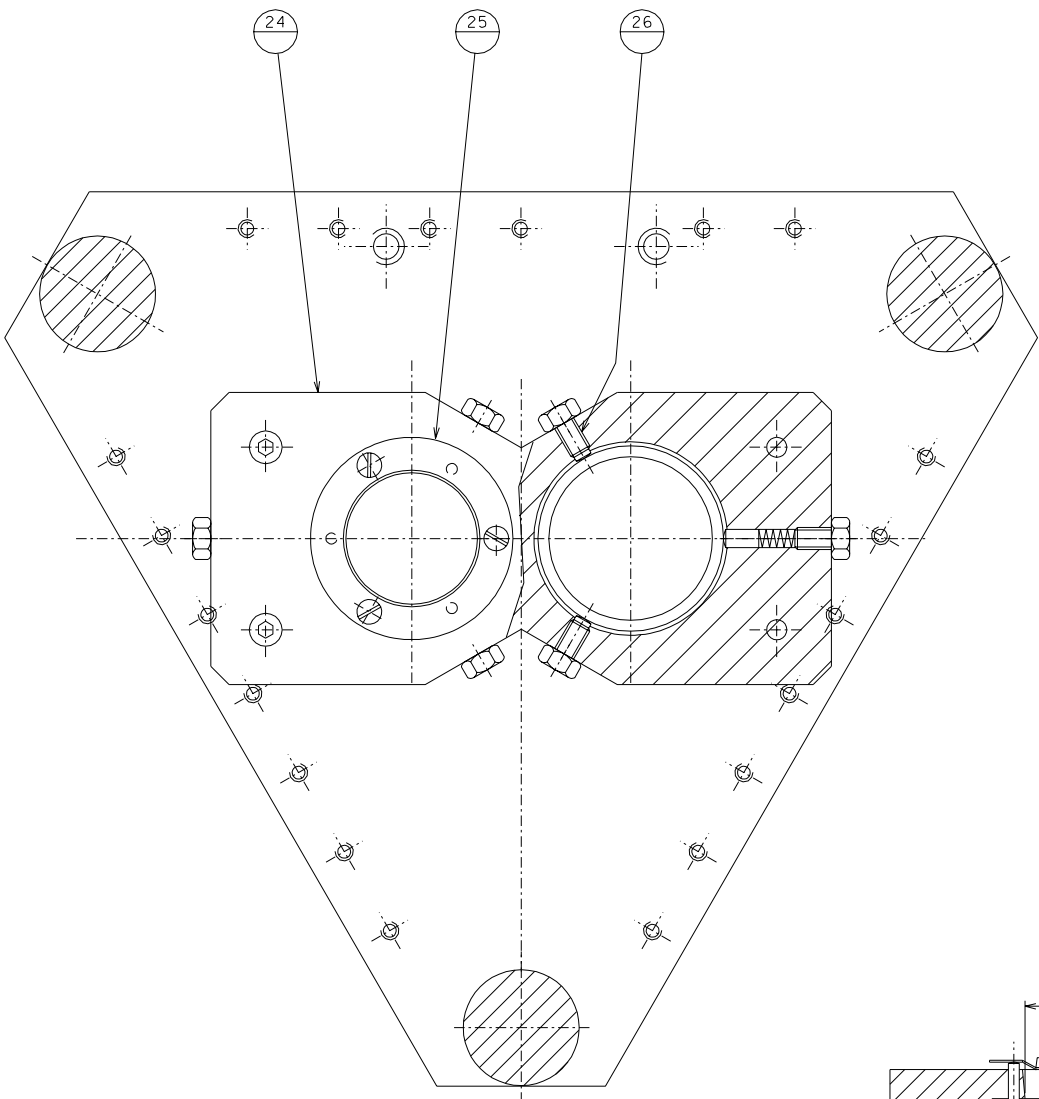
34	010	wire retainer			
46	010	wire 1/2 cups			
31	009	middle spacer			
30	007	spacer clamp			
29	010	wire block			
ref.	draw.	added legend	ref.	draw.	added legend

 PROMEC s.r.l. Bientina (Pisa-Italia)	R. De Salvo designed for	
	draftsman G. Gennaro	
title LASER		
INTERNAL PLATE		
ass. numb. Laser.005		date 2-02-04
scale 1:1	issue A	replaces draw. n° A 2



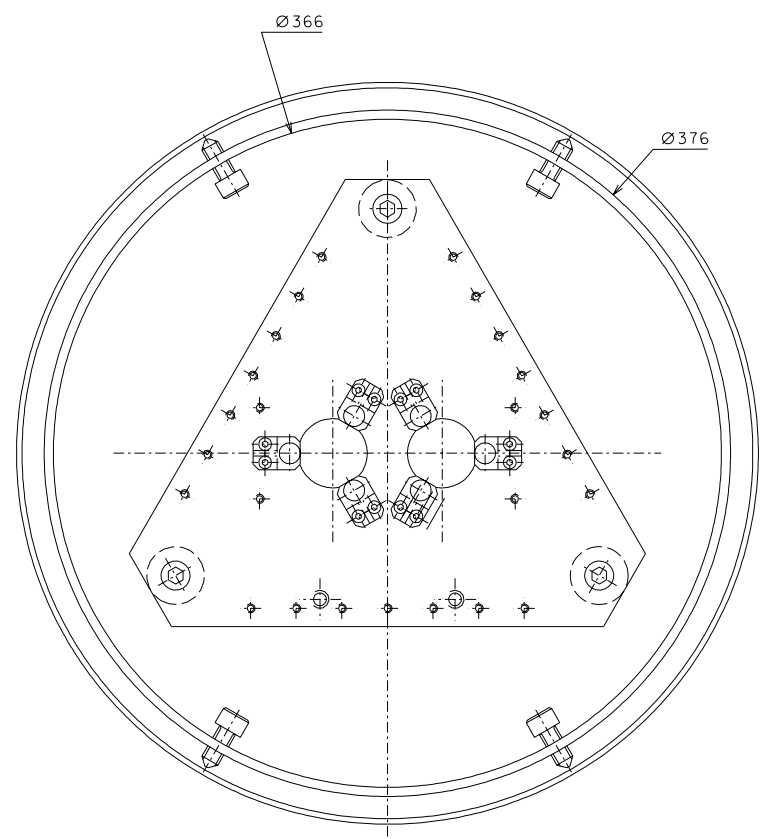
28	008	1 mirror holder			
27	008	1 Mirror end plate			
ref.	draw.	added legend	ref.	draw.	added legend

PROMEC s.r.l. Bientina (Pisa)-Italia	R. De Salvo designed for	
	draftsmen G. Gennaro	
title LASER		
BACK PLATE		
ass. num. Laser.004		date 2-02-04
scale 1:1		issue A
replaces		draw. n° A 1

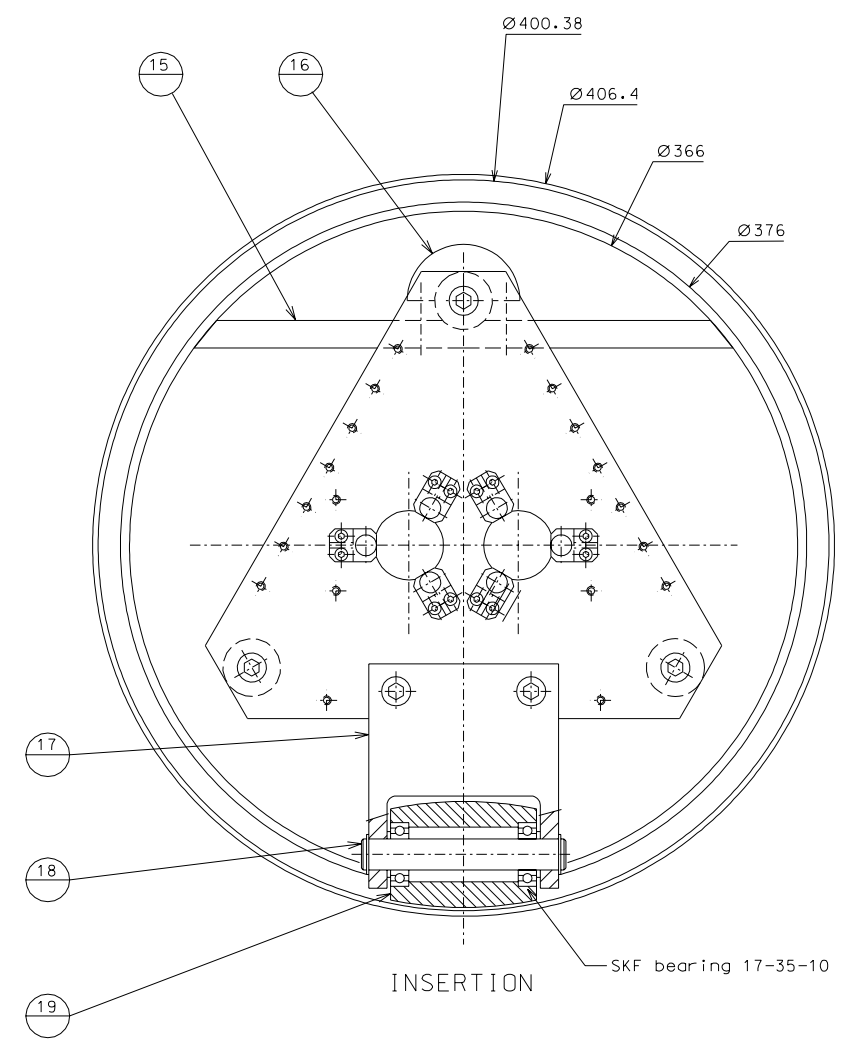


25	007	Mirror spring			
24	007	2-mirror holder			
23	006	Pin			
22	006	Pin			
21	006	Micrometer stand			
20	006	End plate 2 mirrors	26	007	Screw
ref.	draw.	added legend	ref.	draw.	added legend

PROMEC sr l Bientina (Pisa)-Italia	R. De Salvo designed for
	G. Gennaro draftsman
Title LASER FRONT PLATE	
ass. num. Laser.003	
date 1-02-04	
scale 1:1	Issue A
replaces draw. n°	A 1



FIXING

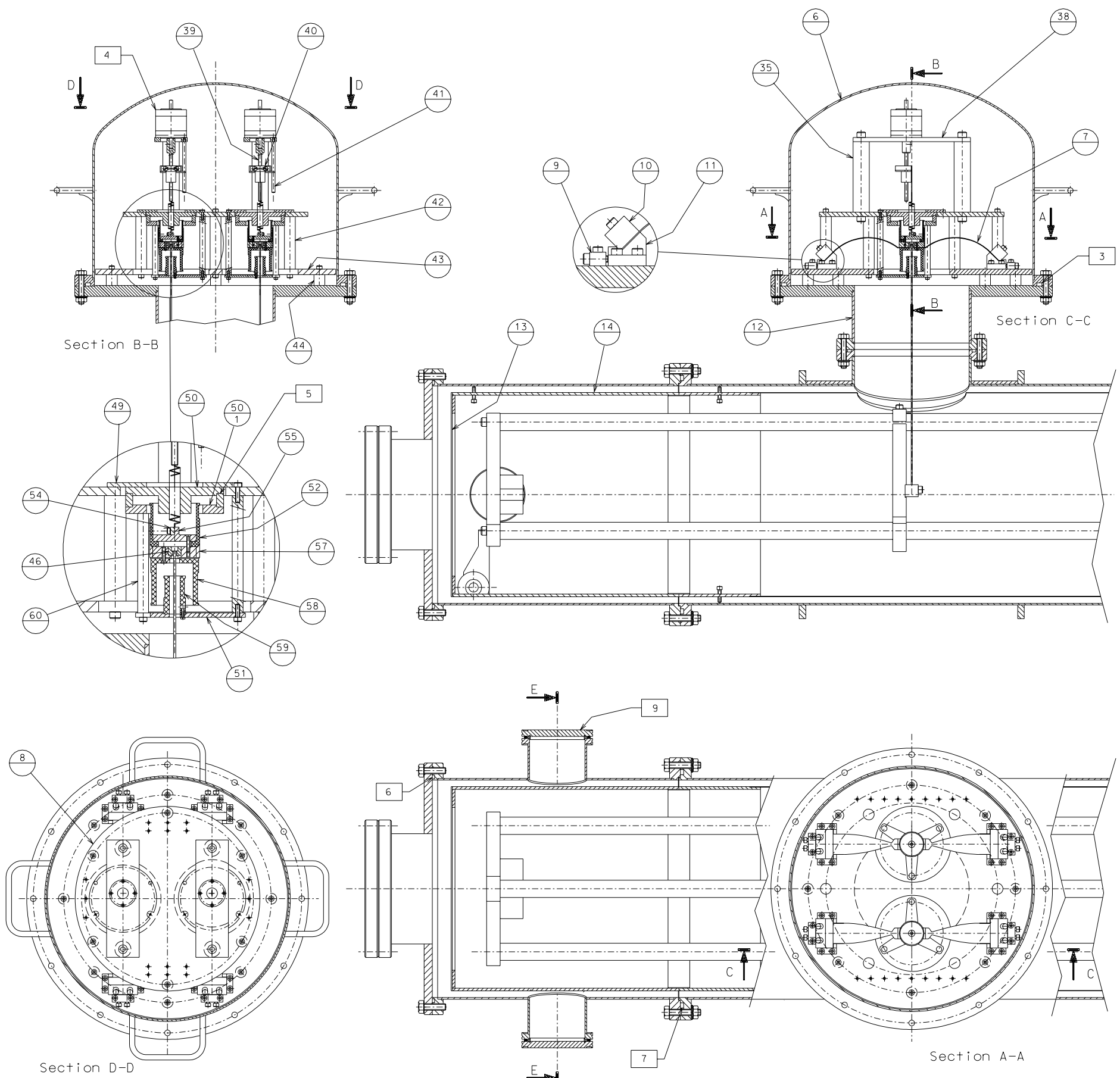


INSERTION

ref.	note	date	signature
modifications			

19	019	Wheel			
18	019	Wheel shaft			
17	019	Wheel structure			
16	019	Clamp			
15	019	Mounting bracket			
ref.	draw.	added legend	ref.	draw.	added legend

	LIGO PROJECT	designed for R. De Salvo
		draw. by PROMEC
title		ass. numb. Laser.002
LASER		date 1-02-04
SECTION A-A		scale 1:2 issue A
		replaces draw. n° A 1



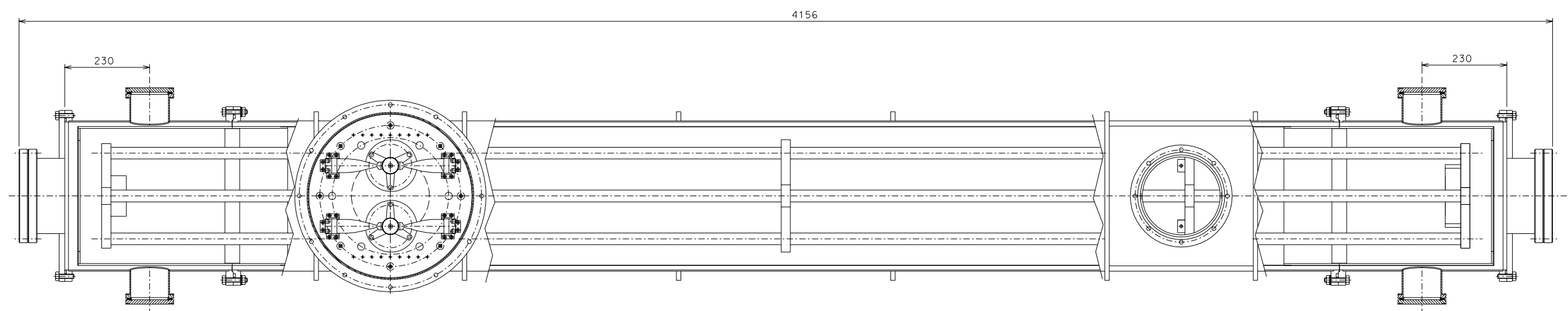
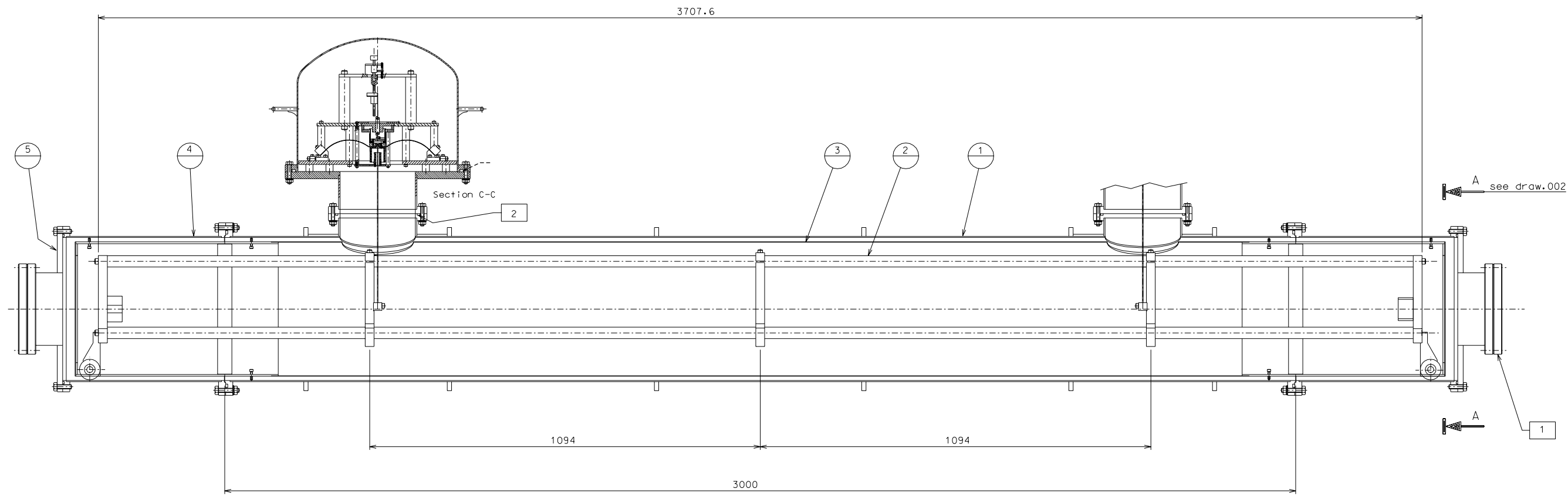
By market

- 3 OR 81800 n°2 pc
- 4 Stepping motor Type Vexta PK 264-01B
- 5 Bunting NEB 3590 n°16 pc
- 6 OR 61600 n°2 pc
- 7 OR 81650 n°2 pc
- 8 Pneurop DN 40 KF n°2 pc
- 9 DN 100 ISO-K n°4 pc

ref.	note	date	signature
modifications			

42	016	Spacer			
41	023	Torque rod			
40	026	Nut	60	025	column's LVDT
39	023	Screw	59	022	LVDT primary
38	023	Motor flange	58	022	LVDT secondary
35	023	Column support	57	022	1/2 cup retainer
14	014	Thermal shield end pipe	55	022	Spring holder
13.1	016	Thermal cap	54	022	Spring clamp
13	016	Thermal cap	52	022	Coil spool
12	015	Vacuum collar	51	025	Safety ring
11	018	Sliding clamp	50.1	026	Magnet
10	018	Clamp cover	50	026	Magnet
9	018	Compression block	49	016	Support plate magnet
8	016	Load disk	46	010	1/2 cup
7	017	Suspension blade	44	016	Spacer
6	020	Vacuum bell	43	021	Inner big plate
ref.	draw.	added legend	ref.	draw.	added legend

	LIGO PROJECT	designed for R. De Salvo
	LASER	draw. by PROMEC
PARTIAL ASSEMBLY		ass. numb. Laser.001
		date 17-03-04
		scale 1:4 Issue A
		replaces draw. n° A 1



By market

- 1 Flange DN 200 n°2 pc
- 2 OR 6870 n°2

5	013	Vacuum end flange		
4	012	Vacuum spool		
3	012	Main heat shield		
2	012	Invar rod		
1	011	Main vacuum pipe		
ref.	draw.	added legend	ref.	draw.

ref.	note	date	signature
modifications			

	LIGO PROJECT		designed for R. De Salvo
	LASER		draw. by PROMEC
GENERAL ASSEMBLY		ass. numb. LASER-000	date 12-02-04
		scale 1:6	issue A
		replaces draw. n°	A 1