

GOJKO MAGAZINVIĆ

KONSTRUIRANJE POMOĆU RAČUNALA 1

Uvod u predmet

Zavod za strojarstvo i brodogradnju

Fakultet elektrotehnike, strojarstva i brodogradnje
Sveučilište u Splitu



Ciljevi

- ❑ Steći sposobnost objašnjavanja temeljnih pojmova i načela konstruiranja značajkama, parametarskoga i geometrijskog modeliranja
- ❑ Steći temeljne vještine modeliranja jednostavnih modela i sklopova primjenom računalnoga programa *Creo Parametric 3.0*
- ❑ Steći temeljne vještine izradbe jednostavnih nacрта primjenom računalnoga programa *Creo Parametric 3.0*

Osoblje

- Predavanja: prof. dr. sc. Gojko Magazinović

Soba: C606

E-pošta: gmag@fesb.hr

Tel. 305-966

Primanja: srijedom, 12:15-13:00

- Vježbe: Eni Turudić, mag. ing. industr.

E-pošta: eturud00@fesb.hr

i

Ante Barbir, mag. ing. mech.

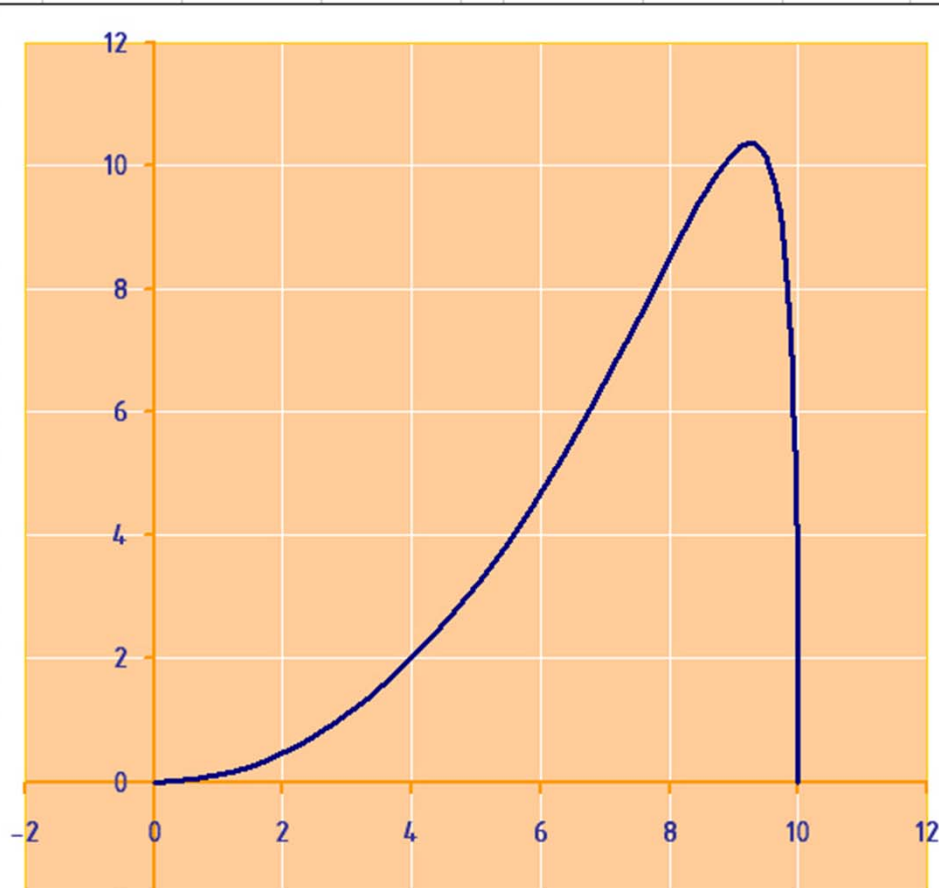
E-pošta: abarbir@fesb.hr

Temeljni pojmovi i načela

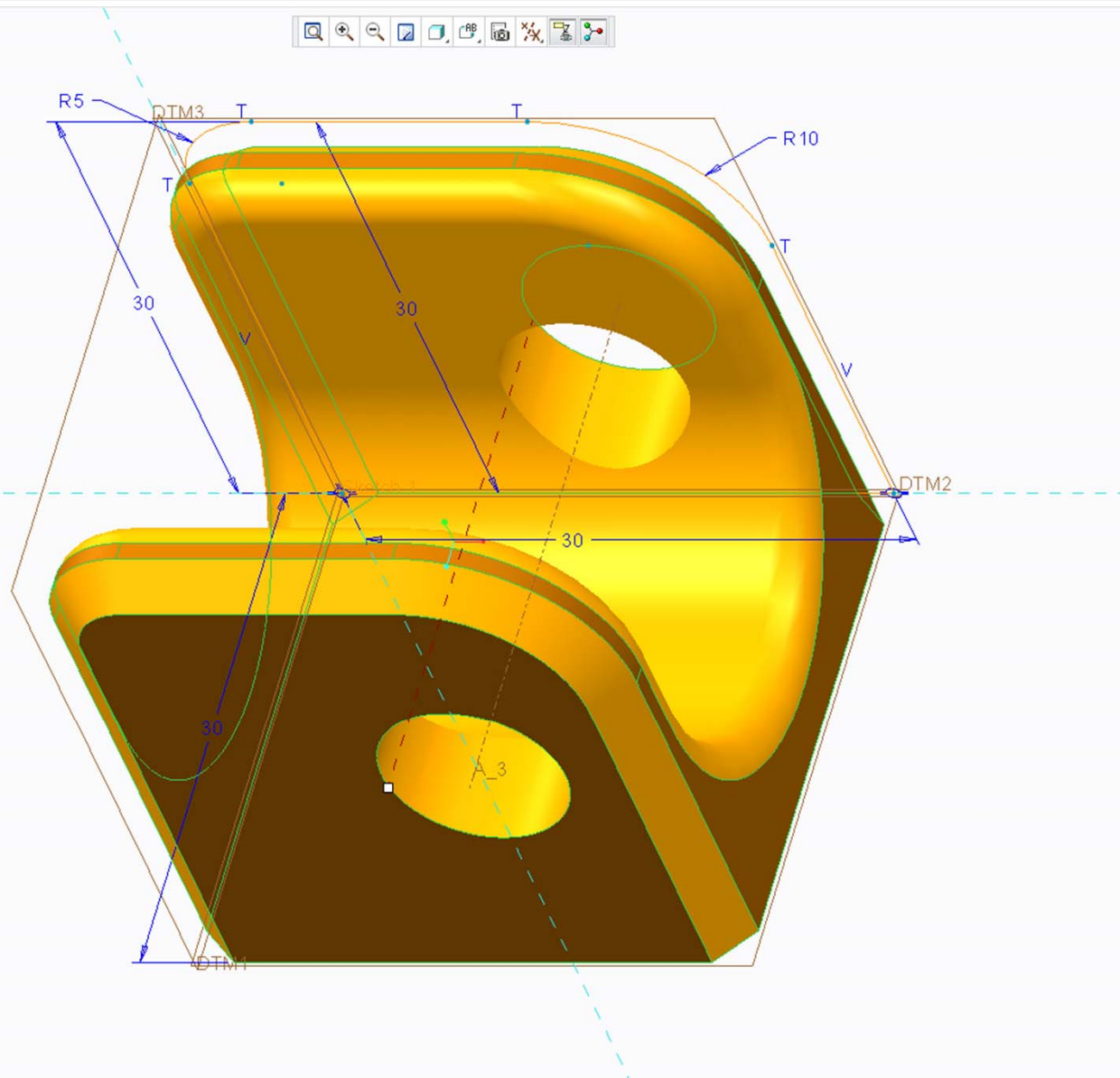


Matematičko opisivanje krivulja i ploha

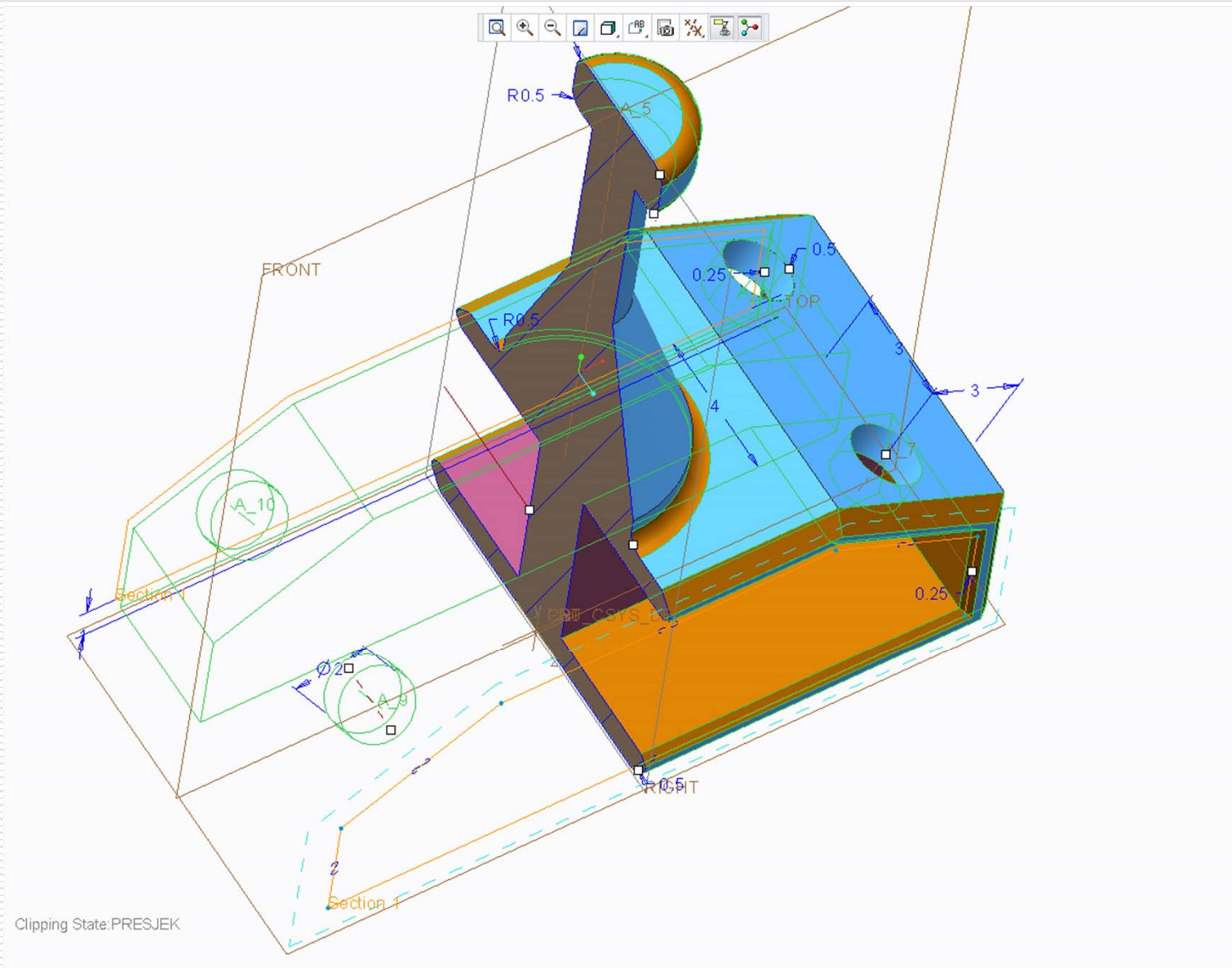
	A	B	C	D	E	F	G	H	I
1	Hermiteova krivulja								
2									
3		P0	P1	P0'	P1'				
4	x	0	10	25	0				
5	y	0	0	0	-70				
6									
7	u	fm1	fm2	fm3	fm4	x(u)	y(u)		
8	0.00	1.0000	0.0000	0.0000	0.0000	0.00	0.00		
9	0.05	0.9928	0.0073	0.0451	-0.0024	1.20	0.17		
10	0.10	0.9756	0.0244	0.1702	-0.0096	2.40	0.68		
11	0.15	0.9484	0.0516	0.3805	-0.0240	3.60	1.50		
12	0.20	0.9112	0.0788	0.5708	-0.0456	4.80	2.63		
13	0.25	0.8640	0.1060	0.7411	-0.0720	6.00	4.07		
14	0.30	0.8068	0.1332	0.8914	-0.1032	7.20	5.82		
15	0.35	0.7396	0.1604	1.0217	-0.1392	8.40	7.88		
16	0.40	0.6624	0.1876	1.1320	-0.1800	9.60	10.25		
17	0.45	0.5752	0.2148	1.2223	-0.2256	10.80	12.94		
18	0.50	0.4780	0.2420	1.2926	-0.2760	12.00	15.96		
19	0.55	0.3708	0.2692	1.3429	-0.3312	13.20	19.32		
20	0.60	0.2536	0.2964	1.3732	-0.3912	14.40	23.03		
21	0.65	0.1264	0.3236	1.3835	-0.4560	15.60	27.10		
22	0.70	0.0000	0.3508	1.3738	-0.5256	16.80	31.54		
23	0.75	0.0000	0.3780	1.3441	-0.6000	18.00	36.35		
24	0.80	0.0000	0.4052	1.2944	-0.6792	19.20	41.54		
25	0.85	0.0000	0.4324	1.2247	-0.7632	20.40	47.12		
26	0.90	0.0000	0.4596	1.1350	-0.8520	21.60	53.10		
27	0.95	0.0000	0.4868	1.0253	-0.9456	22.80	59.49		
28	1.00	0.0000	0.5140	0.8956	-1.0440	24.00	66.30		
29									
30									
31									
32									



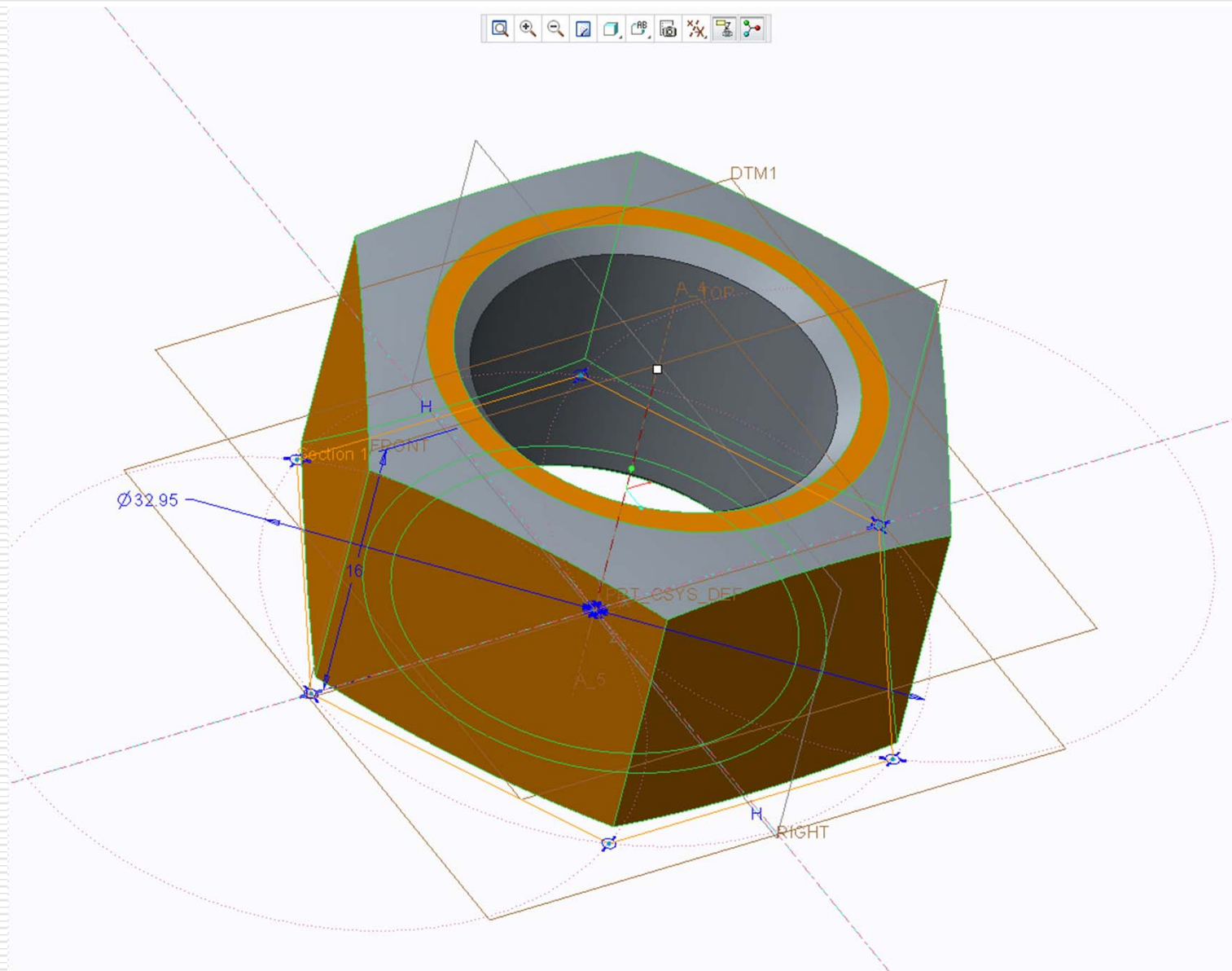
Geometrijsko modeliranje – tvorba modela



Geometrijsko modeliranje – presjek modela



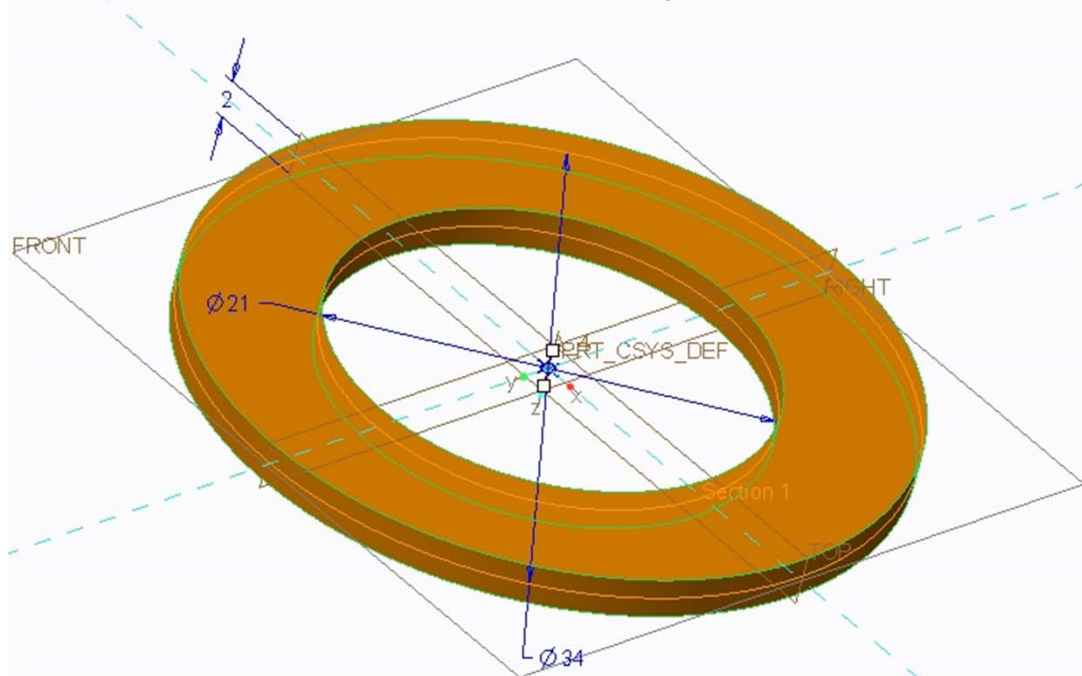
Geometrijsko modeliranje – konstrukcija modela



Razmjena podataka – neutralni zapis

podloska_21mm

```
1 ISO-10303-21;  
2 HEADER;  
3 FILE_DESCRIPTION('', '2;1');  
4 FILE_NAME('PODLOSKA_21MM', '2013-12-02T', (  
    ER BY PARAMETRIC TECHNOLOGY CO  
    ER BY PARAMETRIC TECHNOLOGY CO  
    ('CONFIG_CONTROL_DESIGN')));
```

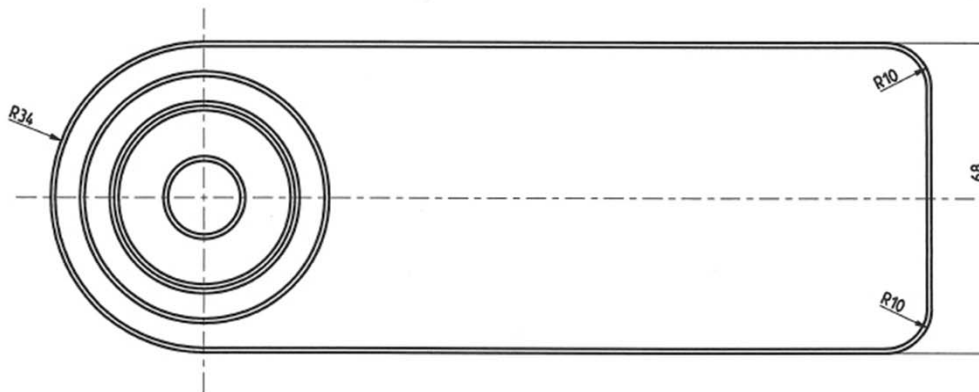
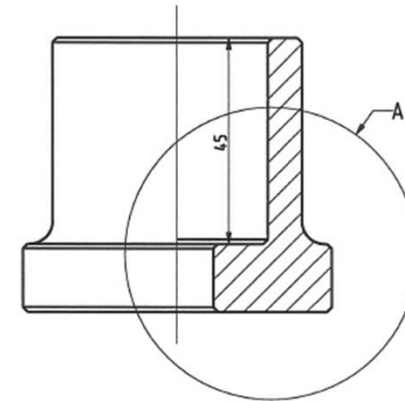
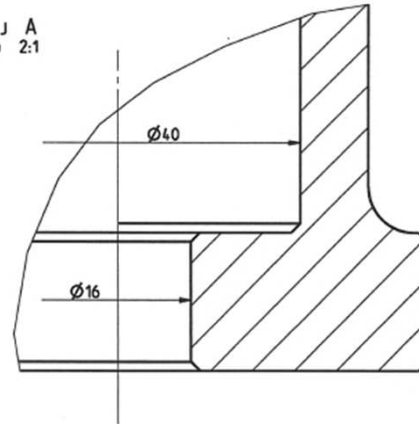
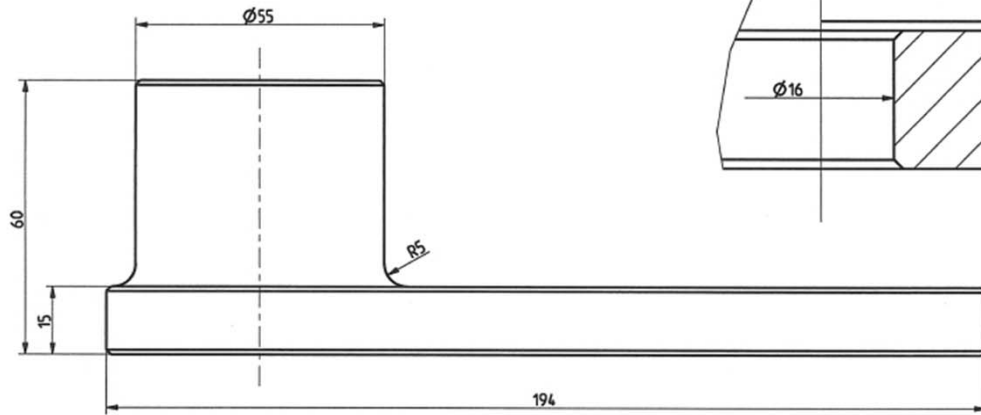


```
5 _POINT('', (0.E0, 0.E0, -1.E0));  
6 _POINT('', (0.E0, 0.E0, -1.E0));  
7 _POINT('', (1.E0, 0.E0, 0.E0));  
8 _AXIS2_PLACEMENT_3D('', #2, #3, #4);  
9 _POINT('', (0.E0, 0.E0, -1.E0));  
10 _POINT('', (0.E0, 0.E0, -1.E0));  
11 _POINT('', (-1.E0, 0.E0, 0.E0));  
12 _AXIS2_PLACEMENT_3D('', #7, #8, #9);
```

```
18 #12=CARTESIAN_POINT('', (0.E0, 0.E0, -1.E0))  
19 #13=DIRECTION('', (0.E0, 0.E0, 1.E0));  
20 #14=DIRECTION('', (1.E0, 0.E0, 0.E0));  
21 #15=AXIS2_PLACEMENT_3D('', #12, #13, #14);  
22 #17=CARTESIAN_POINT('', (0.E0, 0.E0, -1.E0))
```

Jednostavni nacrt

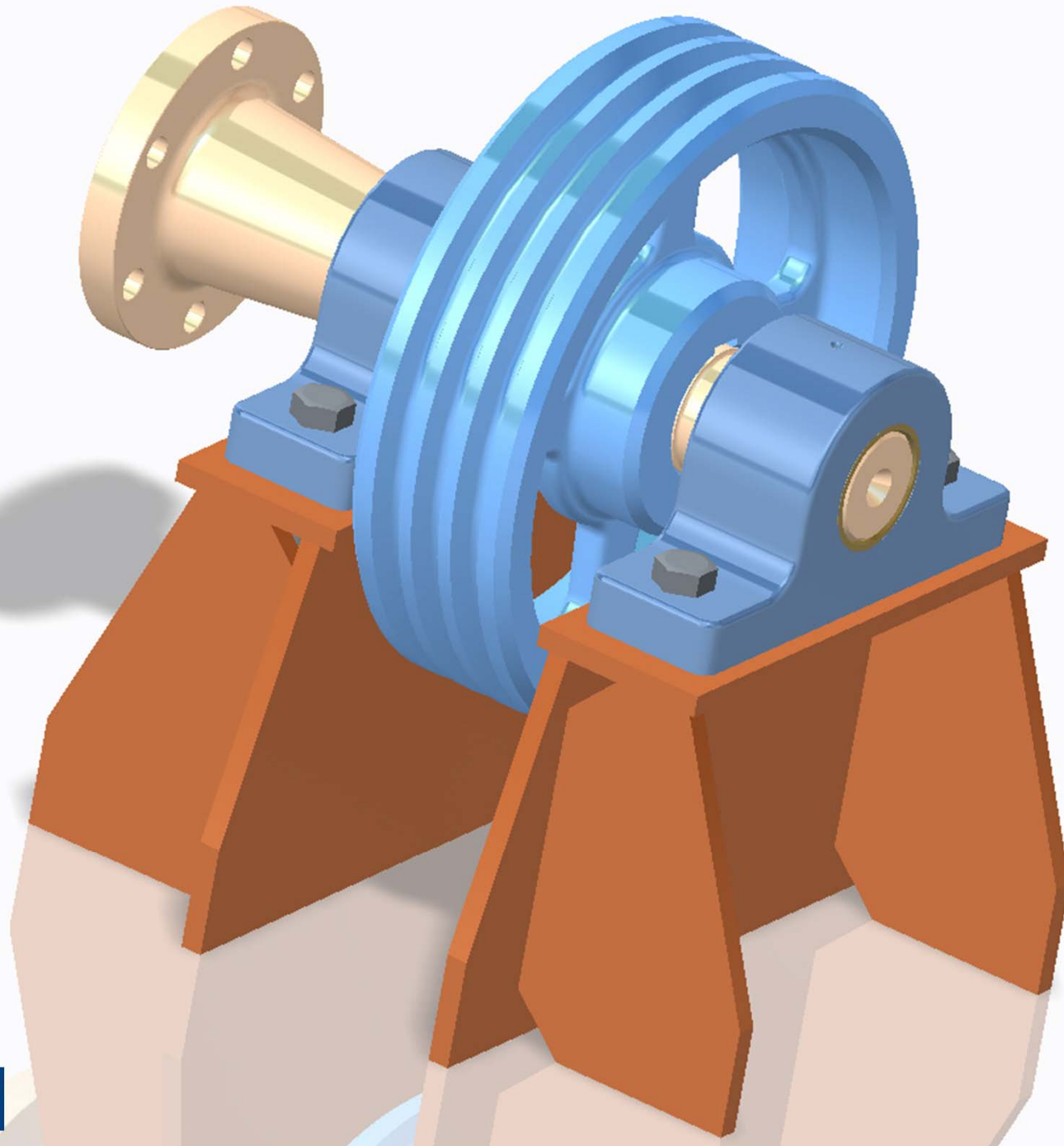
DETALJ A
Mjerilo 2:1



Napomena:
Sve oštre rubove skositi s 1/45°

Datum	Ime i prezime	Polpis	Sveučiliste u Splitu FESB, Split
Projektirao 10-05-29	GMag		
Razradio 10-05-29	GMag		
Crtao 10-05-29	GMag		
Pregledao 10-05-29			
Objekt: Kolokvij		Objekt broj: 1	
		R.N. broj: 1	
Napomena:			Primjerak
Materijal: SL14		Masa: 1.839	
Mjerilo: 1:1		Naziv: Zadatak_1	
		Pozicija: 1	
		Format: A3	
		Listova: 1	
		List: 1	

0 10 20 30 40 50 60 70 80 90 100



Sretno!

