

# MOVABLE CARBIDE PILOT PUNCHES



CARBIDE PILOT PUNCHES

Type	Shank diameter D tolerance	M	Catalog No.	Shape
<b>Tip R type</b> 	Dg6	V30 (HIP) 88~89HRA	<b>WSUPT</b> —Lapping— <b>L—WSUPT</b> —TiCN coating— <b>H—WSUPT</b>	<p>For the length of tip R, refer to the products data "Punch R length". <b>P.1592</b>                      RT=0 with lapping cannot be selected.                      RT(*) → If R&lt;8, tip is rounded for safety. To keep the sharp tip (no rounding), specify RT=0. <b>P.1592</b>                      Although the marks of processing may remain in the center of a Shank end face, it is satisfactory on a function.</p>
	D <sub>-0.005/-0.010</sub>		<b>A—WSUPT</b> —Lapping— <b>AL—WSUPT</b> —TiCN coating— <b>AH—WSUPT</b>	
<b>Tapered tip type</b> 	Dg6	V30 (HIP) 88~89HRA	<b>WTUPT</b> —Lapping— <b>L—WTUPT</b> —TiCN coating— <b>H—WTUPT</b>	<p>Although the marks of processing may remain in the center of a Shank end face, it is satisfactory on a function.</p>
	D <sub>-0.005/-0.010</sub>		<b>A—WTUPT</b> —Lapping— <b>AL—WTUPT</b> —TiCN coating— <b>AH—WTUPT</b>	
<b>Sharp tip angle type</b> 	Dg6	V30 (HIP) 88~89HRA Surface 3000HV	<b>WUPT</b> —Lapping— <b>L—WUPT</b> —TiCN coating— <b>H—WUPT</b>	<p>Although the marks of processing may remain in the center of a Shank end face, it is satisfactory on a function.</p>
	D <sub>-0.005/-0.010</sub>		<b>A—WUPT</b> —Lapping— <b>AL—WUPT</b> —TiCN coating— <b>AH—WUPT</b>	

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to tip	PC	PC ≥ Pmin./2 0.01mm increments If PC is 0.500 ~ 0.999, Bmax. is 8mm. — Coating type— P ≥ Pmin./2 ≥ 1.00 0.01mm increments		
	PKC	Tip diameter tolerance change • Normal P +0.005 0 ⇨ +0.003 0 • Lapping P +0.01 0 ⇨ +0.005 0 • TiCN coating P +0.01 0 ⇨ +0.005 0 P dimension can be selected in 0.001mm increments.		Quotation
	PKV	Tip diameter tolerance change • Normal P +0.005 0 ⇨ ±0.002 • Lapping P +0.01 0 ⇨ ±0.005 • TiCN coating P +0.01 0 ⇨ ±0.005 P dimension increment remains the same.		Quotation
Alterations to full length	RLC	Tip R is cut flat. Allowable range of change 2 ≤ RLC < √P (10-P/4) 0.1mm increments		

Alteration	Code	Tip R type	Tapered tip and sharp tip angle types	1Code
Alterations to tip	BKC		Tip length tolerance change B +0.3 0 ⇨ +0.05 0	
	SC		Tip roughness change The base material is finished before the coating is applied. R=0 → R ≤ 0.2	
	GC		Tip angle change 15° < GC ≤ 45° 1° increments Cannot be used for tapered tip types.	Quotation
	YC		Tip taper length change - If YC < 2.0, 1 ≤ YC ≤ P × 2.83 - 0.3 - If P ≤ 2.0, 1 ≤ YC ≤ P × 1.86 - 0.3 ≤ 12 L (LC) + YC ≤ Lmax. + 8 0.1mm increments Cannot be used for sharp tip angle types.	Quotation
Alterations to full length	LC		Full length change B + 9 ≤ LC < L 0.1mm increments	

**P** Price **Quotation**

**EX** Example

**Features**

- No height adjustment is required after regrinding.
- Because it is possible to remove the pilot punch without disassembling the die, the number of steps required for regrinding can be reduced.
- Even if a misfeed occurs, because the pilot punches themselves are moveable, it is possible to prevent the punch from biting into the workpiece or being broken.

Catalog No.	Type	D	0.1mm increments			0.001mm increments (With coating, 0.01mm increments)		0.1mm increments	Y
			L	B		min.	max.		
(Dg6)	(Tip R) WSUPT	3	42	52	62	1.000 ~ 2.500		5 ≤ B ≤ 23 TiCN coating 5 ≤ B ≤ L/2 ≤ 23	2
(D <sub>-0.005/-0.010</sub> )	(Tapered tip) A—WSUPT		42	52	62	72	1.500 ~ 3.500		
(Dg6)	(Sharp tip angle) L—WSUPT	5	42	52	62	72	2.000 ~ 4.500		3
(D <sub>-0.005/-0.010</sub> )	(Tapered tip) AL—WSUPT		42	52	62	72	2.500 ~ 5.500		
(Dg6)	(Sharp tip angle) H—WSUPT	8	42	52	62	72	3.000 ~ 7.500		5
(D <sub>-0.005/-0.010</sub> )	(Tapered tip) AH—WSUPT		42	52	62	72	82		

P dimension increment → If coated, 0.001mm increments can be selected for alteration PKC.

Order **Catalog No.** — **L** — **P** — **B**  
 WUPT 6 — 62 — P4.320 — B20

Days to Ship **Quotation**