

B

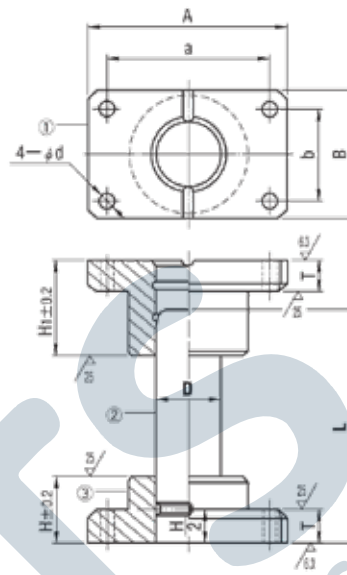
หมวดชิ้นส่วน แม่พิมพ์โลหะ

Standard Components for Press Dies



Guide Post Sets (GPS)

ไกด์โพสท์ ชนิดธรรมดา



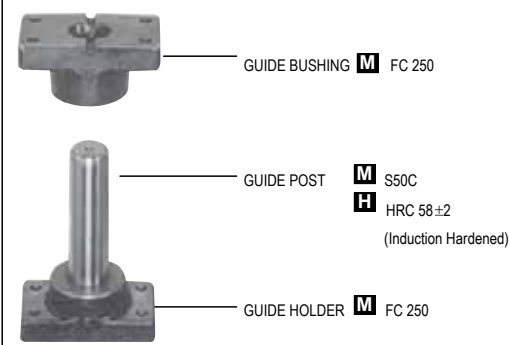
Order Code D x L
GPS 20 x 100

D	A	B	a	b	d	H	H1	T
20	74	44	56	30	6.6	30	40	15
25	84	48	66	30	9	30	45	20
32	100	58	76	36	11	40	50	20
38	130	75	100	44	11	50	60	25
50	155	90	125	60	14	65	85	25
60	190	120	150	80	18	75	100	30
80	230	150	180	110	22	100	130	35
100	270	180	210	140	22	125	160	40

ขนาดของสกรูที่ใช้ยึดชุดไกด์โพสท์กับแม่พิมพ์
(Sizes of suitable cap screws)

D	Cap Screw
20	M6-30
25	M8-35
32	M10-40
38	M10-45
50	M12-50
60	M16-60
80	M20-75
100	M20-80

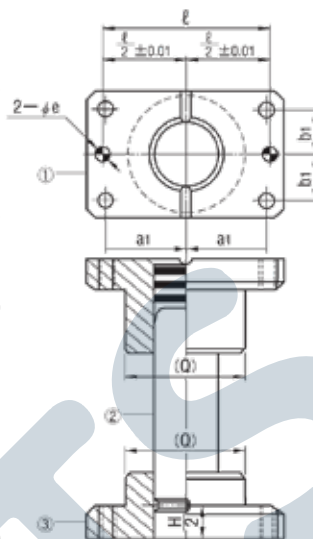
ส่วนประกอบของชุดไกด์โพสท์ 1 ชุด
(Parts for 1 set guide post set)



Code	D	L
GPS	20	80 90 100 110 120 130 140 150
	25	80 90 100 110 120 130 140 150 160 170 180 200
	32	100 110 120 130 140 150 160 170 180 200 220 250
	38	120 130 140 150 160 170 180 200 220 250 280 300
	50	160 170 180 200 220 250 280 300 350
	60	180 200 220 250 280 300 350 400
	80	250 280 300 350 400 450
	100	300 350 400 450 500

Guide Post Sets (GPSP)

ไกด์โพลท์ ชนิดมีรูไดเว

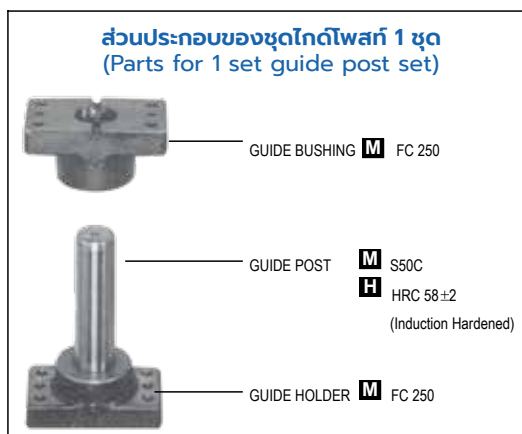


Order Code D x L
GPSP 20 x 100

D	A	B	a	b	d	H	H ₁	T	l	e ^{H7}
20	74	44	56	30	6.6	30	40	15	56	±0.010
25	84	48	66	30	9	30	45	20	66	
32	100	58	76	36	11	40	50	20	76	
38	130	75	100	44	11	50	60	25	100	
50	155	90	125	60	14	65	85	25	125	±0.015
60	190	120	150	80	18	75	100	30	150	
80	230	150	180	110	22	100	130	35	190	
100	270	180	210	140	22	125	160	40	230	

ขนาดของสกรู และ ไถเวทพิน ที่ใช้ยึดชุดไกด์โพลท์กับแม่พิมพ์
(Sizes of suitable cap screws and dowel pins)

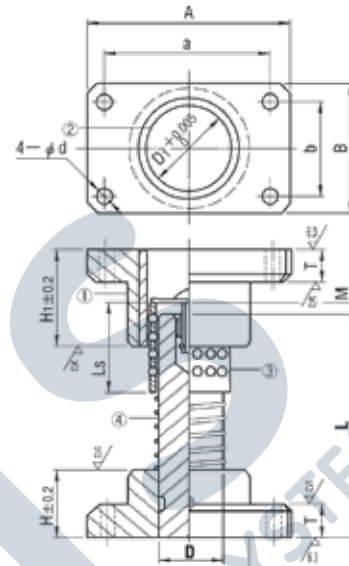
D	Cap Screw	Dowel Pin
20	M6-30	MSTH 6-20
25	M8-35	MSTH 8-30
32	M10-40	MSTH 8-30
38	M10-45	MSTH 10-40
50	M12-50	MSTH 10-40
60	M16-60	MSTH 13-50
80	M20-75	MSTH 16-60
100	M20-80	MSTH 16-60



Code	D	L
GPSP	20	80 90 100 110 120 130 140 150
	25	80 90 100 110 120 130 140 150 160 170 180 200
	32	100 110 120 130 140 150 160 170 180 200 220 250
	38	120 130 140 150 160 170 180 200 220 250 280 300
	50	160 170 180 200 220 250 280 300 350
	60	180 200 220 250 280 300 350 400
	80	250 280 300 350 400 450
	100	300 350 400 450 500

Ball Bearing Guide Post Sets - Movable Stopper (GPSB)

ไกด์โพสท์แบบปลอกลูกปืนพลาสติก ฝาครอบลูกปืนเคลื่อนตาม ชนิดธรรมดา



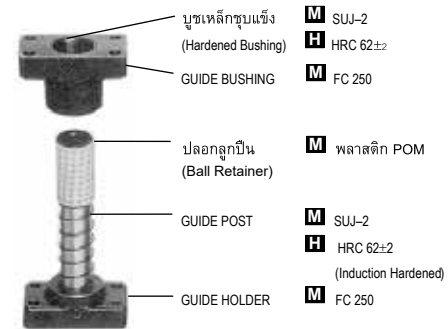
Order Code D x L
GPSB 20 x 100

D	D ₁	A	B	a	b	d	H	H ₁	T	S
20	26	74	44	56	30	6.6	30	50	15	50
25	31	84	48	66	30	9	30	50	20	50
32	40	100	58	76	36	11	40	60	20	60
38	48	130	75	100	44	11	50	70	25	70
50	60	155	90	125	60	14	65	90	25	90

ขนาดของสกรูที่ใช้ยึดชุดไกด์โพสท์กับแม่พิมพ์
(Sizes of suitable cap screws)

D	Cap Screw
20	M6-30
25	M8-35
32	M10-40
38	M10-45
50	M12-50

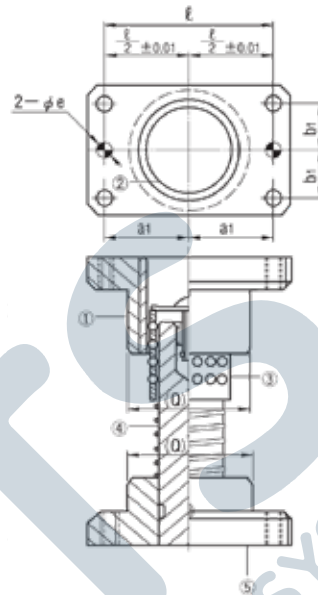
ส่วนประกอบของชุดไกด์โพสท์ 1 ชุด
(Parts for 1 set guide post set)



Code	D	L
GPSB	20	90 100 110 120 130 140 150 160
	25	90 100 110 120 130 140 150 160 170 180 200
	32	110 120 130 140 150 160 170 180 200 220 240 250 260
	38	130 140 150 160 170 180 200 220 240 250 260 280 300
	50	170 180 200 220 240 250 260 280 300 350

Ball Bearing Guide Post Sets - Movable Stopper (GPBP)

โถงโพลท์แบบปลอกลูกปืนพลาสติก ฝากรอบลูกปืนเคลื่อนตาม ชนิดมีรูโดเวล



Order Code D x L
GPBP 20 x 100

D	D1	A	B	a	b	d	H	H1	T	S	ℓ	e ^{H7}
20	26	74	44	56	30	6.6	30	50	15	50	56	6 +0.012 0
25	31	84	48	66	30	9	30	50	20	50	66	8 +0.015 0
32	40	100	58	76	36	11	40	60	20	60	76	8 +0.015 0
38	48	130	75	100	44	11	50	70	25	70	100	10 +0.015 0
50	60	155	90	125	60	14	65	90	25	90	125	10 +0.015 0

ขนาดของสกรู และ โดเวลพิน ที่ใช้ยึดชุดโถงโพลท์กับแม่พิมพ์
(Sizes of suitable cap screws and dowel pins)

D	Cap Screw	Dowel Pin
20	M6-30	MSTH 6-20
25	M8-35	MSTH 8-30
32	M10-40	MSTH 10-40
38	M10-45	MSTH 10-40
50	M12-50	MSTH 10-40

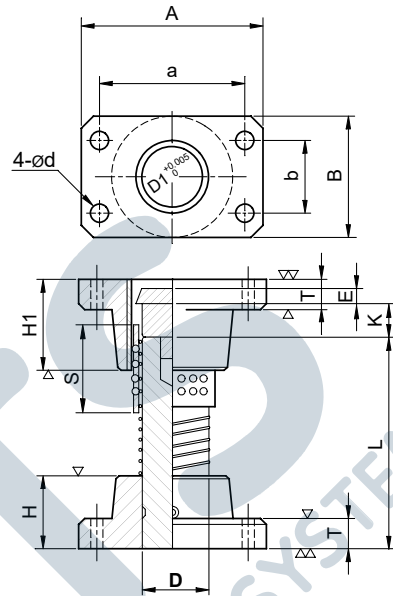
ส่วนประกอบของชุดโถงโพลท์ 1 ชุด
(Parts for 1 set guide post set)

- บูชเหล็กชุบแข็ง (Hardened Bushing) **M** SUJ-2 **H** HRC 62±2
- GUIDE BUSHING **M** FC 250
- ปลอกลูกปืน (Ball Retainer) **M** พลาสติก POM
- GUIDE POST **M** SUJ-2 **H** HRC 62±2 (Induction Hardened)
- GUIDE HOLDER **M** FC 250

Code	D	L
GPBP	20	90 100 110 120 130 140 150 160
	25	90 100 110 120 130 140 150 160 170 180 200
	32	110 120 130 140 150 160 170 180 200 220 240 250 260
	38	130 140 150 160 170 180 200 220 240 250 260 280 300
	50	170 180 200 220 240 250 260 280 300 350

Ball Bearing Guide Post Sets - Fixed Stopper (GPF)

ไกด์โพสท์แบบปลอกลูกปืนพลาสติก ฝาครอบปลอกลูกปืนตายตัว ชนิดธรรมดา



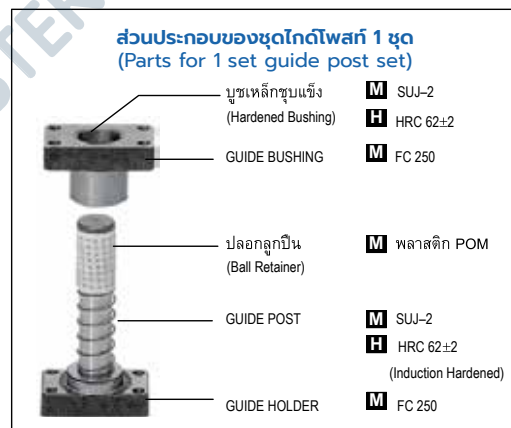
Order Code D x L
GPF 25 x 100

D	D1	A	B	a	b	d	H	H1	T	K	E	S
25	31	84	48	66	30	9	30	50	20	20	5	50
32	40	100	58	76	36	11	40	60	20	25	5	60
38	48	130	75	100	44	11	50	70	25	30	10	70
50	60	155	90	125	60	14	65	90	25	40	10	90
60	70	190	120	150	80	18	75	100	30	50	15	100
80	90	230	150	180	110	22	100	130	35	60	15	125

ขนาดของสกรูที่ใช้ยึดชุดไกด์โพสท์กับแม่พิมพ์
(Sizes of suitable cap screws)

D	Cap Screw
25	M8-35
32	M10-40
38	M10-45
50	M12-50
60	M16-60
80	M20-75

ส่วนประกอบของชุดไกด์โพสท์ 1 ชุด
(Parts for 1 set guide post set)

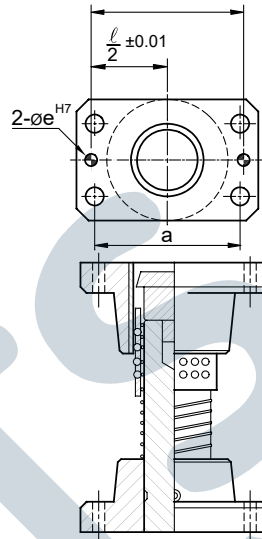


Code	D	L																			
GPF	25	90	100	110	120	130	140	150	160	170	180	200									
	32			110	120	130	140	150	160	170	180	200	220	240	250	260					
	38					130	140	150	160	170	180	200	220	240	250	260	280	300			
	50									170	180	200	220	240	250	260	280	300	350		
	60											200	220	240	250	260	280	300	350		
	80																260	280	300	350	400

B Standard Components for Press Dies

Ball Bearing Guide Post Sets - Fixed Stopper (GPFP)

โถงโพสท์ปลอกลูกปืนพลาสติก แบบฝาครอบปลอกลูกปืนตายตัว ชนิดมีรูโดเวล



Order Code D x L
GPFP 25 x 100

D	D1	A	B	a	b	d	H	H1	T	K	E	S	ℓ	e ^{H7}
25	31	84	48	66	30	9	30	50	20	20	5	50	66	8
32	40	100	58	76	36	11	40	60	20	25	5	60	76	8
38	48	130	75	100	44	11	50	70	25	30	10	70	100	10
50	60	155	90	125	60	14	65	90	25	40	10	90	125	10
60	70	190	120	150	80	18	75	100	30	50	15	100	150	13
80	90	230	150	180	110	22	100	130	35	60	15	125	190	16

ขนาดของสกรู และ โดเวลพิน ที่ใช้ยึดชุดโถงโพสท์กับแม่พิมพ์
(Sizes of suitable cap screws and dowel pins)

D	Cap Screw	Dowel Pin
25	M8-35	MSTH 8-30
32	M10-40	MSTH 8-30
38	M10-45	MSTH 10-40
50	M12-50	MSTH 10-40
60	M16-60	MSTH 13-50
80	M20-75	MSTH 16-60

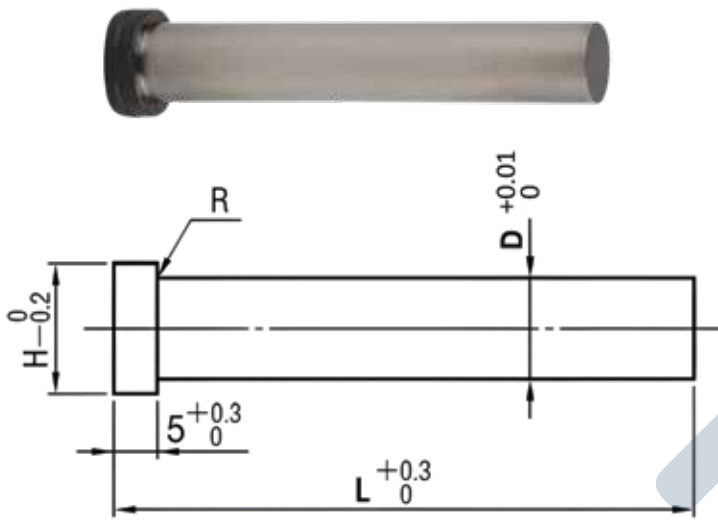
ส่วนประกอบของชุดโถงโพสท์ 1 ชุด
(Parts for 1 set guide post set)

- บุชเหล็กชุบแข็ง (Hardened Bushing)
 - M SUJ-2
 - H HRC 62±2
- GUIDE BUSHING
 - M FC 250
- ปลอกลูกปืน (Ball Retainer)
 - M พลาสติก POM
- GUIDE POST
 - M SUJ-2
 - H HRC 62±2 (Induction Hardened)
- GUIDE HOLDER
 - M FC 250

Code	D	L
GPFP	25	90 100 110 120 130 140 150 160 170 180 200
	32	110 120 130 140 150 160 170 180 200 220 240 250 260
	38	130 140 150 160 170 180 200 220 240 250 260 280 300
	50	170 180 200 220 240 250 260 280 300 350
	60	200 220 240 250 260 280 300 350
	80	260 280 300 350 400 450

Straight Punches

พืน้ตรงง SKD11 (PD)



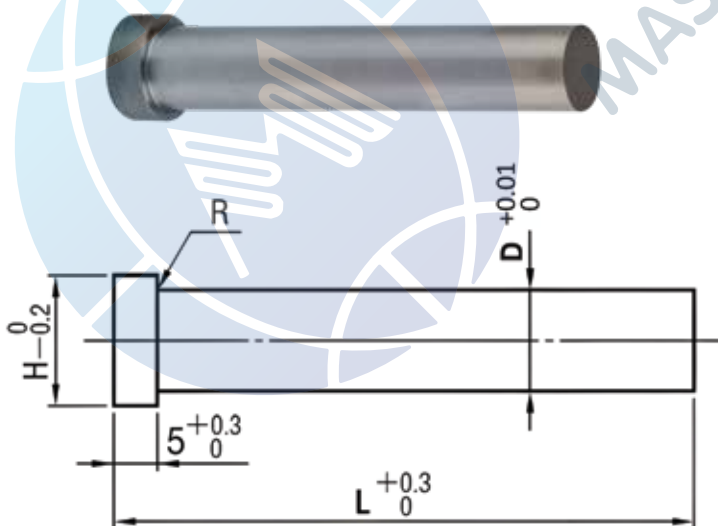
Code	PD
Material	SKD11
Hardness	60 - 62 HRC

Order Code D x L
 PD 5 x 100

Code	D	H	L
1	2		40 50 60 70 80 90 100
1.5	3		
2	4		
2.5	4.5		
3	5		
3.5	5.5		
4	7		
4.5	8		
5	8		
5.5	9		
6	9		
6.5	10		
7	10		
8	11		
9	12		
10	13		
11	14		
12	15		
13	16		
14	17		
15	18		
16	19		
18	21		
20	23		
25	28		

Straight Punches

พืน้ตรงง SKH51 (PH)



Code	PH
Material	SKH51
Hardness	61 - 64 HRC

Order Code D x L
 PH 25 x 100

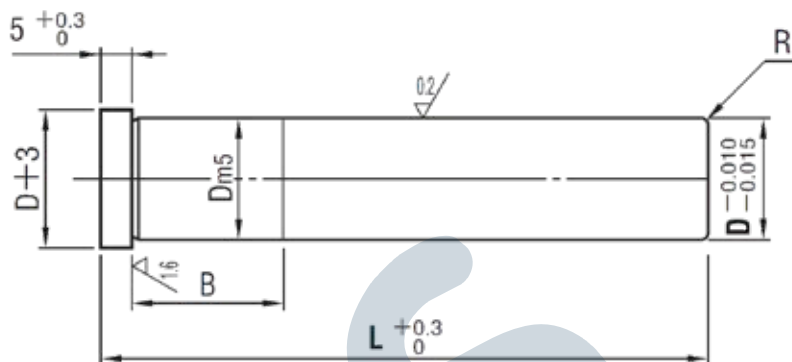
Code	D	H	L
1	2		40 50 60
1.5	3		
2	4		
2.5	4.5		40 50 60 70 80
3	5		
3.5	5.5		
4	7		
4.5	8		40 50 60 70 80 90 100
5	8		
5.5	9		
6	9		
6.5	10		
7	10		
8	11		
9	12		
10	13		
11	14		
12	15		
13	16		
14	17		
15	18		
16	19		
18	21		
20	23		
25	28		

Stripper Guide Pins สตริปเปอร์ไกด์พิน (SGPH)



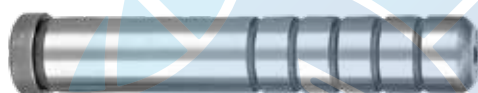
Code	SGPH
Material	SUJ2
Hardness	58 HRC ~

Order Code D x L
SGPH 25 x 100



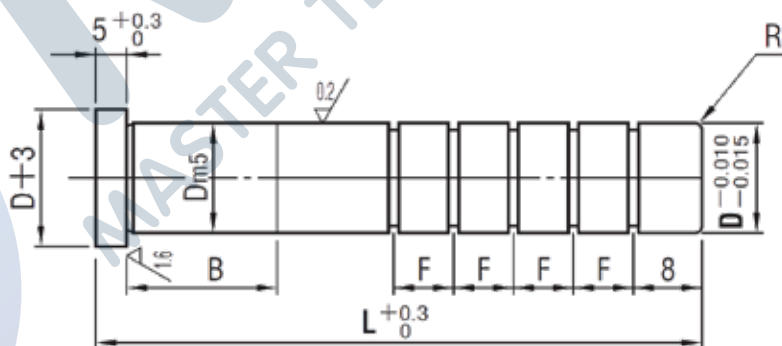
Code	D	m5	R	B	L
SGPH	8	+0.012	1.0	10	40 50 60 70 80
	10	+0.006		13	40 50 60 70 80 90 100
	13	+0.015	1.5	16	40 50 60 70 80 90 100 110 120
	16	+0.007		20	50 60 70 80 90 100 110 120 130 140
	20	+0.017	2.0	25	60 70 80 90 100 110 120 130 140
	25	+0.008		28	70 80 90 100 110 120 130 140

Stripper Guide Pins แบบมีร่องน้ำมัน (SGOH)



Code	SGOH
Material	SUJ2
Hardness	58 HRC ~

Order Code D x L
SGOH 20 x 100

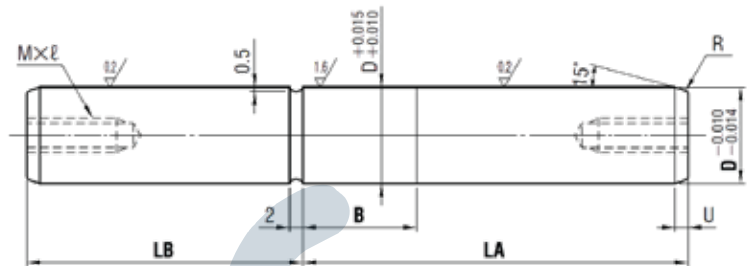


D \ L	Number of grooves						
	40~	50~	70~	80~	90~	160~	180~
8	2	3	4	5	6	-	-
10	2	3	4	5	6	-	-
13	2	3	4	5	6	7	8
16	2	3	4	5	6	7	8
20	2	3	4	5	6	7	8
25	2	3	4	5	6	7	8

Code	D	m5	R	B	L
SGOH (With Oil Grooves)	8	+0.012	1.0	10	40 50 60 70 80
	10	+0.006		13	40 50 60 70 80 90 100
	13	+0.015	1.5	16	40 50 60 70 80 90 100 110 120
	16	+0.007		20	50 60 70 80 90 100 110 120 130 140
	20	+0.017	2.0	25	60 70 80 90 100 110 120 130 140
	25	+0.008		28	70 80 90 100 110 120 130 140

Stripper Guide Pins

สตริปเปอร์ไกด์พิน (SGPWS)



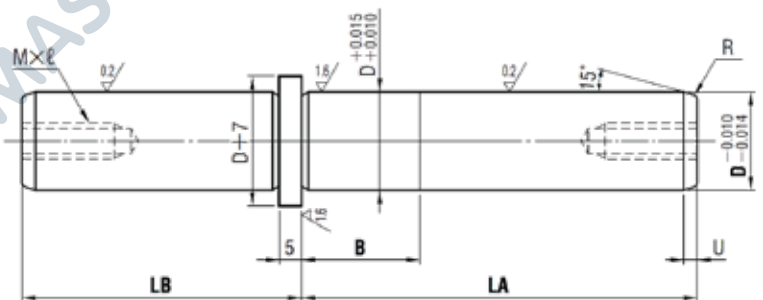
Code	SGPWS
Material	SUJ2
Hardness	58 HRC ~

Order Code D x LA x LB x B
SGPWS 25 x 90 x 50 x 10

Code	D	LA	LB 10mm increments	B 1mm increments	U	R	M x l Pitch		
SGPWS (Straight)	16	70	30 - 60	10 - 30	3	2	M6 x 25 P1.0		
		80	30 - 70						
		90	40 - 80						
	20	80	40 - 70				4	3	M8 x 25 P1.25
		90	40 - 70						
		100	50 - 80						
	25	90	50 - 70		60 - 90				
		100	50 - 80						
		110	60 - 90						

Stripper Guide Pins

สตริปเปอร์ไกด์พินแบบมีขา (SGPWH)



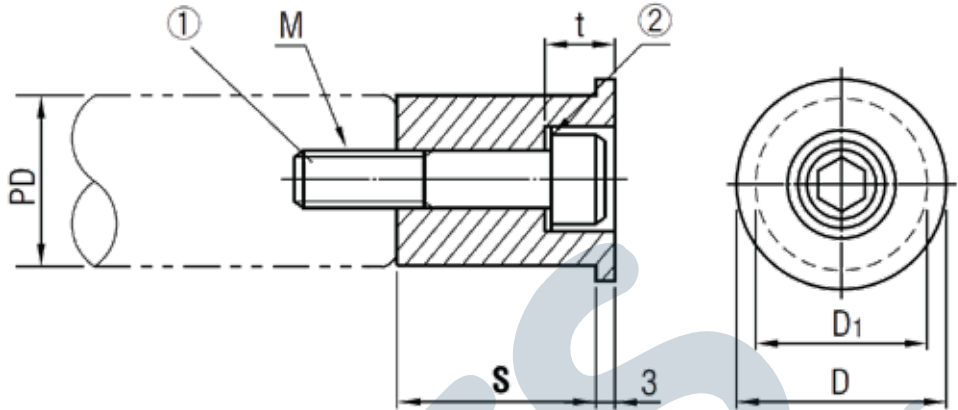
Code	SGPWH
Material	SUJ2
Hardness	58 HRC ~

Order Code D x LA x LB x B
SGPWH 25 x 90 x 70 x 20

Code	D	LA	LB 10mm increments	B 1mm increments	U	R	M x l Pitch		
SGPWH (Flanged)	13	60	30 - 50	10 - 30	2	1.5	M5 x 22 P0.8		
		70	30 - 60						
		80	40 - 60						
	16	70	30 - 60				3	2	M6 x 25 P1.0
		80	30 - 70						
		90	40 - 80						
	20	80	40 - 70		4	3	M8 x 25 P1.25		
		90	40 - 70						
		100	50 - 80						
	25	90	50 - 70		60 - 90				
		100	50 - 80						
		110	60 - 90						

Stoppers For Ball Cages

สตอปเปอร์สำหรับปลอกลูกปืน (SSTK)



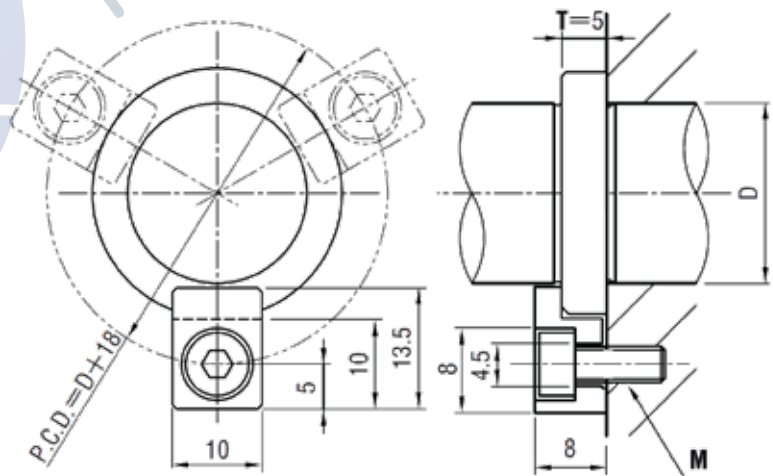
Code	SSTK
Material	S45C
Surface	Black oxide
A	①CB ②Spring washer

Order Code No. x S
SSTK 25 x 20

Code	No.	S 1mm increments	D	D1	t	M
SSTK	13	10 - 20	15	12	6.5	5
	16	10 - 20	17.3	15	8.5	6
	20	11 - 25	24	19	11	8
	25	11 - 30	29	24		

Clamps For Stripper Guide Pins

แคลมป์สำหรับสตริปเปอร์ไกด์พิน (FCLP)



Code	T	M
FCLP	5	4

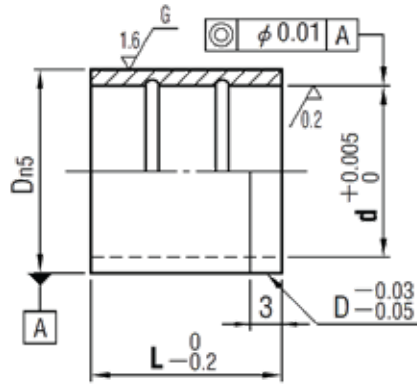
Code	FCLP
Material	S45C
Surface	Black oxide
A	CB4-10

Order Code T x M
FCLP 5 x 4

Stripper Guide Bushings

สตริปเปอร์ไกด์บุชซิ่ง

SGBA

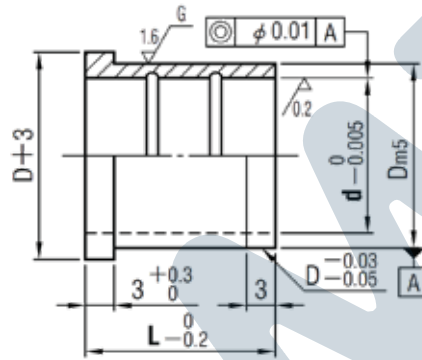


Code	d	Dm5	L
SGBA	8	12	10 13 16 20
	10	14	10 13 16 20 25
	13	18	13 16 20 25
	16	22	16 20 25 30
	20	25	20 25 30
	25	32	25 30 35

Code	SGBA
Material	SUJ2
Hardness	58 HRC~

Order Code d x L
SGBA 25 x 35

SGBH

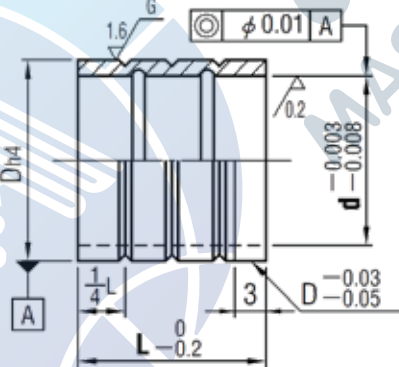


Code	d	Dm5	L
SGBH	8	12	10 13 16 20
	10	14	10 13 16 20 22 25
	13	18	13 16 20 22 25 30 35
	16	22	13 16 20 22 25 30 35
	20	25	16 20 22 25 30 35
	25	32	20 22 25 30 35

Code	SGBH
Material	SUJ2
Hardness	58 HRC~

Order Code d x L
SGBH 25 x 35

SGBL

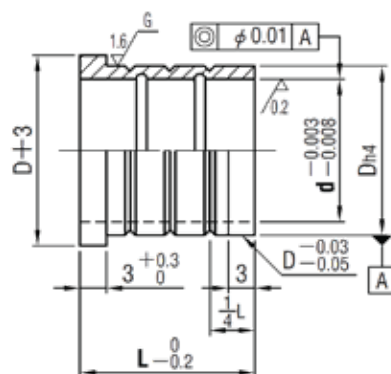


Code	d	Dh4	L
SGBL	8	12	10 13 16 20
	10	14	10 13 16 20 22 25
	13	18	13 16 20 22 25 30 35
	16	22	13 16 20 22 25 30 35
	20	25	16 20 22 25 30 35
	25	32	20 22 25 30 35

Code	SGBL
Material	SUJ2
Hardness	58 HRC~

Order Code d x L
SGBL 25 x 35

SGBT



Code	d	Dh4	L
SGBT	8	12	10 13 16 20
	10	14	10 13 16 20 22 25
	13	18	13 16 20 22 25 30 35
	16	22	13 16 20 22 25 30 35
	20	25	16 20 22 25 30 35
	25	32	20 22 25 30 35

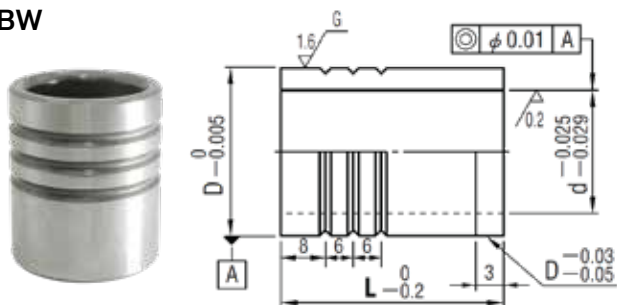
Code	SGBT
Material	SUJ2
Hardness	58 HRC~

Order Code d x L
SGBT 25 x 35

Stripper Guide Bushings

สตริปเปอร์ไกด์บุชซิ่ง

SGBBW

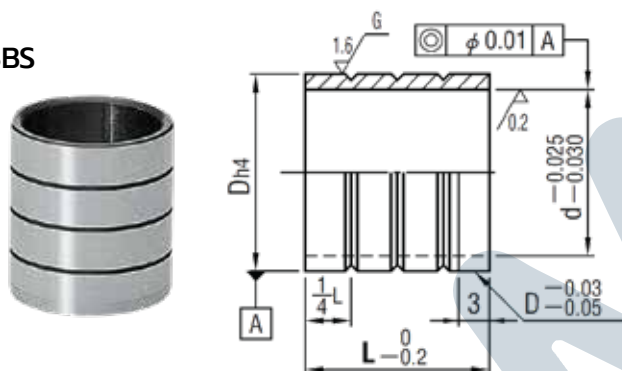


Code	PD	d	D	L
SGBBW	13	17	24	30 35
	16	20	28	35 40
	20	26	34	40 45 50
	25	31	40	45 50 60

Code	SGBBW
Material	SUJ2
Hardness	58 HRC ~

Order Code PD x L
SGBBW 20 x 40

SGBBS

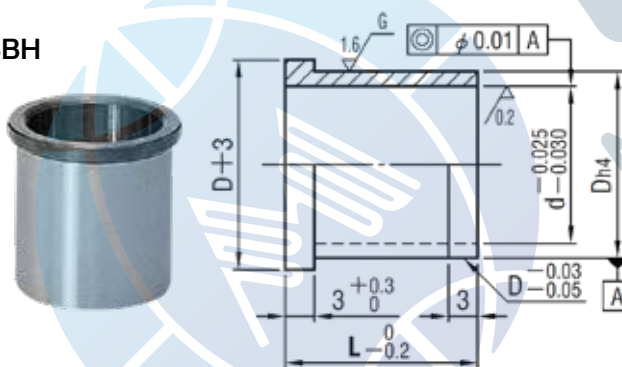


Code	PD	d	Dh4	L
SGBBS	10	14	18	20 25 30
	13	17	22	20 25 30
	16	20	26	25 30 35
	20	26	31	25 30 35 40
25	31	37	35 40	

Code	SGBBS
Material	SUJ2
Hardness	58 HRC ~

Order Code PD x L
SGBBS 20 x 40

SGBBH



Code	PD	d	Dh4	L
SGBBH	10	14	18	20 25 30
	13	17	22	20 25 30
	16	20	26	25 30 35
	20	26	31	25 30 35 40
25	31	37	35 40	

Code	SGBBH
Material	SUJ2
Hardness	58 HRC ~

Order Code PD x L
SGBBH 20 x 40

B

Standard Components
for Press Dies

Ball Cages

ปลอกลูกปืนอลูมิเนียม / เรซิน

MBSH (Aluminum)



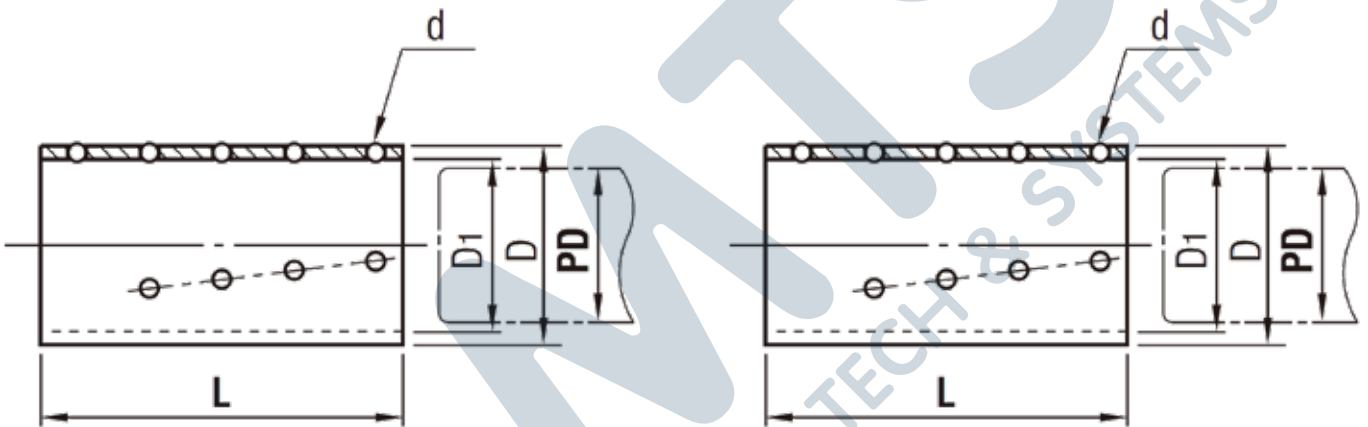
MBJH (Resin)



MBS (Aluminum)



MBJ (Resin)



Code	MBSH	MBJH
Material	Aluminum	Resin
Ball	SUJ2	SUJ2

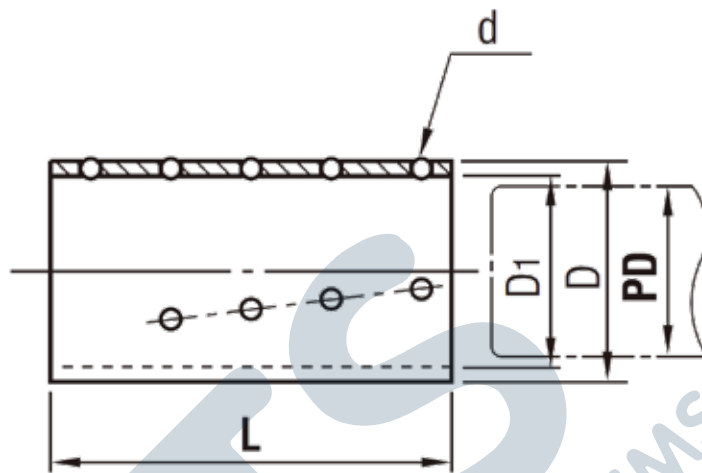
Code	MBS	MBJ
Material	Aluminum	Resin
Ball	SUJ2	SUJ2

Order Code PD x L
 MBSH 20 x 50
 MBJH 32 x 90

Order Code PD x L
 MBS 20 x 50
 MBJ 32 x 90

Code	PD	L	PD Post diameter	Outer diameter ØD	Inner diameter ØD ₁	Ball diameter Ød	Number of balls				
							MBSH MBJH	MBS MBJ	Ratio		
MBSH (Aluminum)	20	50	20	+0.020	25.5	20.5	3	165	96	1.72	
								180	112	1.61	
	25	60	25	+0.015	30.5	25.5		228	140	1.63	
								266	160	1.66	
								350	208	1.68	
MBJH (Resin)	28	75	28	+0.025	35.5	28.5	4	204	112	1.82	
								252	154	1.64	
MBS (Aluminum)	32	90	32	+0.020	39.5	32.5		5	294	176	1.67
									350	208	1.68
									MBJ (Resin)	38	75
280	176	1.67									
MBSH (Aluminum)	45	110	45	+0.025	54.5	45.5	5		320	198	1.70
								400	234	1.71	
	50	110	50	+0.035	59.5	50.5		360	220	1.72	
								450	260	1.73	
								400	242	1.74	
MBJ (Resin)	60	110	60	+0.030	69.5	60.5	5	400	242	1.74	
								500	286	1.75	

Ball Cages ปลอกลูกปืนทองเหลือง (EMBS)



	Code	EMBS
Material	Ball retainer	C3604
	Ball	SUJ2

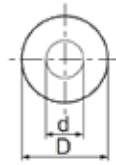
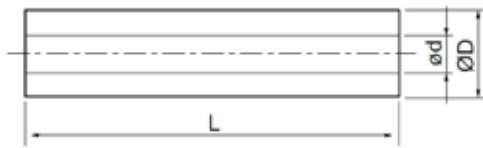
Order Code No. x L
EMBS 8 x 30

Code	No.	d ₁	d	L	Ball Dia.
EMBS	8	8.5	11.5	25 30 35	2
	10	10.5	13.5	25 30 35 40	
	13	13.5	16.5	35 40 45 50 55 60 70	
	16	16.5	19.5	35 40 45 50 55 60 65 70	
	20	20.5	23.5	35 40 45 50 55 60 65 70	
	25	25.5	28.5	35 40 45 50 55 60 65 70	
	30	30.5	33.5	35 40 45 50 55 60 65 70	

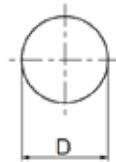
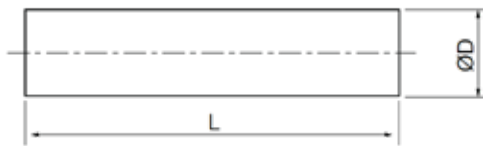
B
Standard Components
for Press Dies

Urethanes

ยูรีเทนแท่งกลม



Order Code D x L
 UTS 60 x 300



สีเหลืองแบบมีรู



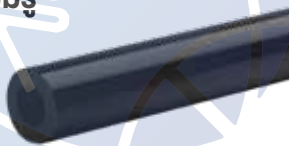
สีเหลืองแบบตัน



Code	D	d	L
UTH	15	6.5	300
	20	8.5	300 500
	25	11	300 500
	30	13	300 500
	35	13	300 500
	40	15	300 500
	50	16	300 500
	60	18	300 500
	80	20	300 500
100	30	300 500	

Code	D	L
UTS	10	300
	12	300
	15	300
	20	300 500
	25	300 500
	30	300 500
	35	300 500
	40	300 500
	50	300 500
	60	300 500
	80	300 500
100	300 500	

สีดำแบบมีรู



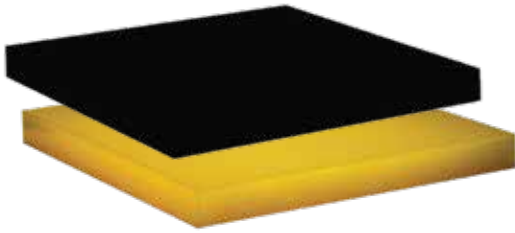
สีดำแบบตัน



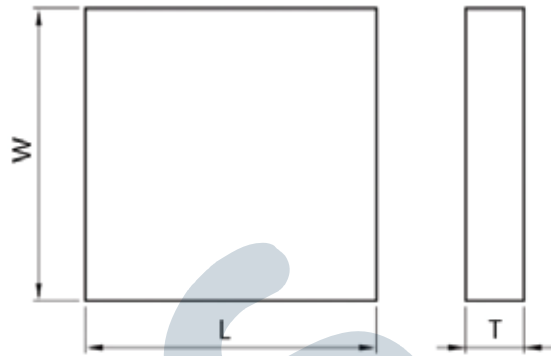
Code	D	d	L
HUTH	15	7	300
	20	8.5	300
	25	11	300
	30	14	500
	40	14	500
	50	14	500
	60	14	500
	80	22	500
	100	22	500

Code	D	L
HUTS	10	300
	15	300
	20	500
	25	500
	30	500
	40	500
	50	500
	60	500
	80	500
	100	500

Urethanes ยูรีเทนแผ่น



Order Code T x W x L
UTE 5 x 300 x 1,000

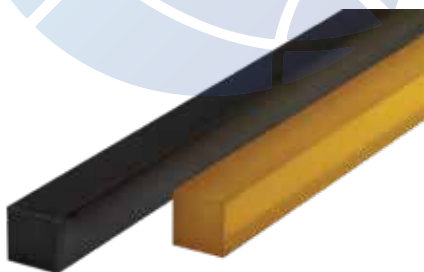


Code	T	W x L
UTE (สีเหลือง) HUTE (สีดำ)	5	300 x 300
	10	
	15	
	20	
	25	
	30	
	35	
	40	
	50	
	60	
70		
80		
100		

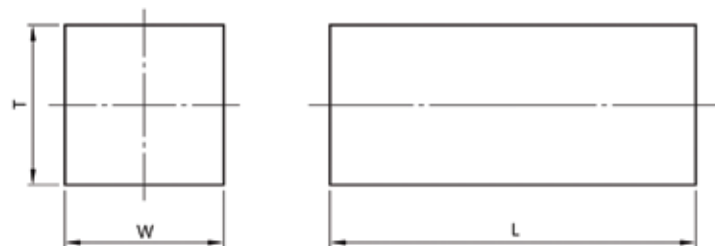
Code	T	W x L
UTE (สีเหลือง)	1	300 x 1,000
	2	
	3	
HUTE (สีดำ)	4	
	5	
	6	

Code	T	W x L
UTE (สีเหลือง)	8	500 x 500
	10	
	15	
HUTE (สีดำ)	20	
	25	
	30	
	40	
	50	

Urethanes ยูรีเทนแท่งเหลี่ยม



Order Code T x W x L
UTP 25 x 25 x 300



Code	W	T	L
UTP (สีเหลือง)	25	25	300
			500
HUTP (สีดำ)	50	50	300
			500
	75	50	300
			500

B

Standard Components
for Press Dies