



Puspresnas
Pusat Prestasi Nasional

KISI-KISI DAN SOAL-SOAL

**LOMBA KOMPETISI SISWA (LKS)
TINGKAT NASIONAL XXIX
TAHUN 2021**



BIDANG LOMBA

Teknik Pencetakan Plastik
Plastic Die Engineering





KISI – KISI

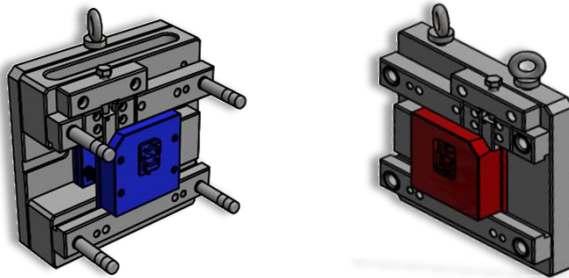
PLASTIC DIE ENGINEERING

LKS SMK
TINGKAT NASIONAL
2021

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI
PUSAT PRESTASI NASIONAL

JL. JENDERAL SUDIRMAN GEDUNG C LT.19
SENAYAN - JAKARTA

**LOMBA KOMPETENSI SISWA
(DARING)
SEKOLAH MENENGAH KEJURUAN
TINGKAT NASIONAL KE- XXIX**



SOAL

**BIDANG LOMBA
PLASTIC DIE ENGINEERING**

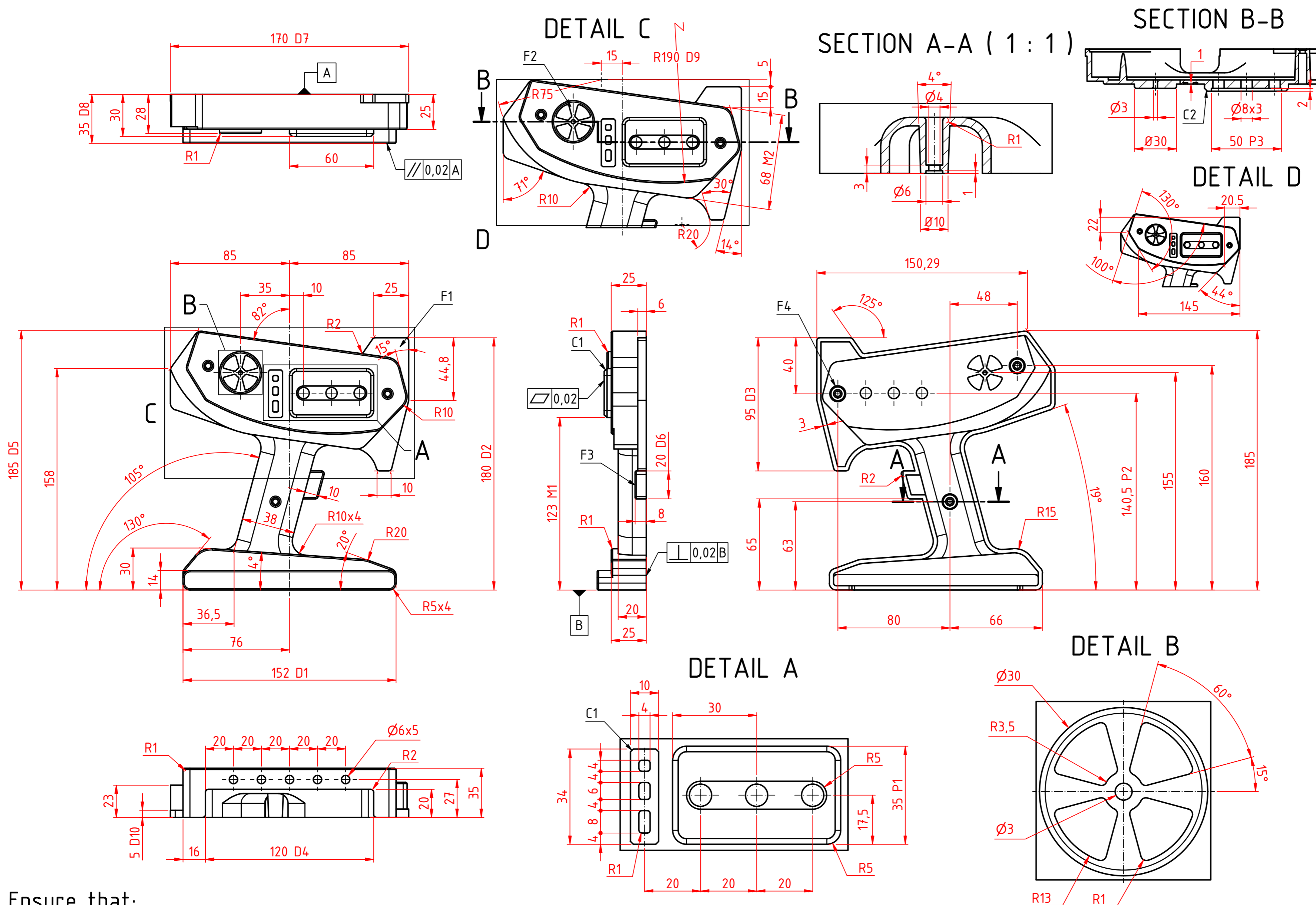


KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI

PUSAT PRESTASI NASIONAL

JL. JENDERAL SUDIRMAN GEDUNG C LT.19

SENAYAN - JAKARTA



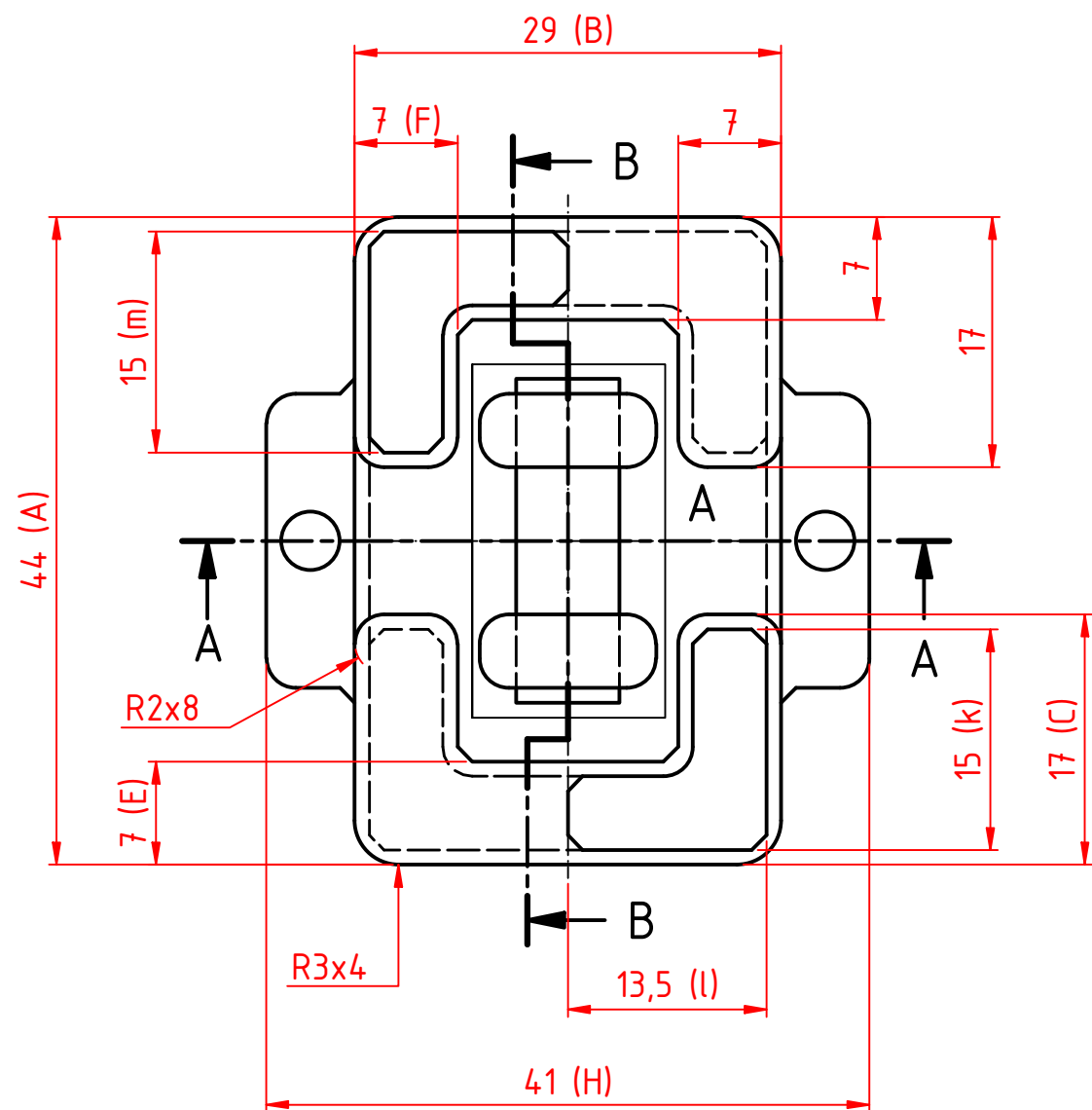
Ensure that;

1. The moulding compound is polystyrene (shrinkage approx. 0.5%).
2. There are no burrs on the product (molded compound).
3. There are no cutter marks of machining on the surface of the product (molded part).
4. There are no scratches,dents,etc on the surface of the product (molded compound).
5. There are no defective moldings such as flow marks,weld line,burns,etc.
6. Step of ejector pin marks are within 0.1. (Protrusions are not allowed).

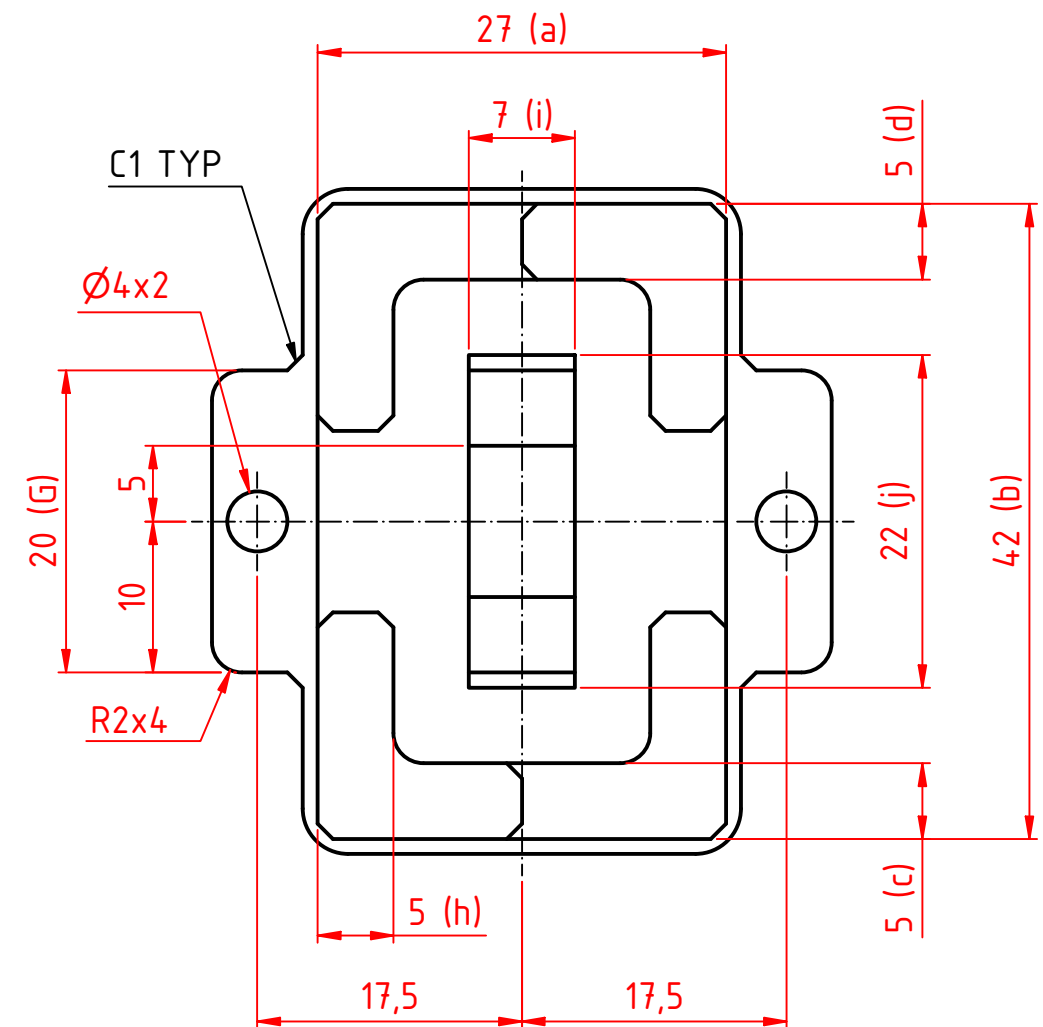
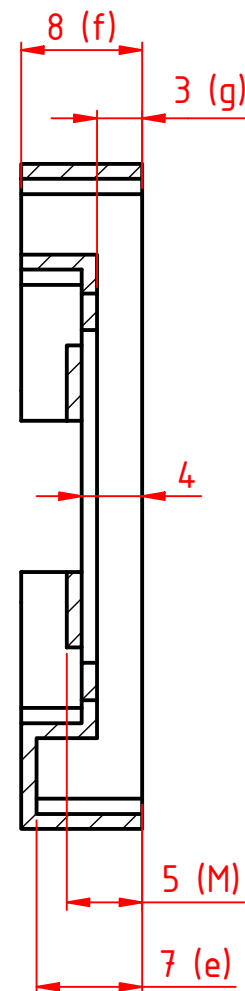
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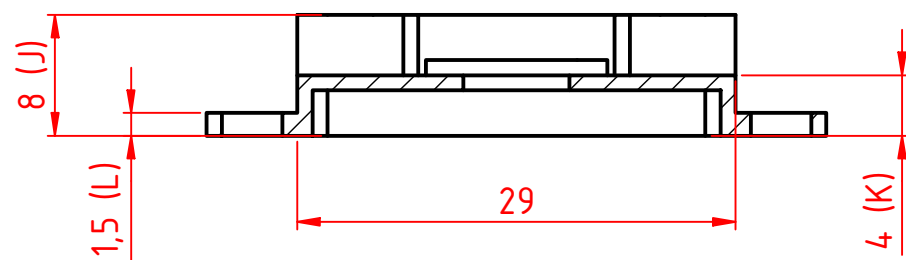
Skill : Plastic Die Engineering			Projection A	
Scale : 1 : 2	Date : 15 May 2021	Paper : A2	ISO 5456-2	
Drawn / Design by : HAFID			Drawing No: -	
Description : Product Design			Rev:	Page:



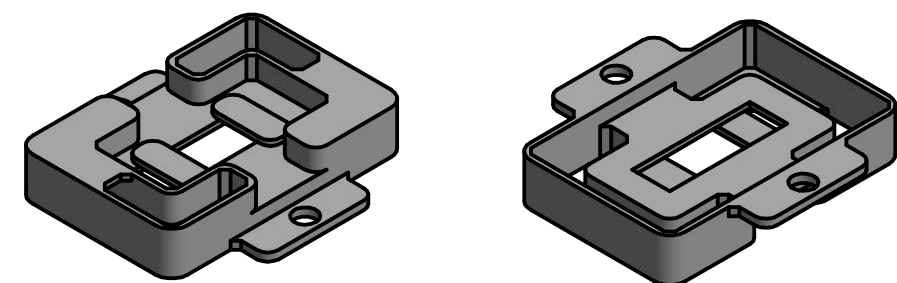
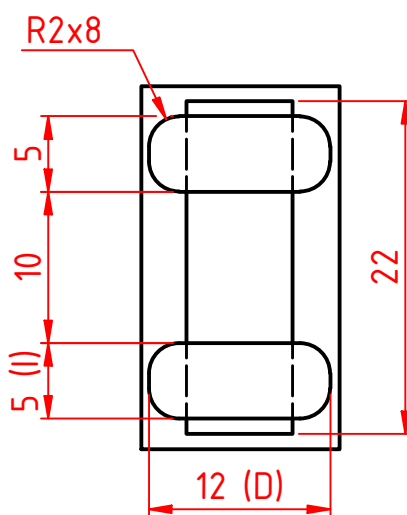
SECTION B-B



SECTION A-A



DETAIL A-A



3D VIEW

Ensure that;

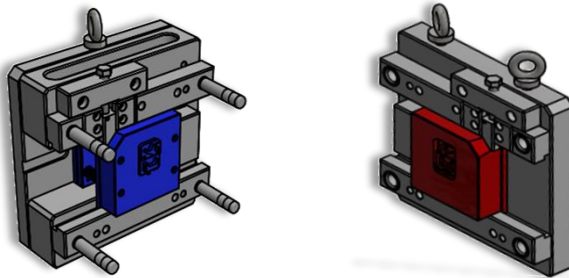
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Skill : Plastic Die Engineering			Projection A	
Scale : 2 : 1	Date : 12-05-2021	Paper : A3	ISO 5456-2	
Drawn / Design by : HAFID			Drawing No: -	
Description : MANUFACTURING			Rev:	Page:

**LOMBA KOMPETENSI SISWA
(DARING)
SEKOLAH MENENGAH KEJURUAN
TINGKAT NASIONAL KE- XXIX**



**CONTOH
Pengerjaan Soal**

BIDANG LOMBA

PLASTIC DIE ENGINEERING



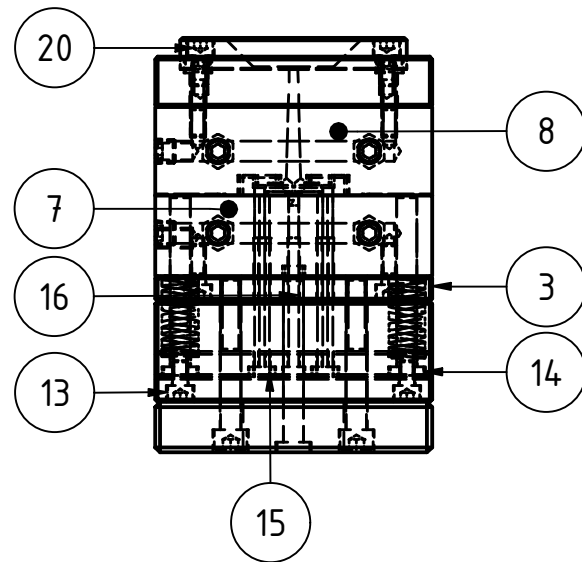
KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI

PUSAT PRESTASI NASIONAL

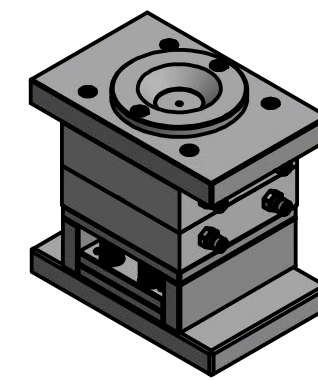
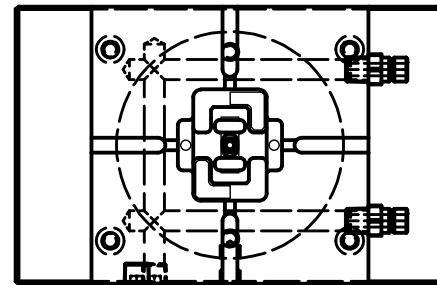
JL. JENDERAL SUDIRMAN GEDUNG C LT.19

SENAYAN - JAKARTA

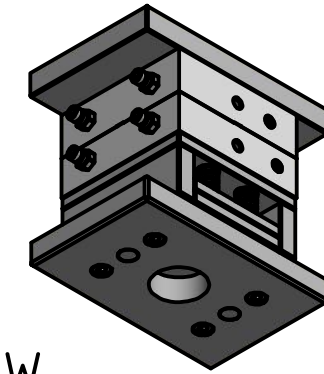
ASSY SIDE VIEW



CAVITY TOP VIEW



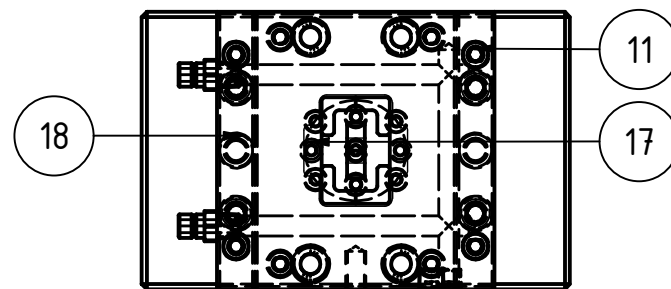
3D VIEW



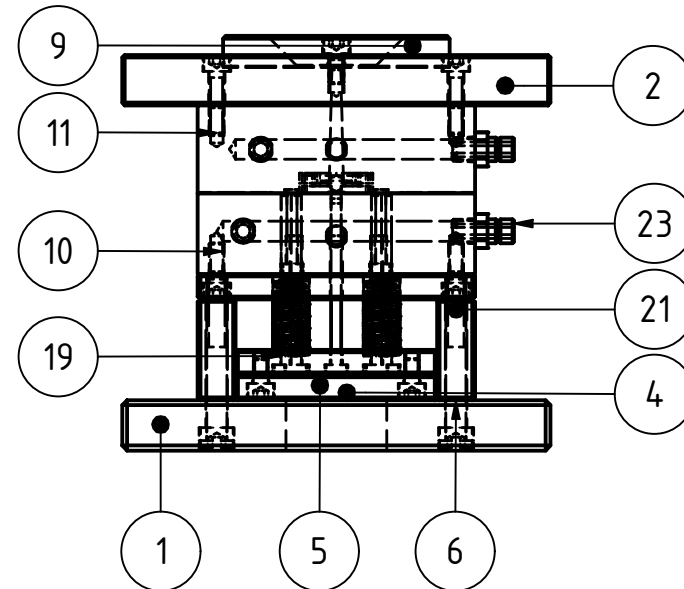
PARTS LIST

ITEM	PART NUMBER	SIZE	MATERIAL	QTY
1	ADAPTOR BASE	70x110x20	Generic	1
2	ADAPTOR CAVITY	70x110x20	Generic	1
3	CORE BACK PLATE	110x110x10	Generic	1
4	EJECTOR RETAINER PLATE	110x110x10	Generic	1
5	RETAINER PLATE	110x110x10	Generic	1
6	STRIPER	110x15x40	Generic	2
7	Mold Design1_Part7_CR_1	110x110x40	Generic	1
8	Mold Design1_Part7_CV_1	110x110x35	Generic	1
9	locating ring	Dia 90	Generic	1
10	BOLT	ISO 4762 - M6 x 16	Stainless Steel, 440C	4
11	BOLT	ISO 4762 - M6 x 25	Stainless Steel, 440C	4
13	BOLT	ISO 4762 - M6 x 10	Stainless Steel, 440C	4
14	Ejector 1	Ejector Pin Dia 4	Generic	8
15	ejector 2	Ejector Pin Dia 4	Generic	2
16	ejector lock	Z Pin Dia 4	Generic	1
17	Core Pin	Dia 4 x 33,47	SKD61	2
18	Pin Stripper	Ejector Pin Dia 8	Generic	2
19	SPRING	358-16-32	Generic	4
20	BOLT	ISO 4762 - M6 x 12	Stainless Steel, 440C	2
21	BOLT	ISO 4762 - M8 x 60	Stainless Steel, 440C	4
22	"AN-8"	Plug 1/8 BSPT	Copper,Cu	2
23	"JPJH1"	Connector 1/8 BSPT	C 3604	4

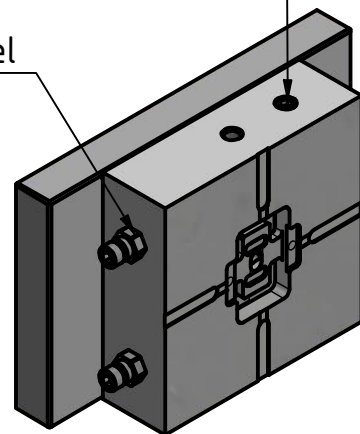
CORE TOP VIEW



ASSY FRONT VIEW

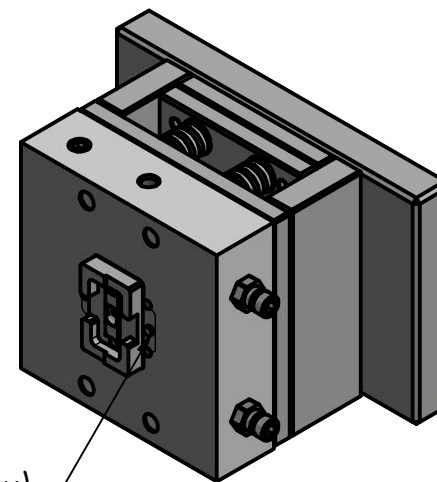


Colling Channel



CAVITY VIEW

Core Pin (2x)



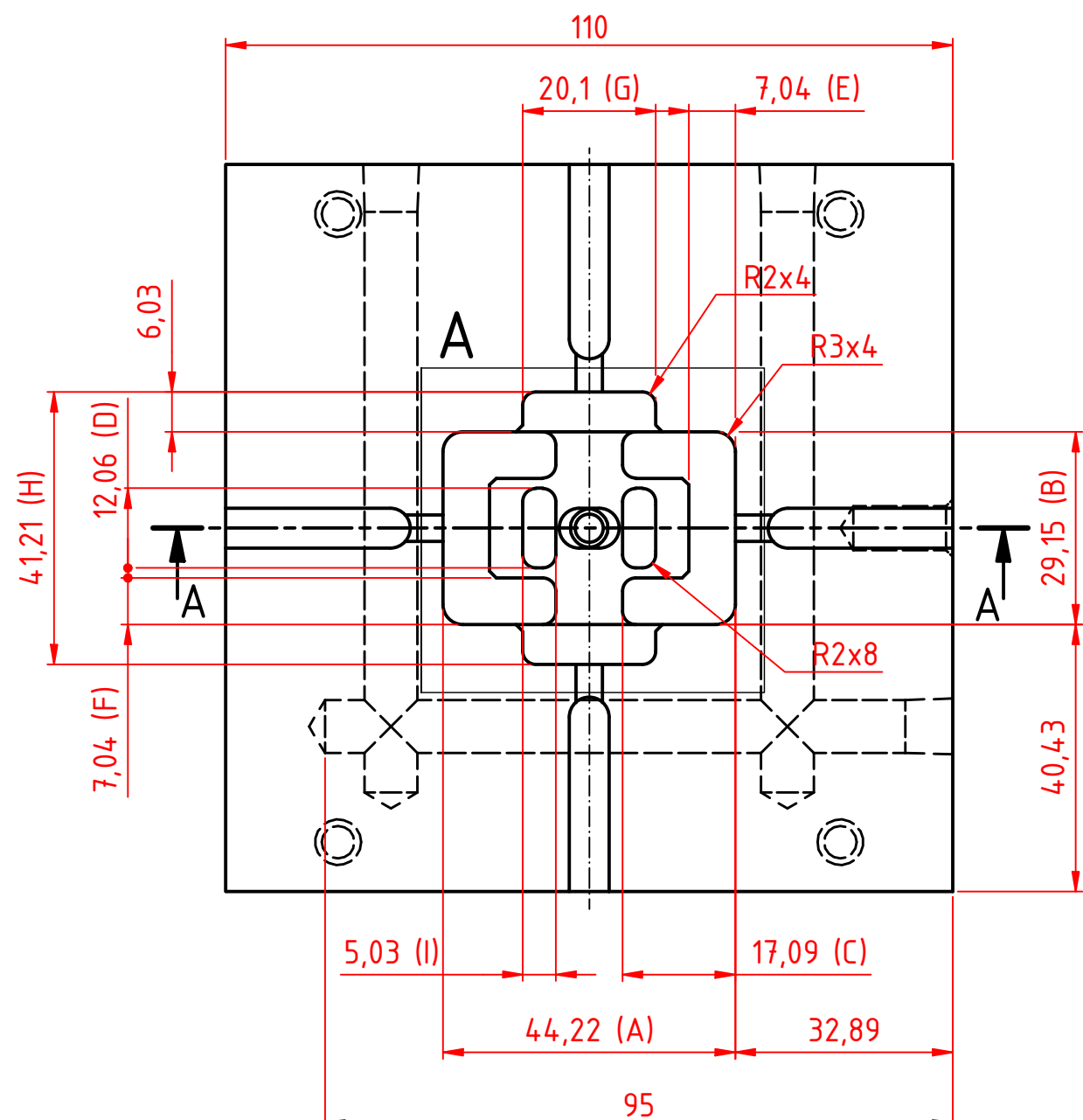
CORE VIEW

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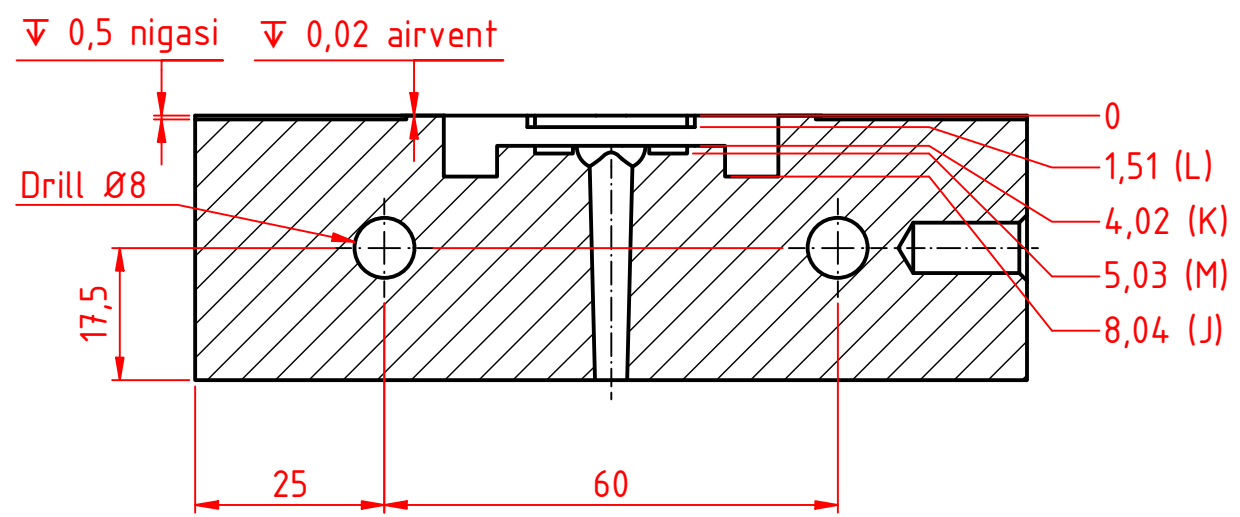
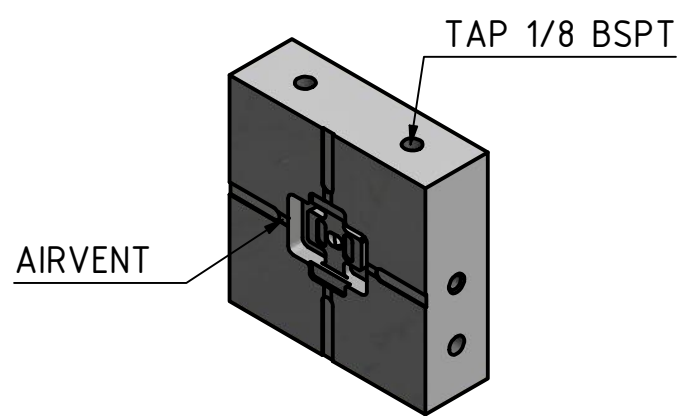
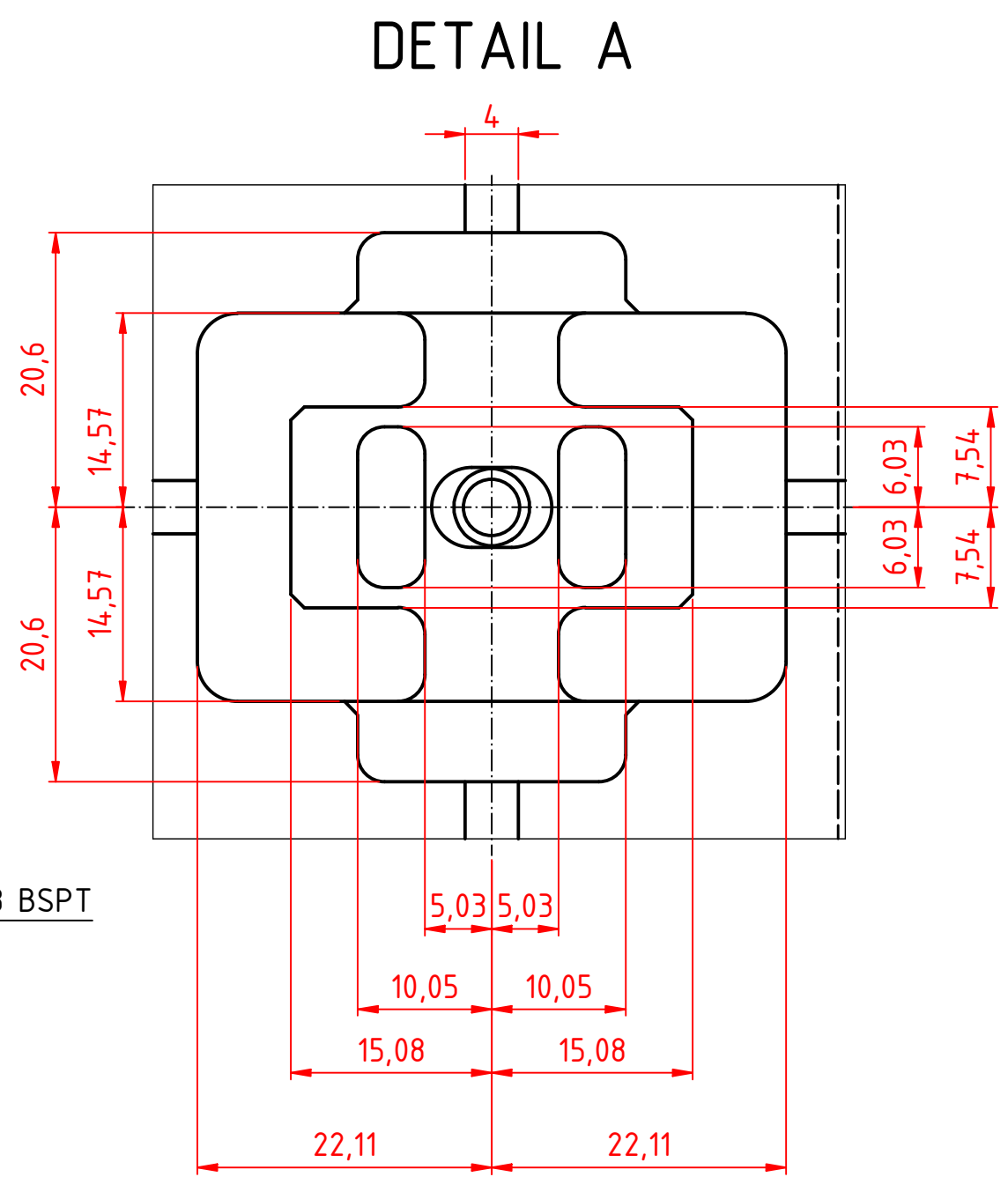
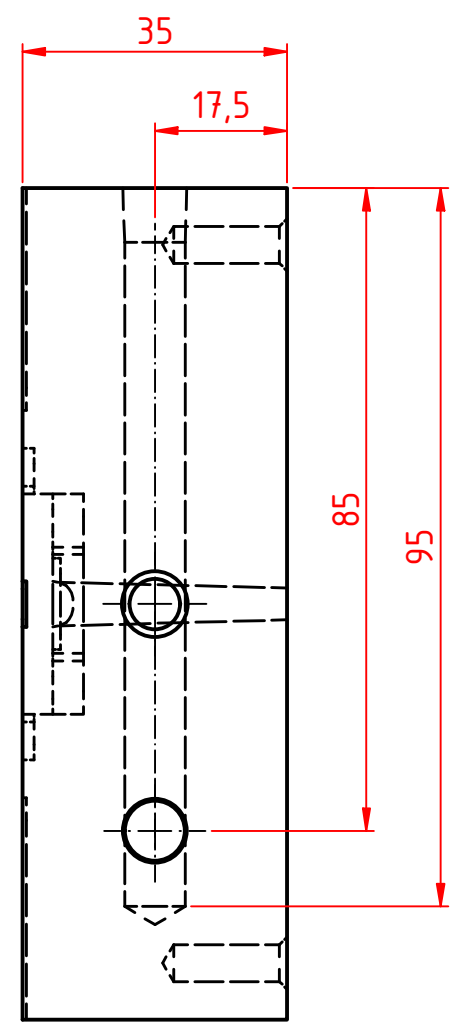


LKS SMK

Skill : Plastic Die engineering		Projection A		
Scale: 1:3	Date: 17-05-2021	Paper: A3	ISO 5456-2	
Drawn / Design by: HAFID			Drawing No: -	
Description: ASSEMBLY			Rev:	Page: 1/3



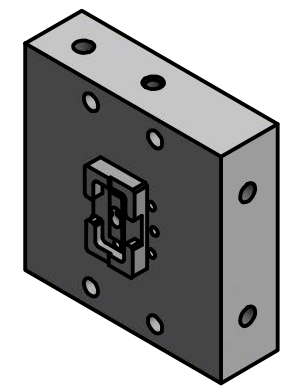
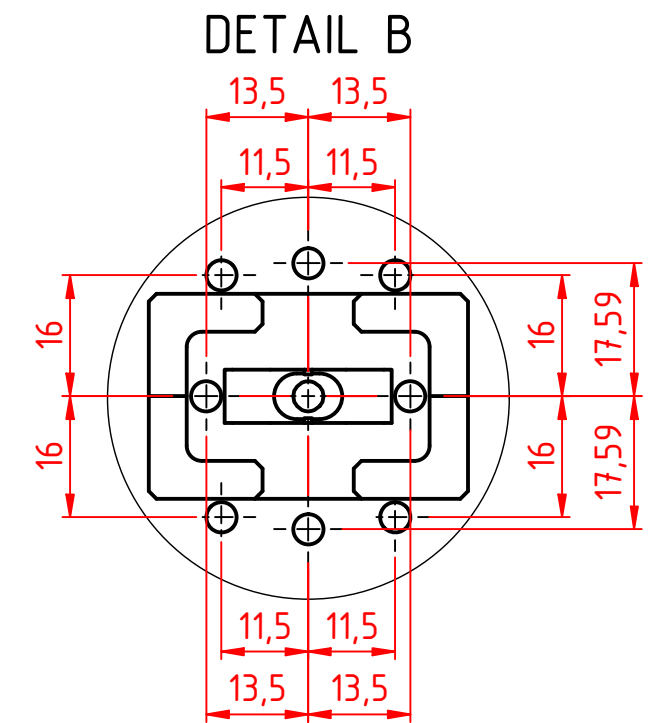
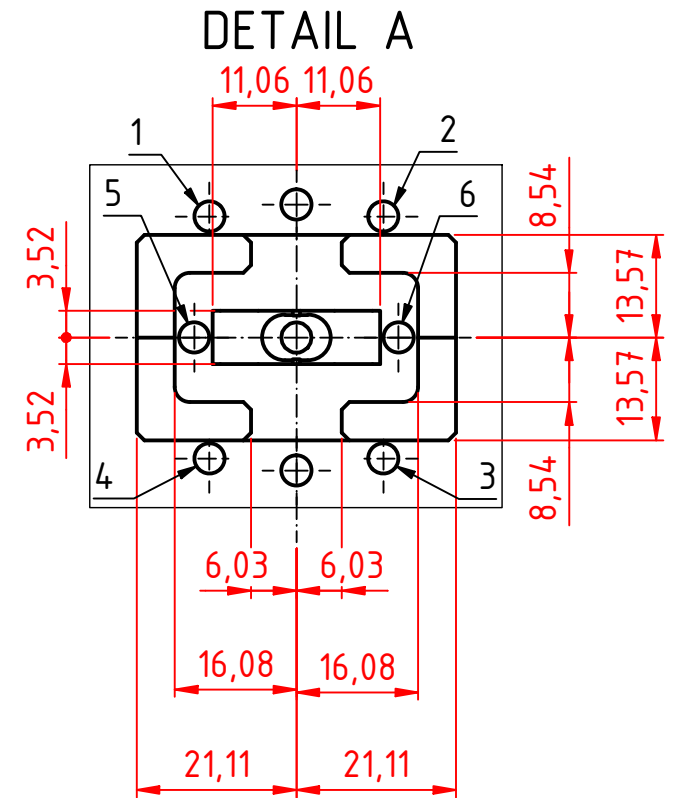
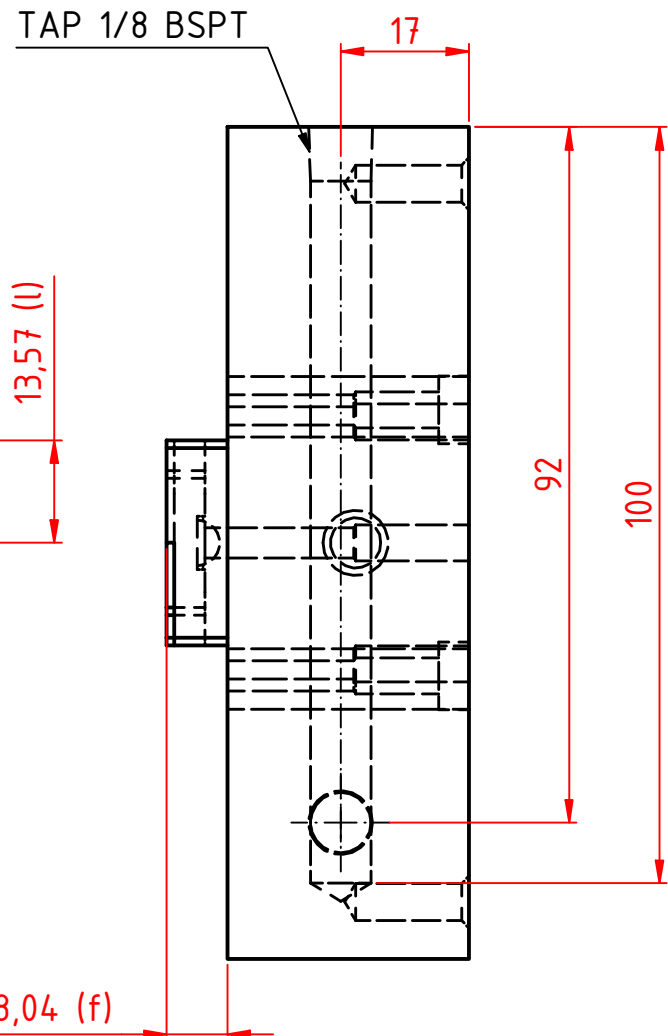
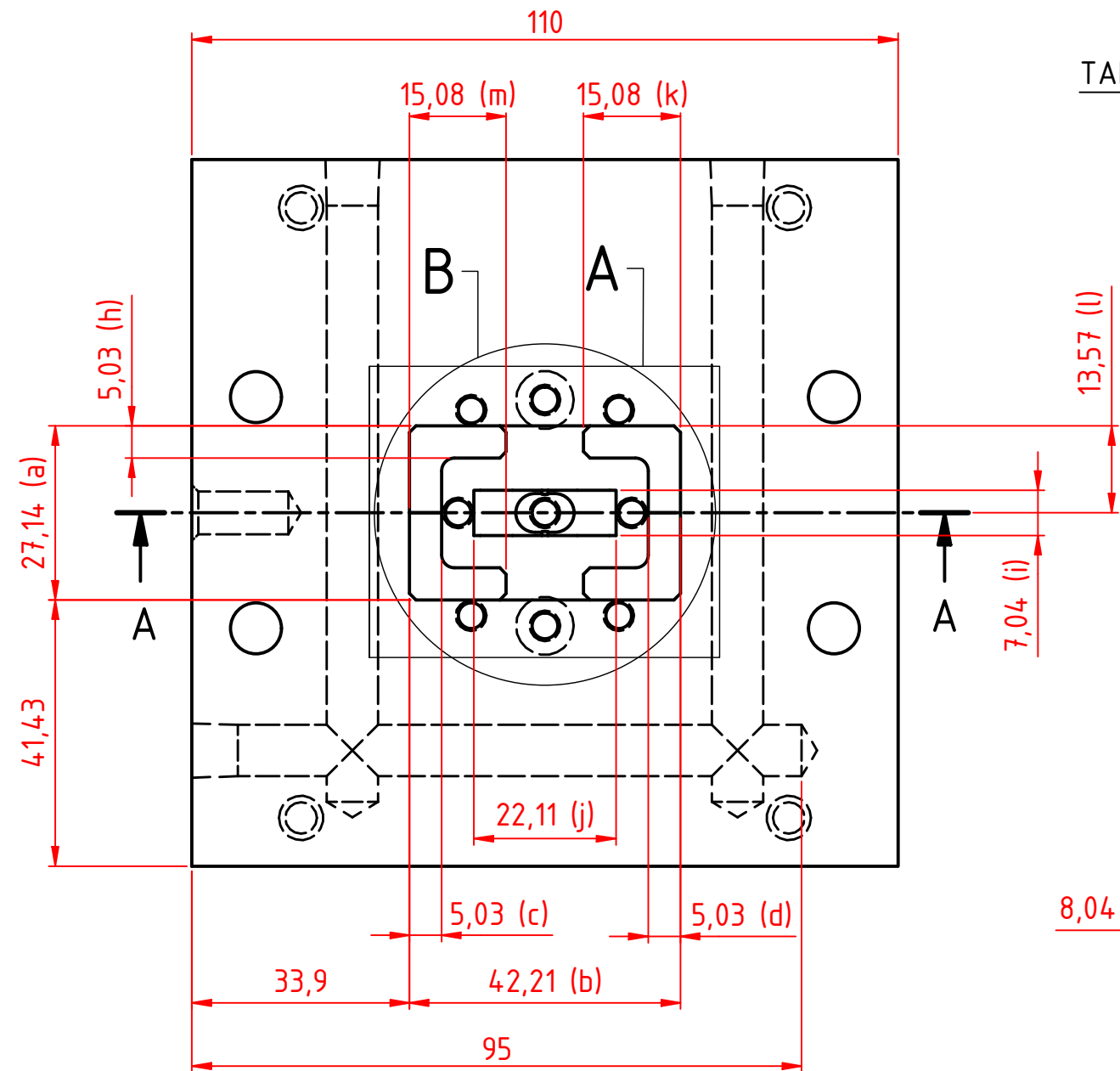
SECTION A-A



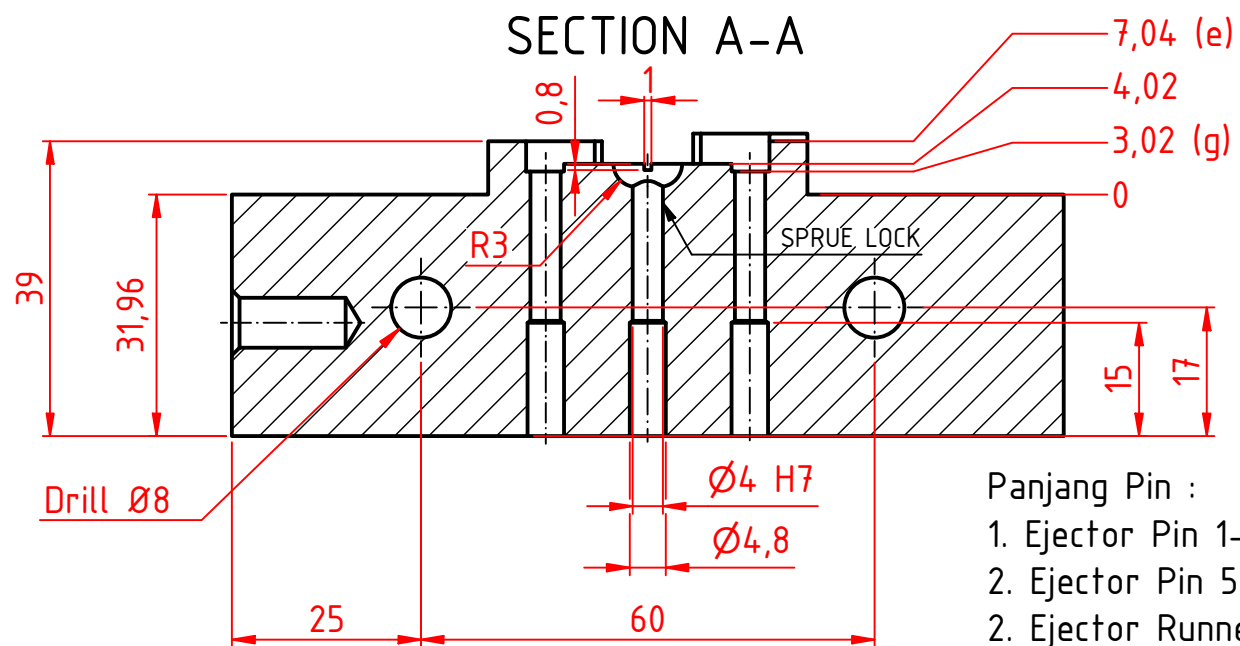
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LKS SMK

Skill : Plastic Die engineering			Projection A	
Scale: 1:3	Date: 17-05-2021	Paper: A3	ISO 5456-2	
Drawn / Design by: HAFID			Drawing No: -	Page: 3/3
Description: CAVITY MOLD			Rev:	



SECTION A-A



Panjang Pin :

1. Ejector Pin 1-4 = 71.960 (4x)
2. Ejector Pin 5-6 = 74.975 (2x)
2. Ejector Runner = 70 (1x)
3. Core Pin = 33.468 (2x)
4. Return Pin = 71 (4x)

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Skill : Plastic Die engineering

Scale: 1:3

Date: 17-05-2021

Paper: A3

Drawn / Design by: HAFID

Description: CORE MOLD

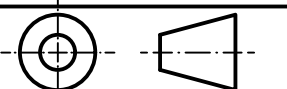
Projection A

ISO 5456-2

Drawing No: -

Rev:

Page: 2/3





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PUSAT PRESTASI NASIONAL

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