







| Type | シャンク径 D公差 | 材質 硬度 | Type | Shape 刃先形状 | B 刃先長さ | 刃先形状は下図 刃先形状 A~Gより選択 | |
|-----------|----------------------------------|--------------------------------------|--------|---------------|-----------|-------------------------|-------------------|
| -WPC®処理- | D ^{+0.005} ₀ | SKD11相当 60~63HRC 表面1000~1100HV | GW-SP | A | | 刃先形状は下図 刃先形状 A~Gより選択 | |
| RoHS | | SKH51相当 61~64HRC 表面1000~1100HV | GW-SH | D | | | S |
| | | 粉末ハイス鋼 64~67HRC 表面1000~1100HV | GW-PH | R | | | L |
| | | SKH51相当 61~64HRC 表面3000HV | GHW-SH | E | | | X |
| | | 粉末ハイス鋼 64~67HRC 表面3000HV | GHW-PH | G | | | 刃先長さ (B) X>L>S |
| | | | | | | | |
| -HWコート処理- | | | | | | | |

| 刃先形状 | 刃先形状 | 刃先形状 | 刃先形状 | 刃先形状 | 刃先形状 |
|--------------------------|---|---|----------------|----------------|------|
| A | D | R | E | G | |
| | | | | | |
| <p>⌀P≥W K=√P²+W²</p> | <p>⌀P≥W 0.15≤R<W/2 K=√(P-2R)²+(W-2R)²+2R</p> | <p>⌀P≥W 0.15≤R<W/2 K=√(P-2R)²+(W-2R)²+2R</p> | <p>⌀P>W</p> | <p>⌀P>W</p> | |

| 型式 | | | | L | | | | | | | 指定0.01mm単位 | | | | B | H | | | | | |
|-------------------|---|-----------|-------|---|----|----|----|----|----|-------------|-------------|--------|---------|------|----|-------------------------------|----|---|--|----|----|
| Type | Shape 刃先形状 | B 刃先長さ | D | | | | | | | | A | | D R E G | | | | R | | | | |
| | | | | | | | | | | min. P max. | P・Kmax. | W max. | P・Wmin. | R | | | | | | | |
| －WPC®処理－ GW－SP |  | S | 3 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 1.00～1.80 | | | | | 0.15 ↓ W 2 未満 Rのみ | 8 | 5 | | | |
| | | | 4 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 1.00～2.80 | 3.97 | 2.80 | 1.00 | 7 | | | | | | |
| | | | 5 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 2.00～3.80 | 4.97 | 3.80 | 1.20 | 8 | | | | | | |
| | | | 6 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 2.00～4.80 | 5.97 | 4.80 | 1.50 | 9 | | | | | | |
| | | | 8 | (40) | 50 | 60 | 70 | 80 | 90 | 100 | 3.00～5.80 | 7.97 | 5.80 | 2.00 | 11 | | | | | | |
| | | | 10 | (40) | 50 | 60 | 70 | 80 | 90 | 100 | 3.00～7.80 | 9.97 | 7.80 | 2.50 | 13 | | | | | | |
| | | | 13 | (40) | 50 | 60 | 70 | 80 | 90 | 100 | 6.00～10.80 | 12.97 | 10.80 | 3.00 | 16 | | | | | | |
| | | | 16 | (40) | 50 | 60 | 70 | 80 | 90 | 100 | 10.00～13.80 | 15.97 | 13.80 | 4.00 | 19 | | | | | | |
| GW－SH |  | A | 20 | (40) | 50 | 60 | 70 | 80 | 90 | 100 | 13.00～17.80 | 19.97 | 17.80 | 5.00 | | 19 | 23 | | | | |
| | | | 25 | (40) | 50 | 60 | 70 | 80 | 90 | 100 | 18.00～22.80 | 24.97 | 22.80 | 6.00 | | 28 | | | | | |
| | | | 3 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 1.00～1.80 | | | | | 7 | | | | | |
| | | | 4 | | 50 | 60 | 70 | 80 | 90 | 100 | 1.00～2.80 | 3.97 | 2.80 | 2.00 | | 8 | | | | | |
| | | | 5 | | 50 | 60 | 70 | 80 | 90 | 100 | 2.00～3.80 | 4.97 | 3.80 | 2.00 | | 9 | | | | | |
| | | | 6 | | 50 | 60 | 70 | 80 | 90 | 100 | 2.00～4.80 | 5.97 | 4.80 | 2.00 | | 11 | | | | | |
| | | | 8 | | 50 | 60 | 70 | 80 | 90 | 100 | 3.00～5.80 | 7.97 | 5.80 | 2.50 | | 13 | | | | | |
| | | | 10 | | 50 | 60 | 70 | 80 | 90 | 100 | 3.00～7.80 | 9.97 | 7.80 | 2.50 | | 16 | | | | | |
| GW－PH |  | R | 13 | | 50 | 60 | 70 | 80 | 90 | 100 | 6.00～10.80 | 12.97 | 10.80 | 3.00 | | 19 | 19 | | | | |
| | | | 16 | | | 60 | 70 | 80 | 90 | 100 | 10.00～13.80 | 15.97 | 13.80 | 4.00 | | 23 | | | | | |
| | | | 20 | | | 60 | 70 | 80 | 90 | 100 | 13.00～17.80 | 19.97 | 17.80 | 5.00 | | 28 | | | | | |
| | | | 25 | | | 60 | 70 | 80 | 90 | 100 | 18.00～22.80 | 24.97 | 22.80 | 6.00 | | | | | | | |
| | | | 3 | | 50 | 60 | 70 | 80 | 90 | 100 | 1.20～1.80 | | | | | 19 | 5 | | | | |
| | | | 4 | | 50 | 60 | 70 | 80 | 90 | 100 | 1.20～2.80 | 3.97 | 2.80 | 2.00 | | 7 | | | | | |
| | | | 5 | | | 60 | 70 | 80 | 90 | 100 | 2.00～3.80 | 4.97 | 3.80 | 3.50 | | 8 | | | | | |
| | | | 6 | | | 60 | 70 | 80 | 90 | 100 | 2.00～4.80 | 5.97 | 4.80 | 3.50 | | 9 | | | | | |
| GW－PH |  | E | 8 | | | 60 | 70 | 80 | 90 | 100 | 3.00～5.80 | 7.97 | 5.80 | 5.00 | | 25 | 11 | | | | |
| | | | 10 | | | 60 | 70 | 80 | 90 | 100 | 3.00～7.80 | 9.97 | 7.80 | 5.00 | | 13 | | | | | |
| | | | 13 | | | 60 | 70 | 80 | 90 | 100 | 6.00～10.80 | 12.97 | 10.80 | 5.00 | | 16 | | | | | |
| | | | 16 | | | | 70 | 80 | 90 | 100 | 10.00～13.80 | | | | | 19 | | | | | |
| | | | 20 | | | | 70 | 80 | 90 | 100 | 13.00～17.80 | | | | | 23 | | | | | |
| | | | 25 | | | | 70 | 80 | 90 | 100 | 18.00～22.80 | | | | | 28 | | | | | |
| | | | GW－PH |  | G | 3 | | | | | | | | | | | | | | 40 | 19 |
| | | | | | | 4 | | | | | | | | | | | | | | 23 | |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | |
| GW－PH |  | X | 20 | | | | | | | | | | | | | 40 | 19 | | | | |
| | | | 25 | | | | | | | | | | | | | 23 | | | | | |
| | | | 3 | | | | | | | | | | | | | | | | | | |
| | | | 4 | | | | | | | | | | | | | | | | | | |
| | | | 5 | | | | | | | | | | | | | | | | | | |
| | | | 6 | | | | | | | | | | | | | | | | | | |
| | | | 8 | | | | | | | | | | | | | | | | | | |
| | | | 10 | | | | | | | | | | | | | | | | | | |

① L(40)→B=8 全長が(40)の場合、刃先長さは一律8mmになります。
 ② D R E G: P・K>D-0.05→ℓ=0 変形パンチでP・K>D-0.05の場合、D-0.03(導入部)はつきません。
 ③ D=3~6→a=0.5 D寸法が3~6のとき、a部は0.5mmになります。
 ④ D=8~25→a=1 D寸法が8~25のとき、a部は1mmになります。

Order 注文例 型式 - L - P - W - R(Rのみ)
 GW-PHDL 13 - 80 - P10.50 - W7.34

■WPC®処理 (GW-) ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

■HWコート処理 (GHW-) ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

Alterations 追加加工 型式 - L(LC・LCT・LMT) - P(PC) - W(WC) - R - (BC・HC・TC...etc.)
 GW-SPAS 10 - LC72.0 - PC2.80 - BC8

| Alterations | Code | A | D R E G | ¥/Code |
|-------------|-------|---|---|--------|
| 刃先追加加工 | PC WC | 刃先寸法変更 PC ₁ ≥ ₂ 指定0.01mm単位 (PKC併用の場合 0.001mm単位指定可) | 刃先寸法変更 PC ₁ ≥ ₂ ・P・Wmin. ≥0.80 指定0.01mm単位 刃先X適用不可 | 200 |
| | | P(PC) Bmax 0.500~0.799 10 0.800~0.999 13 1.000~1.999 20 2.000~3.999 35 4.000~4.999 45 5.000~5.999 50 6.000~ 60 | P(PC)・W(WC) Bmax 0.80~1.49 8 1.50~1.99 13 2.00~3.49 19 3.50~4.99 25 5.00~ 30 | |
| | BC | 刃先長さ変更 2≤BC≤Bmax 指定0.1mm単位 ①全長Lは刃先長さBC+ 25mm以上必要です。 | 刃先長さ変更 2≤BC≤Bmax 指定0.1mm単位 ①全長Lは刃先長さBC+ 30mm以上必要です。 | 200 |
| | | | | |
| | PRC | 刃先側端面R加工 0.3≤PRC≤1 指定0.1mm単位 ①PRC≤(P-0.2)/2 ②PCC併用不可 ③HWコート処理は ストックA適用不可 | | 400 |
| | PCC | 刃先側端面C面取り加工 0.3≤PCC≤1 指定0.1mm単位 ①PCC≤(P-0.2)/2 ②PRC併用不可 ③HWコート処理は ストックA適用不可 | | 200 |
| ツバ部追加加工 | PKC | 刃先公差変更 P+0.01⇔+0.005 0 (P寸法0.001mm単位指定可) ①HWコート処理はD>13適用不可 | 刃先公差変更 P・W±0.01⇔+0.01 0 (HWコート 処理 600) | 400 |

Price 価格 数量スライド価格 (①1円未満切り捨て) P.39
 数量区分 標準対応 個別対応大口
 数量 1~9 10~29 30~99 100~200 201~
 値引率 基準単価 5% 10% 15% お見積り

①表示数量超えはWOSにてご確認ください。

| D | SKD11相当 -WPC®処理- 基準単価 | | | | D | SKH51相当 -WPC®処理- 基準単価 | | | | D | 粉末ハイス鋼 -WPC®処理- 基準単価 | | | |
|----|-----------------------|---------|--------------------|---------|----|-----------------------|---------|--------------------|---------|----|----------------------|---------|--------------------|---------|
| | GW-SPAS GW-SPAL | GW-SPAX | GW-SP-S GW-SP-L | GW-SP-X | | GW-SHAS GW-SHAL | GW-SHAX | GW-SH-S GW-SH-L | GW-SH-X | | GW-PHAS GW-PHAL | GW-PHAX | GW-PH-S GW-PH-L | GW-PH-X |
| 3 | 1,740 | 1,830 | — | — | 3 | 1,800 | 1,890 | — | — | 3 | 2,030 | 2,120 | — | — |
| 4 | 1,760 | 1,840 | 2,390 | 2,560 | 4 | 1,820 | 1,900 | 2,490 | 2,660 | 4 | 2,050 | 2,130 | 2,910 | 3,070 |
| 5 | 1,770 | 1,880 | 2,460 | 2,630 | 5 | 1,830 | 1,930 | 2,560 | 2,730 | 5 | 2,070 | 2,170 | 3,000 | 3,170 |
| 6 | 1,780 | 1,890 | 2,510 | 2,680 | 6 | 1,840 | 1,950 | 2,610 | 2,770 | 6 | 2,160 | 2,260 | 3,150 | 3,320 |
| 8 | 1,840 | 1,970 | 2,590 | 2,760 | 8 | 1,940 | 2,070 | 2,750 | 2,910 | 8 | 2,430 | 2,550 | 3,450 | 3,620 |
| 10 | 1,930 | 2,060 | 2,700 | 2,860 | 10 | 2,070 | 2,200 | 2,850 | 3,010 | 10 | 2,680 | 2,800 | 3,620 | 3,780 |
| 13 | 2,020 | 2,160 | 2,990 | 3,160 | 13 | 2,230 | 2,360 | 3,140 | 3,310 | 13 | 3,330 | 3,440 | 4,490 | 4,670 |
| 16 | 2,120 | 2,280 | 3,390 | — | 16 | 2,510 | 2,660 | 4,190 | — | 16 | 3,660 | 3,810 | 4,970 | — |
| 20 | 2,270 | 2,440 | 3,850 | — | 20 | 2,870 | 3,030 | 4,860 | — | 20 | 4,210 | 4,380 | 5,840 | — |
| 25 | 2,690 | 2,860 | 4,230 | — | 25 | 3,550 | 3,720 | 5,370 | — | 25 | 4,860 | 5,040 | 6,630 | — |

| D | SKH51相当 -HWコート処理- 基準単価 | | | | D | 粉末ハイス鋼 -HWコート処理- 基準単価 | | | |
|----|------------------------|----------|----------------------|----------|----|-----------------------|----------|----------------------|----------|
| | GHW-SHAS GHW-SHAL | GHW-SHAX | GHW-SH-S GHW-SH-L | GHW-SH-X | | GHW-PHAS GHW-PHAL | GHW-PHAX | GHW-PH-S GHW-PH-L | GHW-PH-X |
| 3 | 2,430 | 2,520 | — | — | 3 | 2,690 | 2,770 | — | — |
| 4 | 2,480 | 2,560 | 3,170 | 3,340 | 4 | 2,780 | 2,820 | 3,650 | 3,820 |
| 5 | 2,520 | 2,640 | 3,280 | 3,450 | 5 | 2,840 | 2,910 | 3,790 | 3,970 |
| 6 | 2,650 | 2,770 | 3,440 | 3,610 | 6 | 3,040 | 3,110 | 4,050 | 4,230 |
| 8 | 2,870 | 3,010 | 3,710 | 3,880 | 8 | 3,440 | 3,520 | 4,490 | 4,660 |
| 10 | 3,140 | 3,280 | 3,940 | 4,110 | 10 | 3,830 | 3,900 | 4,780 | 4,950 |
| 13 | 3,420 | 3,570 | 4,460 | 4,630 | 13 | 4,580 | 4,650 | 5,930 | 6,110 |
| 16 | 3,850 | 4,020 | 5,480 | — | 16 | 5,090 | 5,170 | 6,650 | — |
| 20 | 4,400 | 4,550 | 6,340 | — | 20 | 5,820 | 5,900 | 7,900 | — |
| 25 | 5,140 | 5,280 | 6,940 | — | 25 | 6,550 | 6,620 | 8,970 | — |