

202 版

二〇二一年八月

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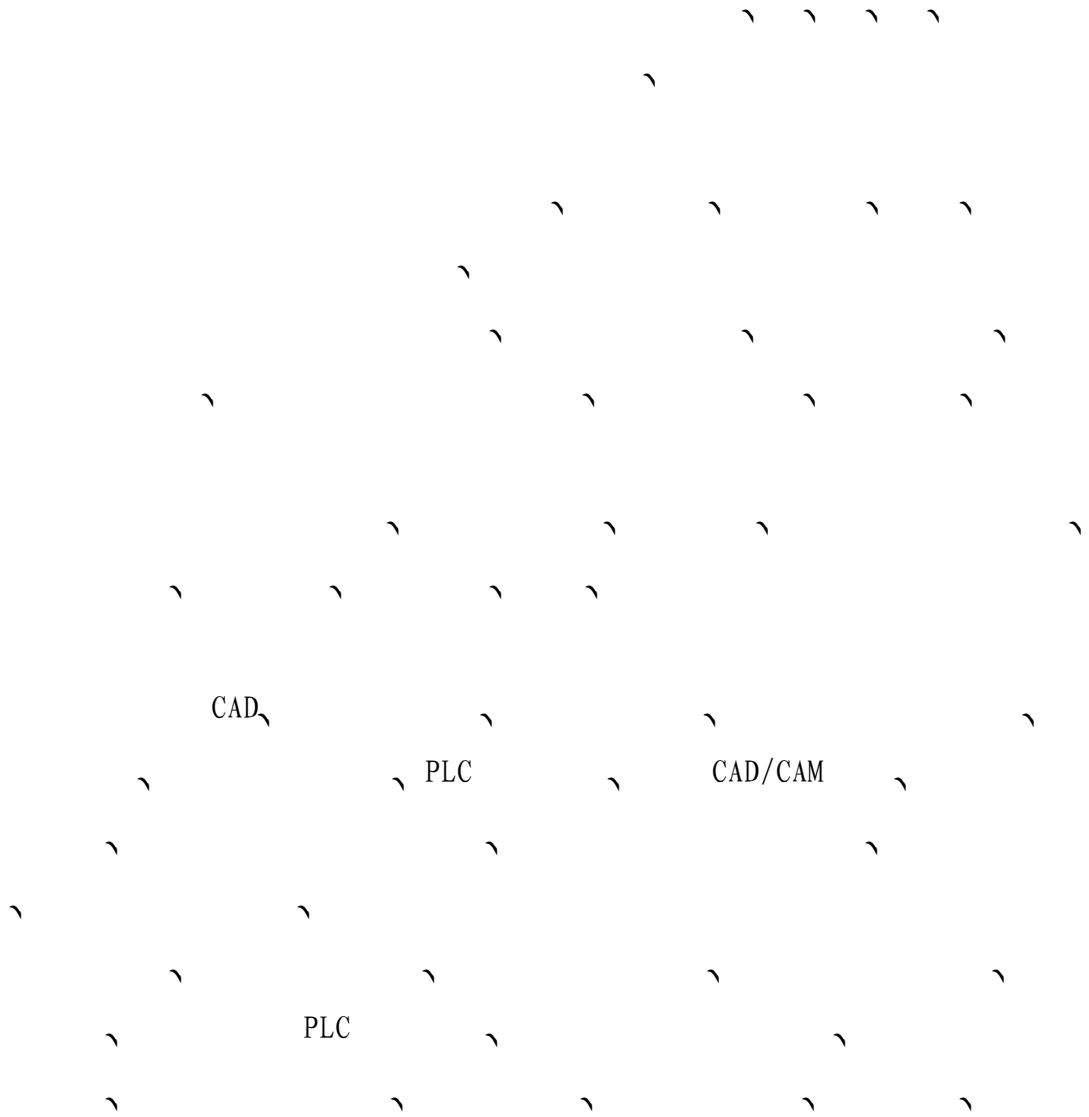
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460301

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	4603
	34 43
	2-02-07-04 6-31-01

	1. UG * 2. * 3. * 4. * 5. 1+X 6. 1+X 7. 1+X

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6. 1-2

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1. \

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3. \

4. \ \ \ \ \ PLC

5. CAD/CAM, \ \ \ \

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\ 1+X

9. \ \

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3	*	∩	
4	*	∩	
5	1+X	∩	
6	1+X	∩	
7	1+X	∩	

*

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	2.	2.	2.
	3.	3.	3.
	4.	4.	4.

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	1. ↘ 2. 3.	1. ↘ 2. 3.	1. 2. 3. 4.
	1. 2. 3.	1. 2. 3.	1. 2. 3.
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A1

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↘ 3 48

1.	1.	1.
2. ↘ ↘	1. ↘ ↘ 2. ↘ ↘ ↘ 2. ↘ ↘ ↘	2.

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A2

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1. ˘ ˘ ˘	1. ˘	1. ˘
2. ˘ ˘	2. ˘ 21	2.

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A3

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1.	1.	1.
2.	2.	2.

A4, A5, A6, A7

+ +

6 96

1.	1.	1.
2.	2.	2.
3.	3.	3.

A8

1.	1.	1.
2.	2.	2.
	3.	

A9

2 36

1. ; 2. ,	1. 2. 3. , ; 4. 5.	1. 2. 3. 4.

A10, A11

2 32

1. 2.	1. 2.	1. 2.

<p>3.</p> <p>4.</p>	<p>3.</p> <p>4.</p>	<p>3.</p>
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A12

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

- 1.
- 2.
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- 6.

- 1.
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- 6.

A13

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1. 2. 3.	1. ` ` 2. 3. ` ` 4.	1. 2. 3.

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Matlab

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A16, A17

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1. 2. 3.	1. ` ` ` 2. ` ` ` ` `	1. ` ` 2. ` ` 3. `

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A18, A19

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˘ 4 ˘ 64

+

A20

2 32

1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
	5.	5.
		6.

Windows

win10

win7

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Office

WPS

word, excel, PowerPoint

A21

1 18

1.	1.	1.
2.	2.	2.

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A22, A23

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2 36

1.	1.	1.
2.	~	~ ~
3.	2.	2. ~ ~ ~

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5.		

2.

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CAD,

PLC

B1

1.	1.	1.
2.	2.	2.
3.	3.	3.

✓	4.	4. ✓
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B2

CAD

4.5

84

1. ✓	1. ✓	1. ✓
2. ✓	2. ✓	2. ✓
3. ✓	3. ✓	3. ✓
4. ✓	4. ✓	4. ✓
5. ✓	5. ✓	5. ✓
	6. ✓	6. ✓
	7. CAD	7. ✓

B3

4 75

1.	1.	1.
2.	2.	2.
	3.	3.
3.	4.	4.
4.	5.	5.
	6.	

B4

1.5 30

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1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.
13.	14.	15.
16.	17.	18.

1. 2. 3.
4. 5. 6.

7.	6.	4.
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B6

B7

4.5 78

1.	1.	1. CAD
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	
6.		

B8

1.	1.	1.
2.		2.
3.	2.	3.
4.	3.	4.
5.	4.	
6.		

B9 PLC

PLC

PLC

PLC

PLC

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<p>3.</p> <p>4.</p>	<p>4.</p> <p>5.</p> <p>6.</p> <p>7.</p> <p>8.</p>	<p>4. CAD</p> <p>CAD</p> <p>5.</p>
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CAD/CAM

C2

4 72

<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>	<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p>	<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>
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C3

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PLC

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5.	4.	4.
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C6

FMS

FMS

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56

1.	1.	1.
2.	2.	2.
3.	3. G, M	3.
4.	4.	4.
5.	5.	5.
6.	6.	6.
7.		

C7

MCS51

3 56

1.	1.	1.
2.	2. CPU	2. CPU /
3.	3. /	3.
4.	4.	4.
5.	5.	5.
6.	6. MCS-51	6. MCS-51
7.	7. /	7.
8.	8. A/D, D/A	8. A/D, D/A
	EDA	EDA

MCS51

MCS51

C8

1.	1.	1. PLC
2.	2.	2. PLC
3.	3.	3. PLC
4.	4.	4. PLC
5.	5.	5. PLC
6.		

protel

PCB

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CAXA

Pro/E

C

SolidWorks

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↖ CAD ↗

↖ PLC ↗

↖ UG ↗

E1

↖ 2 ↗

↖ 2 ↗

E2

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↖ 1 ↗

E3

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E4

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1 AutoCAD

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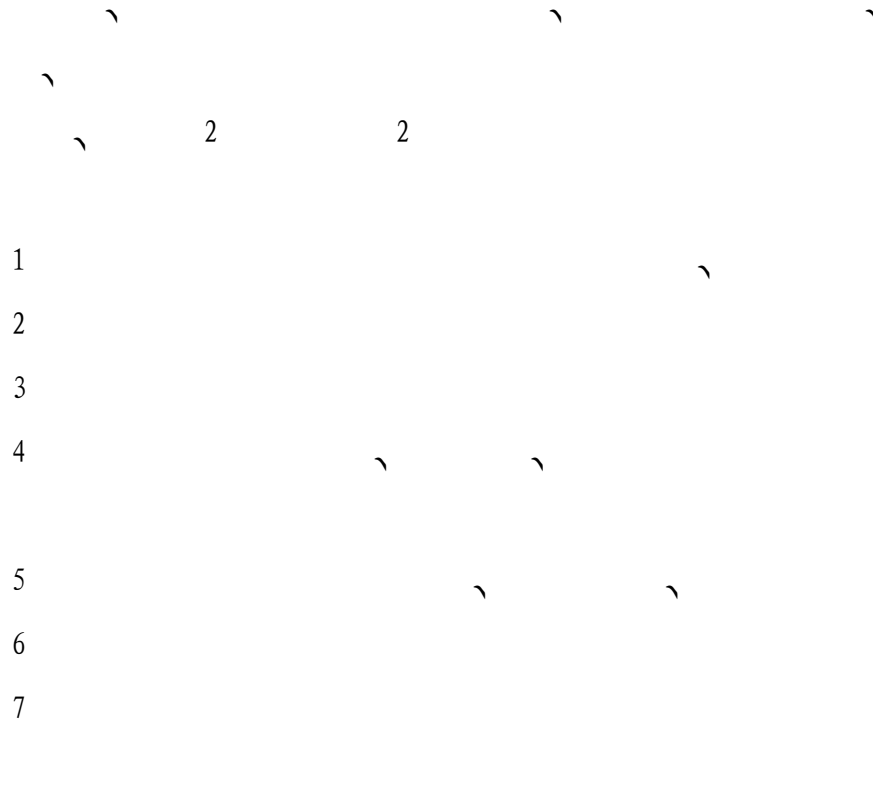
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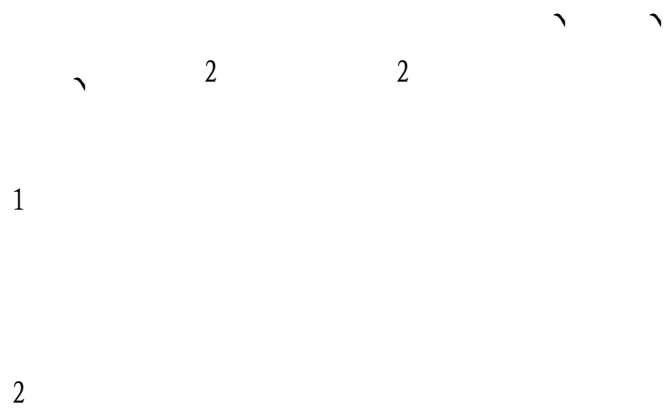
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E5



E6



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E7

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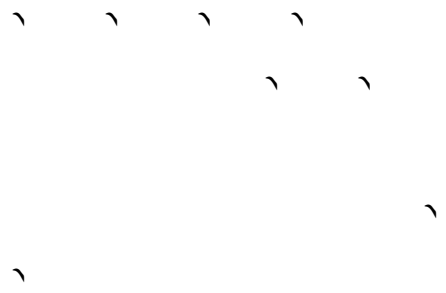
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E10

PLC

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E11

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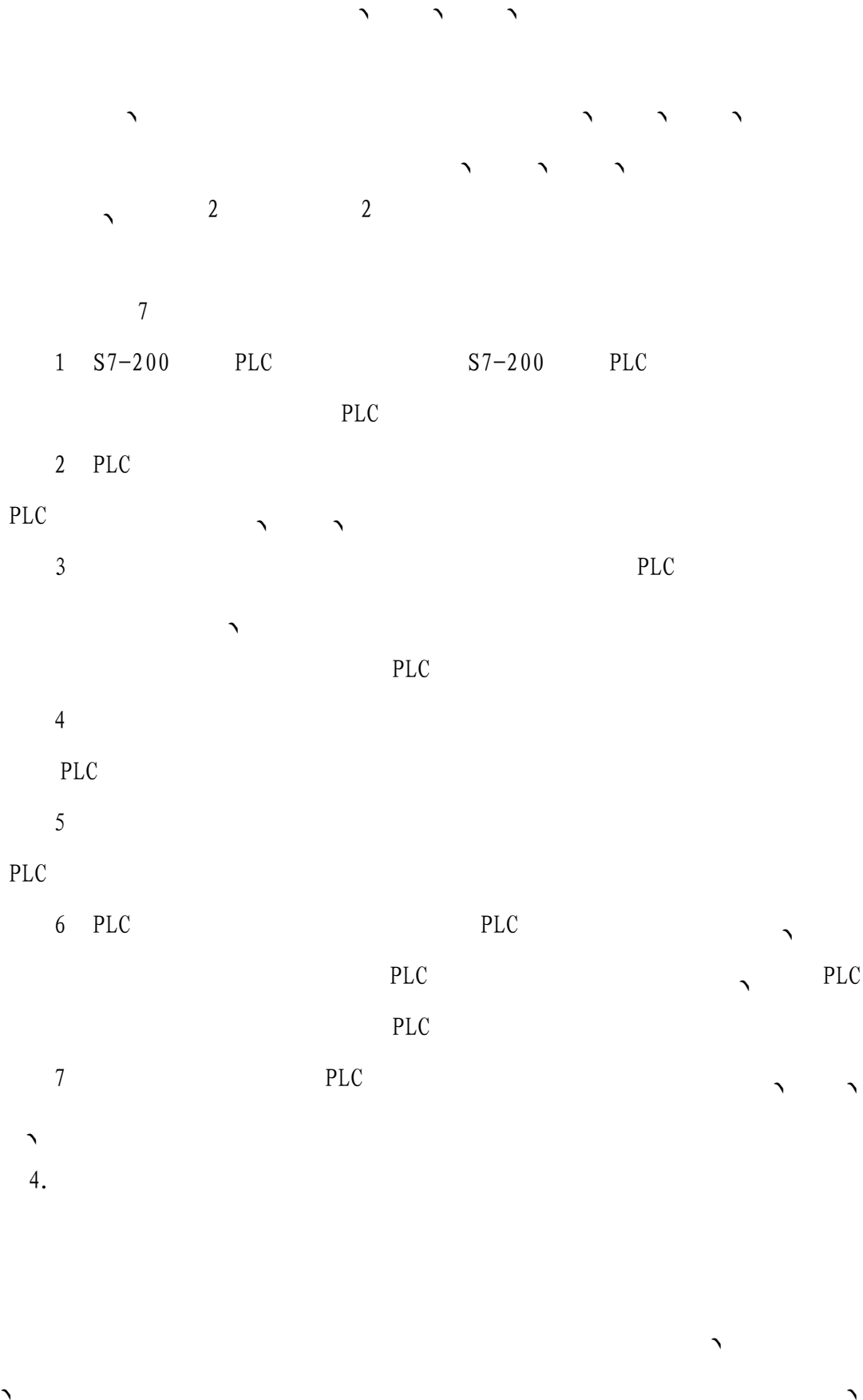
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E12



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8 5.33% 160

100 60

13 38 25.33% 760

150 2760 1474

53.41%

5 6、 7、 8、 9、 10

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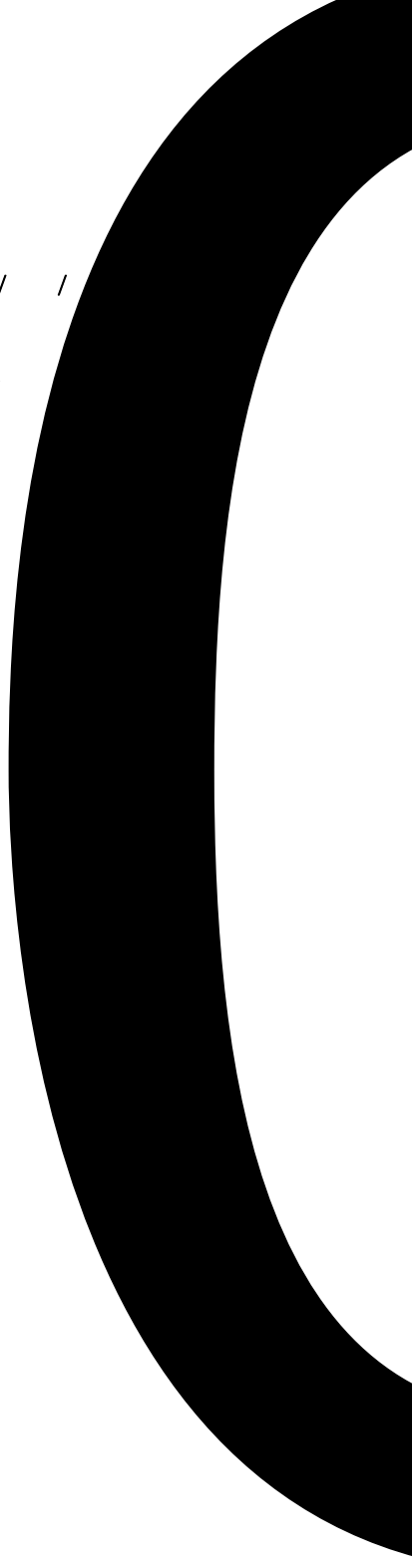
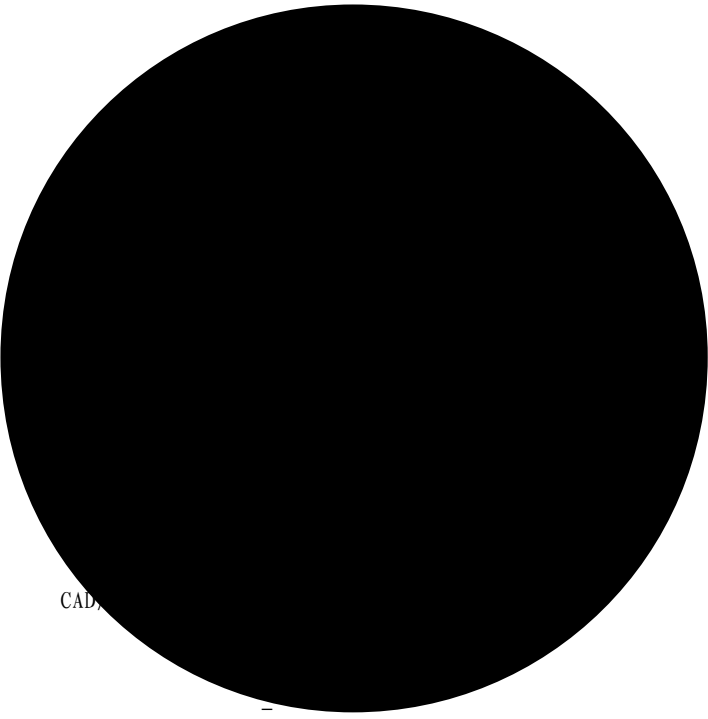
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		20	13.33	337	270	67
		2	1.22	40	24	16
		45	30.00	777	484	286
		32	21.33	572	418	154
		27	18.00	492	292	200
		8	5.33	160	100	60
		67	44.67	1223	805	428
		2	1.33	40	0	40
		1	0.67	20	0	20
		19	12.67	380	0	380
		16	10.67	320	0	320
		38	25.33	760	0	760
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A-2			+	4	64	48	16		4/12					
A-3			+	1	40	40								
A-4			+	2	32	0	32	2						
A-5			+	2	32	0	32		2					
A-6			+	1	16	0	13			1				
A-7			+	1	16	0	12				1			
A-8			+	2	36	20	16	2						
A-9				2	36	20	16		2					
A-10			+	1	16	8	8	1						
A-11			+	1	16	8	8					1		
A-12			+	2	32	14	18		2					
A-13			+	1	16	0	16		1					
				23	400	190	203	8	11	1	1	1	0	
A-14				3	56	50	6	4						
A-15				2	30	26	4		2					
A-16				3	56	50	6	4						
A-17				3	45	40	5		3					
A-18				2	32	30	2	2						
A-19				2	32	30	2		2					
A-20			+	2	32	0	32		2					
A-21			+	1	18	12	6							
A-22			+	1	18	16	2	1						
A-23			+	1	18	16	2		1					
D-1			+	2	40	24	16							
D-100														
				22	377	294	83	11	10	0	0	0	0	0
				45	777	484	286	19	21	1	1	1	0	

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14 15 13

B-1
B-2
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B-5
B-6
B-7
B-8
B-9

C-1 CAD
C-2
C-3



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						1	2	3	4	5	6		
D 101		+	1	20	12	8			3				
D 102		+	1	20	12	8							
D 103		+	1	20	12	8							
D 104	CAXA	+	1	20	12	8							
D 105	Pro/E	+	1	20	12	8							
D 106		+	1	20	12	8							
D 107		+	1	20	12	8							
D 108	C	+	1	20	12	8			3				
D 109		+	1	20	12	8							
D 110		+	1	20	12	8							
D 111		+	1	20	12	8							
D 112		+	1	20	12	8							
D 113		+	1	20	12	8							
D 114		+	1	20	12	8							
D 115		+	1	20	12	8			2				
D 116	SolidWorks	+	1	20	12	8							
D 117		+	1	20	12	8							
D 118		+	1	20	12	8							
D 119		+	1	20	12	8							
D 120		+	1	20	12	8							
D 121		+	1	20	12	8							
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			3	2	1	0	0	0	0
E-3			2	2					
E-4			2		2				
E-5			2			2			
E-6			2			2			
E-7			2			1			
E-8			2				2		
E-9			2				2		
E-10		PLC	2				2		
E-11			2					2	
E-12			2					2	
			20	2	2	5	6	4	0
E-13			16						16
			38	4	3	5	6	4	16

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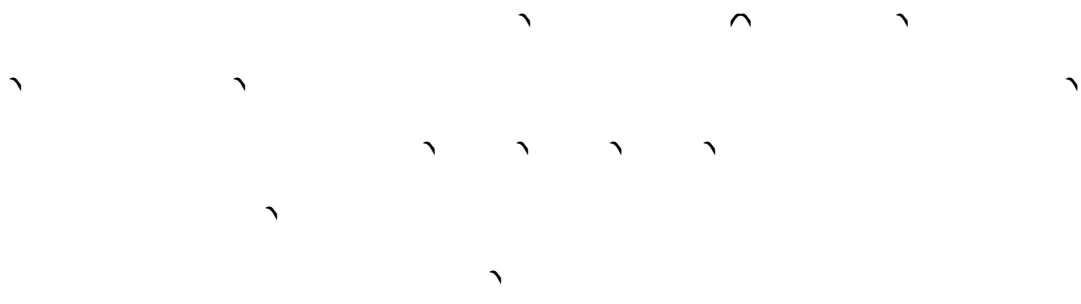
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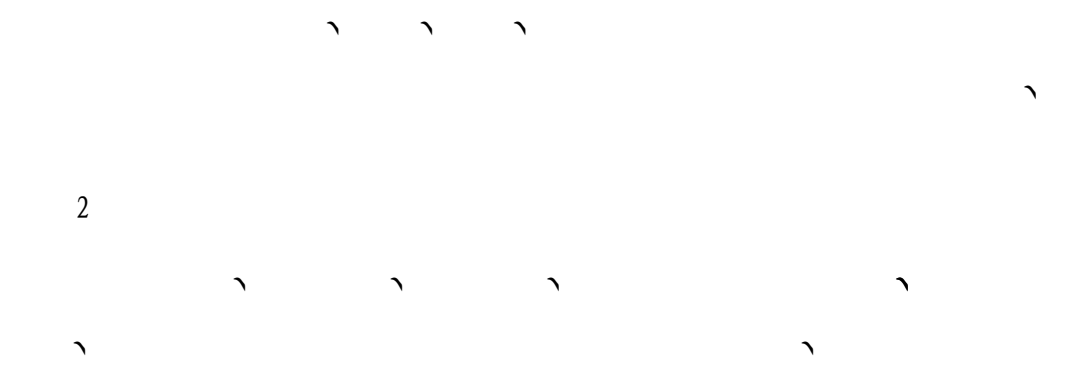


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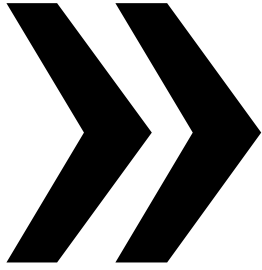


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