NON-CLOGGING BUTTON DIES
—HEADED TYPE, STRAIGHT TYPE—

Type		D dimension	Catalog No.	Shape
—Headed— RoHS	Equivalent to SKH51 61~64HRC	D3~5	SV—MHD	
	Equivalent to SKD11 60~63HRC	D6~10		
	Powdered high-speed steel 64~67HRC	D6~10	SV—PMHD	
—Straight— RoHS	Equivalent to SKH51 61~64HRC	D3~5	SV—MSD	
	Equivalent to SKD11 60~63HRC	D6~10		
	Powdered high-speed steel 64~67HRC	D6~10	SV—PMSD	

D tolerance			Catalog No.		L	0.01mm increments	V	G	d	H	T
D	m5	n5	Type	D		min. P max.					
3	+0.006 +0.002	+0.008 +0.004	(Equivalent to SKH51)	3		0.50~1.00			2.0	4	
4	+0.009 +0.004	+0.013 +0.008	Headed type (Dm5) Straight type (Dn5)	4		0.50~2.00	0.4	0.2	2.4	5	3
5			SV—MHD SV—MSD	5	16	0.50~2.50			2.9	6	
6			(Equivalent to SKD11)	6	20	1.00~3.00			3.4	9	
8	+0.012 +0.006	+0.016 +0.010	Headed type (Dm5) Straight type (Dn5)	8	(22)	1.00~4.00	0.8	0.3	4.4	11	5
10			SV—MHD SV—MSD	10		2.00~6.00			6.4	13	
6	+0.009 +0.004	+0.013 +0.008	(Powdered high-speed steel)	6	(25)	1.00~3.00			3.4	9	
8	+0.012 +0.006	+0.016 +0.010	Headed type (Dm5) Straight type (Dn5)	8		1.00~4.00	0.8	0.3	4.4	11	5
10			SV—PMHD SV—PMSD	10		2.00~6.00			6.4	13	

⚠ D3 headed types are thin under the head. Be careful not to damage the bushings when mounting them.
⚠ L(22) and (25) are specifications available for D4~10 only.

📞 Order   Catalog No. — L — P
SV—PMHD10 — 25 — P4.50

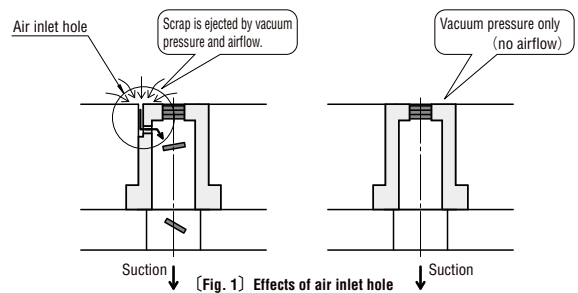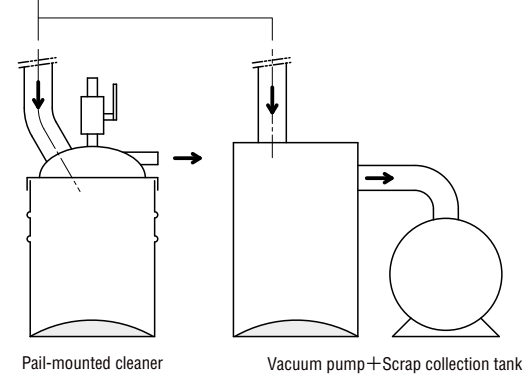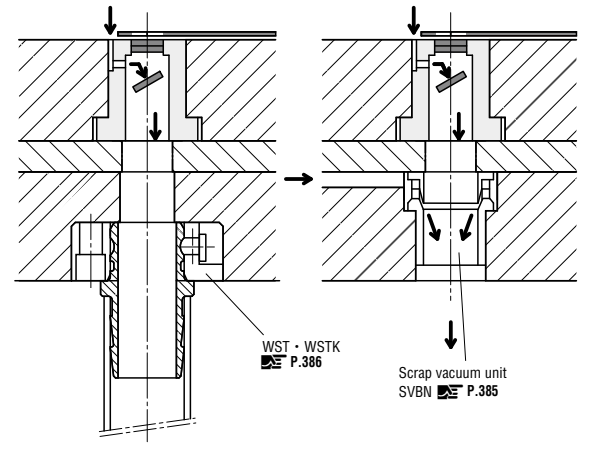🚚 Days to Ship   **Quotation**

💲 Price   **Quotation**

Alterations   Catalog No. — L (LC·SLC) — P (PC) — (HC·TC·CKC·MKC, etc.)
SV—MSD8 — LC18 — PC4.20 — LKC

Alterations to shaped hole

Alteration	Code	Spec.	1Code
	PC	Shaped hole diameter change min.: P>PC≧ $\frac{Pmin}{2}$ ≧0.50 0.01 mm increments max.: P<PC≦Pmax.+0.2 0.01 mm increments	
	PKC	Shaped hole diameter tolerance change P $^{+0.01}_{0}$ ⇒ $^{+0.005}_{0}$ ⊗ Cannot be used for P<100.	

Alterations to full length

Alteration	Code	Spec.	1Code
	LC	Full length change 10≦LC<L 0.1 mm increments (If combined with LKC, 0.01 mm increments can be selected.) ⊙ Press-in lead is shortened by (L—LC). ⊗ Cannot be used for headed types.	Quotation
	SLC	Changes to full length and full length tolerance are processed using a single code. The allowable range of change, increment, ordering process, and notes (⊙) are the same as for LC. **LC** Full length change + **LKC** Full length tolerance change L $^{+0.4}_{0.2}$ ⇒ $^{+0.05}_{0}$ ⊙ 0.01 mm increments ⊗ Cannot be used for headed types.	
	LKC	Full length tolerance change L $^{+0.4}_{0.2}$ ⇒ $^{+0.05}_{0}$	
	LKZ	Full length tolerance change L $^{+0.4}_{0.2}$ ⇒ $^{+0.01}_{0}$ ⊗ Cannot be used for L(LC)<16.	
	CKC	Changes to head thickness tolerance and full length tolerance are processed using a single code. Machining limits are the same as for TKC and LKC. ⊗ Cannot be used for straight types. **TKC** Head thickness tolerance change T $^{+0.3}_{0}$ ⇒ $^{+0.02}_{0}$ + **LKC** Full length tolerance change L $^{+0.4}_{0.2}$ ⇒ $^{+0.05}_{0}$	
	MKC	Changes to head thickness tolerance and full length tolerance are processed using a single code. Machining limits are the same as for TKM and LKC. ⊗ Cannot be used for straight types. **TKM** Head thickness tolerance change T $^{+0.3}_{0}$ ⇒ $^{0}_{-0.02}$ + **LKC** Full length tolerance change L $^{+0.4}_{0.2}$ ⇒ $^{+0.05}_{0}$	

Alterations to head

Alteration	Code	Spec.	1Code
	KC	Addition of single key flat to head Addition of single key flat ⊗ Cannot be used for D3~6.	
	WKC	Addition of double key flats in parallel ⊗ Cannot be combined with KC. ⊗ Cannot be used for straight types.	
	KFC	Double key flats at 0° and a selected angle 1° increments ⊗ Cannot be combined with KC·WKC. ⊗ Cannot be used for straight types.	Quotation
	HC	Head diameter change D≦HC<H 0.1 mm increments	
	TC	Head thickness change 2≦TC<T 0.1 mm increments (If combined with TKC·TKM·CKC·MKC, 0.01 mm increments can be selected.) ⊙ Full length L is shortened by (T—TC). If combined with LC, full length is equal to LC.	
	TKC	Head thickness tolerance change T $^{+0.3}_{0}$ ⇒ $^{+0.02}_{0}$ ⊗ Cannot be used for L(LC)<16.	
	TKM	Head thickness tolerance change T $^{+0.3}_{0}$ ⇒ $^{0}_{-0.02}$ ⊗ Cannot be used for L(LC)<16.	

■Features・These non-clogging button dies are intended to be used in combination with a vacuum device such as a vacuum pump.
・Because an air inlet hole is created near the shaped hole, when a vacuum device is used to provide suction, an air flow is produced inside the button die. This results in more effective scrap discharge compared with button dies that do not have air inlet holes. [Fig. 1]
・It is also possible to use products such as a scrap vacuum unit ▸ (P.385) or commercially available pail-mounted cleaner as the vacuum device in place of the vacuum pump. In these cases, the drive source is compressed air from a compressor or other machine. [Fig. 2]
・Non-clogging button dies [Products Data] ▸ P.1621

WST · WSTK ▸ P.386
Scrap vacuum unit SVBN ▸ P.385

Air inlet hole
Scrap is ejected by vacuum pressure and airflow.
Vacuum pressure only (no airflow)
Suction   [Fig. 1] Effects of air inlet hole   Suction

Pail-mounted cleaner   Vacuum pump+Scrap collection tank
[Fig. 2] Examples of combinations with different vacuum devices

BUTTON DIES