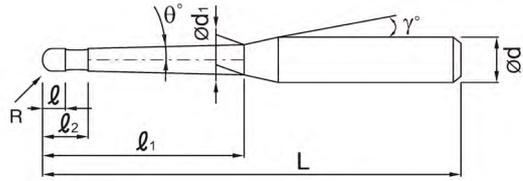
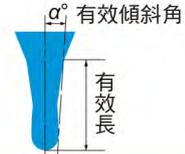


# MRBTN230 無限鍍膜全鎢鋼斜刃長首徑圓球立銑刀

## 2-Flute Long Taper Neck Ball End Mills



$R < 0.25 \pm 0.005$   
 $R \geq 0.25 \pm 0.01$



\* 頸下部為斜刃型設計，可提升工具之剛性，且切削深度可大幅增加。

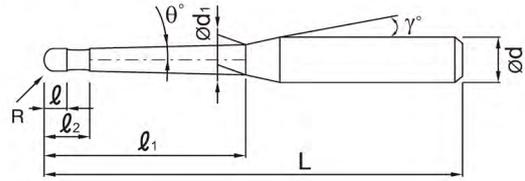
單位：mm

R角 (R)	首角 (θ)	有效長 (l <sub>1</sub> )	首徑 (d <sub>1</sub> )	刃長 (l)	首下長 (l <sub>2</sub> )	首角2 (γ)	有效傾斜角 (α)	柄徑 (d)	全長 (L)	價(支)格
0.1	30'	1	0.21	0.2	0.4	12°	0°19'	4	50	5,090.00
0.1	30'	1.5	0.22	0.2	0.4	12°	0°23'	4	50	5,430.00
0.1	30'	2	0.23	0.2	0.4	12°	0°25'	4	50	5,710.00
0.1	1°	1	0.22	0.2	0.4	12°	0°38'	4	50	5,090.00
0.1	1°	1.5	0.24	0.2	0.4	12°	0°47'	4	50	5,430.00
0.1	1°	2	0.26	0.2	0.4	12°	0°51'	4	50	5,710.00
0.1	1°30'	1	0.23	0.2	0.4	12°	0°57'	4	50	5,090.00
0.1	1°30'	1.5	0.26	0.2	0.4	12°	1°11'	4	50	5,430.00
0.1	1°30'	2	0.28	0.2	0.4	12°	1°16'	4	50	5,710.00
0.1	2°	1	0.24	0.2	0.4	12°	1°16'	4	50	5,090.00
0.1	2°	1.5	0.28	0.2	0.4	12°	1°35'	4	50	5,430.00
0.1	2°	2	0.31	0.2	0.4	12°	1°41'	4	50	5,710.00
0.1	3°	1	0.26	0.2	0.4	12°	1°54'	4	50	5,090.00
0.1	3°	1.5	0.32	0.2	0.4	12°	2°21'	4	50	5,430.00
0.1	3°	2	0.37	0.2	0.4	12°	2°32'	4	50	5,710.00
0.1	5°	2	0.48	0.2	0.4	12°	4°13'	4	50	5,710.00
0.15	30'	3	0.34	0.3	0.6	12°	0°25'	4	50	5,710.00
0.15	1°	2	0.35	0.3	0.6	12°	0°45'	4	50	5,430.00
0.15	1°	3	0.38	0.3	0.6	12°	0°51'	4	50	5,710.00
0.15	1°30'	2	0.37	0.3	0.6	12°	1°08'	4	50	5,430.00
0.15	1°30'	3	0.43	0.3	0.6	12°	1°16'	4	50	5,710.00
0.15	2°	3	0.47	0.3	0.6	12°	1°41'	4	50	5,710.00
0.15	3°	3	0.55	0.3	0.6	12°	2°32'	4	50	5,710.00
0.15	5°	3	0.72	0.3	0.6	12°	4°13'	4	50	5,710.00
0.2	30'	2	0.42	0.4	0.8	12°	0°20'	4	50	4,190.00
0.2	30'	3	0.44	0.4	0.8	12°	0°24'	4	50	4,190.00
0.2	30'	4	0.46	0.4	0.8	12°	0°25'	4	50	4,190.00
0.2	1°	2	0.44	0.4	0.8	12°	0°40'	4	50	4,190.00
0.2	1°	3	0.48	0.4	0.8	12°	0°47'	4	50	4,190.00
0.2	1°	4	0.51	0.4	0.8	12°	0°51'	4	50	4,190.00
0.2	1°30'	2	0.46	0.4	0.8	12°	1°00'	4	50	4,190.00
0.2	1°30'	3	0.52	0.4	0.8	12°	1°11'	4	50	4,190.00
0.2	1°30'	4	0.57	0.4	0.8	12°	1°16'	4	50	4,190.00
0.2	2°	2	0.48	0.4	0.8	12°	1°20'	4	50	4,190.00
0.2	2°	3	0.55	0.4	0.8	12°	1°34'	4	50	4,190.00
0.2	2°	4	0.62	0.4	0.8	12°	1°41'	4	50	4,190.00
0.2	3°	2	0.53	0.4	0.8	12°	2°00'	4	50	4,190.00
0.2	3°	4	0.74	0.4	0.8	12°	2°31'	4	50	4,190.00
0.2	5°	4	0.96	0.4	0.8	12°	4°13'	4	50	4,190.00

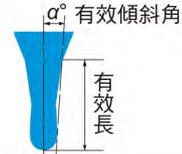
無限鍍膜刀具 MUGEN Coating

# MRBTN230 無限鍍膜全鎢鋼斜刃長首徑圓球立銑刀

## 2-Flute Long Taper Neck Ball End Mills



$R < 0.25 \pm 0.005$   
 $R \geq 0.25 \pm 0.01$



\* 頸下部為斜刃型設計，可提升工具之剛性，且切削深度可大幅增加。

單位：mm

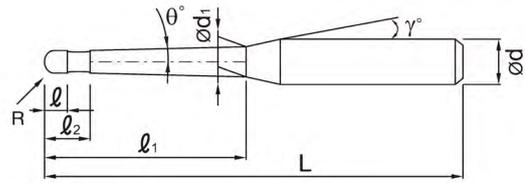
R角 (R)	首角 (θ)	有效長 (ℓ <sub>1</sub> )	首徑 (d <sub>1</sub> )	刃長 (ℓ)	首下長 (ℓ <sub>2</sub> )	首角2 (γ)	有效傾斜角 (α)	柄徑 (d)	全長 (L)	價(支)格
0.25	30'	3	0.53	0.5	1	12°	0°22'	4	50	3,960.00
0.25	30'	5	0.57	0.5	1	12°	0°25'	4	50	4,070.00
0.25	1°	3	0.57	0.5	1	12°	0°44'	4	50	3,960.00
0.25	1°	5	0.64	0.5	1	12°	0°51'	4	50	4,070.00
0.25	1°30'	3	0.6	0.5	1	12°	1°06'	4	50	3,960.00
0.25	1°30'	5	0.71	0.5	1	12°	1°16'	4	50	4,070.00
0.25	2°	3	0.64	0.5	1	12°	1°27'	4	50	3,960.00
0.25	2°	5	0.78	0.5	1	12°	1°41'	4	50	4,070.00
0.25	3°	3	0.71	0.5	1	12°	2°11'	4	50	3,960.00
0.25	3°	5	0.92	0.5	1	12°	2°32'	4	50	4,070.00
0.25	5°	5	1.2	0.5	1	12°	4°13'	4	50	4,070.00
0.3	30'	5	0.67	0.6	1.2	12°	0°24'	4	50	3,900.00
0.3	30'	8	0.72	0.6	1.2	12°	0°27'	4	50	4,020.00
0.3	1°	4	0.7	0.6	1.2	12°	0°45'	4	50	3,730.00
0.3	1°	5	0.73	0.6	1.2	12°	0°49'	4	50	3,900.00
0.3	1°	6	0.77	0.6	1.2	12°	0°51'	4	50	3,900.00
0.3	1°	8	0.84	0.6	1.2	12°	0°53'	4	50	4,020.00
0.3	1°30'	5	0.8	0.6	1.2	12°	1°13'	4	50	3,900.00
0.3	1°30'	8	0.96	0.6	1.2	12°	1°19'	4	50	4,020.00
0.3	2°	6	0.94	0.6	1.2	12°	1°41'	4	50	3,900.00
0.3	2°	8	1.07	0.6	1.2	12°	1°46'	4	50	4,020.00
0.3	3°	6	1.1	0.6	1.2	12°	2°32'	4	50	3,900.00
0.3	3°	8	1.31	0.6	1.2	12°	2°39'	4	50	4,020.00
0.3	5°	8	1.79	0.6	1.2	12°	4°25'	4	50	4,020.00
0.4	30'	8	0.91	0.8	1.6	12°	0°25'	4	50	4,190.00
0.4	30'	12	0.98	0.8	1.6	12°	0°27'	4	60	4,410.00
0.4	1°	8	1.02	0.8	1.6	12°	0°50'	4	50	4,190.00
0.4	1°	12	1.16	0.8	1.6	12°	0°54'	4	60	4,410.00
0.4	1°30'	8	1.14	0.8	1.6	12°	1°16'	4	50	4,190.00
0.4	1°30'	12	1.34	0.8	1.6	12°	1°21'	4	60	4,410.00
0.4	2°	8	1.25	0.8	1.6	12°	1°42'	4	50	4,190.00
0.4	2°	12	1.53	0.8	1.6	12°	1°48'	4	60	4,410.00
0.4	3°	8	1.47	0.8	1.6	12°	2°31'	4	50	4,190.00
0.4	3°	12	1.89	0.8	1.6	12°	2°41'	4	60	4,410.00
0.5	30'	10	1.14	1	2	12°	0°25'	4	60	3,560.00
0.5	30'	15	1.23	1	2	12°	0°27'	4	60	3,730.00
0.5	30'	20	1.31	1	2	12°	0°28'	4	70	4,520.00
0.5	30'	25	1.41	1	2	12°	0°29'	4	70	4,810.00
0.5	1°	6	1.14	1	2	12°	0°43'	4	60	2,940.00

無限鍍膜刀具

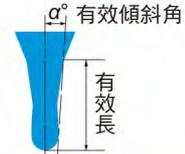
MUGEN Coating

# MRBTN230 無限鍍膜全鎢鋼斜刃長首徑圓球立銑刀

## 2-Flute Long Taper Neck Ball End Mills



$R < 0.25 \pm 0.005$   
 $R \geq 0.25 \pm 0.01$



\* 頸下部為斜刃型設計，可提升工具之剛性，且切削深度可大幅增加。

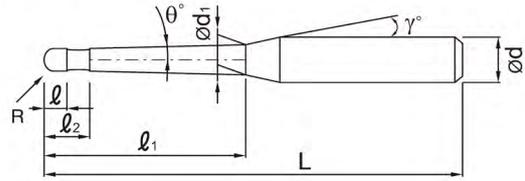
單位：mm

R角 (R)	首角 (θ)	有效長 (l <sub>1</sub> )	首徑 (d <sub>1</sub> )	刃長 (l)	首下長 (l <sub>2</sub> )	首角2 (γ)	有效傾斜角 (α)	柄徑 (d)	全長 (L)	價(支)格
0.5	1°	8	1.21	1	2	12°	0°48'	4	60	3,230.00
0.5	1°	10	1.28	1	2	12°	0°50'	4	60	3,560.00
0.5	1°	12	1.35	1	2	12°	0°52'	4	60	3,560.00
0.5	1°	15	1.45	1	2	12°	0°54'	4	60	3,730.00
0.5	1°	16	1.49	1	2	12°	0°54'	4	60	3,730.00
0.5	1°	20	1.63	1	2	12°	0°55'	4	70	4,520.00
0.5	1°	22	1.7	1	2	12°	0°56'	4	70	4,640.00
0.5	1°	25	1.8	1	2	12°	0°56'	4	70	4,810.00
0.5	1°30'	6	1.21	1	2	12°	1°05'	4	60	2,940.00
0.5	1°30'	8	1.31	1	2	12°	1°12'	4	60	3,230.00
0.5	1°30'	10	1.42	1	2	12°	1°16'	4	60	3,560.00
0.5	1°30'	12	1.52	1	2	12°	1°18'	4	60	3,560.00
0.5	1°30'	15	1.68	1	2	12°	1°21'	4	60	3,730.00
0.5	1°30'	16	1.73	1	2	12°	1°21'	4	60	3,730.00
0.5	1°30'	20	1.94	1	2	12°	1°23'	4	70	4,520.00
0.5	1°30'	22	2.05	1	2	12°	1°24'	4	70	4,640.00
0.5	1°30'	25	2.2	1	2	12°	1°24'	4	70	4,810.00
0.5	1°30'	36	2.78	1	2	12°	1°26'	4	70	5,260.00
0.5	2°	10	1.56	1	2	12°	1°41'	4	60	3,560.00
0.5	2°	15	1.91	1	2	12°	1°48'	4	60	3,730.00
0.5	2°	20	2.26	1	2	12°	1°51'	4	70	4,520.00
0.5	3°	10	1.84	1	2	12°	2°31'	4	60	3,560.00
0.5	3°	15	2.36	1	2	12°	2°41'	4	60	3,730.00
0.5	3°	20	2.89	1	2	12°	2°46'	4	70	4,520.00
0.5	5°	15	3.27	1	2	12°	4°28'	6	60	4,810.00
0.5	5°	20	4.15	1	2	12°	4°37'	6	70	5,490.00
0.6	30'	12	1.37	1.2	2.4	12°	0°25'	4	60	4,070.00
0.6	30'	24	1.58	1.2	2.4	12°	0°28'	4	70	5,030.00
0.6	1°	12	1.54	1.2	2.4	12°	0°51'	4	60	4,070.00
0.6	1°	24	1.95	1.2	2.4	12°	0°55'	4	70	5,030.00
0.6	1°30'	12	1.7	1.2	2.4	12°	1°16'	4	60	4,070.00
0.6	1°30'	24	2.33	1.2	2.4	12°	1°23'	4	70	5,030.00
0.6	2°	12	1.87	1.2	2.4	12°	1°41'	4	60	4,070.00
0.6	2°	24	2.71	1.2	2.4	12°	1°51'	4	70	5,030.00
0.6	3°	12	2.21	1.2	2.4	12°	2°32'	4	60	4,070.00
0.6	3°	24	3.46	1.2	2.4	12°	2°46'	6	70	5,490.00
0.6	5°	12	2.88	1.2	2.4	12°	4°13'	4	60	4,070.00
0.6	5°	24	4.98	1.2	2.4	12°	4°37'	6	70	5,490.00
0.75	30'	10	1.62	1.5	3	12°	0°23'	4	60	3,730.00

無限鍍膜刀具 MUGEN Coating

# MRBTN230 無限鍍膜全鎢鋼斜刃長首徑圓球立銑刀

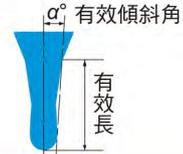
## 2-Flute Long Taper Neck Ball End Mills



$R < 0.25 \pm 0.005$   
 $R \geq 0.25 \pm 0.01$



P245~247



\* 頸下部為斜刃型設計，可提升工具之剛性，且切削深度可大幅增加。

單位：mm

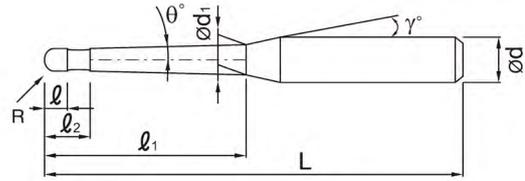
R角 (R)	首角 (theta)	有效長 (phi_1)	首徑 (d_1)	刃長 (l)	首下長 (phi_2)	首角2 (gamma)	有效傾斜角 (alpha)	柄徑 (d)	全長 (L)	價(支)格
0.75	30'	15	1.71	1.5	3	12°	0°25'	4	60	4,070.00
0.75	30'	30	1.97	1.5	3	12°	0°28'	4	70	5,710.00
0.75	1°	10	1.74	1.5	3	12°	0°45'	4	60	3,730.00
0.75	1°	15	1.92	1.5	3	12°	0°51'	4	60	4,070.00
0.75	1°	20	2.09	1.5	3	12°	0°53'	4	60	4,520.00
0.75	1°	30	2.44	1.5	3	12°	0°55'	4	70	5,710.00
0.75	1°30'	10	1.87	1.5	3	12°	1°08'	4	60	3,730.00
0.75	1°30'	15	2.13	1.5	3	12°	1°16'	4	60	4,070.00
0.75	1°30'	30	2.91	1.5	3	12°	1°23'	4	70	5,710.00
0.75	2°	10	1.99	1.5	3	12°	1°31'	4	60	3,730.00
0.75	2°	15	2.34	1.5	3	12°	1°41'	4	60	4,070.00
0.75	2°	20	2.69	1.5	3	12°	1°46'	4	60	4,980.00
0.75	2°	30	3.39	1.5	3	12°	1°51'	6	70	6,330.00
0.75	3°	15	2.76	1.5	3	12°	2°32'	4	60	4,070.00
0.75	3°	20	3.28	1.5	3	12°	2°39'	4	60	4,980.00
0.75	3°	30	4.33	1.5	3	12°	2°46'	6	70	6,330.00
0.75	5°	15	3.6	1.5	3	12°	4°13'	6	60	4,520.00
0.75	5°	28.7	6	1.5	3	-	4°36'	6	70	6,330.00
1	30'	12	2.14	2	4	12°	0°21'	4	60	3,280.00
1	30'	16	2.21	2	4	12°	0°24'	4	60	3,390.00
1	30'	20	2.28	2	4	12°	0°25'	4	60	4,070.00
1	30'	30	2.45	2	4	12°	0°27'	4	70	4,980.00
1	30'	40	2.63	2	4	12°	0°28'	4	80	5,880.00
1	1°	12	2.28	2	4	12°	0°43'	4	60	3,280.00
1	1°	16	2.42	2	4	12°	0°48'	4	60	3,390.00
1	1°	20	2.56	2	4	12°	0°51'	4	60	4,070.00
1	1°	25	2.73	2	4	12°	0°53'	4	60	4,520.00
1	1°	30	2.91	2	4	12°	0°54'	4	70	4,980.00
1	1°	35	3.08	2	4	12°	0°55'	4	80	6,450.00
1	1°	40	3.26	2	4	12°	0°55'	6	80	6,780.00
1	1°30'	12	2.42	2	4	12°	1°05'	4	60	3,280.00
1	1°30'	16	2.63	2	4	12°	1°12'	4	60	3,390.00
1	1°30'	20	2.84	2	4	12°	1°16'	4	60	4,070.00
1	1°30'	25	3.1	2	4	12°	1°19'	4	60	4,520.00
1	1°30'	30	3.36	2	4	12°	1°21'	6	70	5,880.00
1	1°30'	35	3.62	2	4	12°	1°22'	6	80	6,450.00
1	1°30'	40	3.89	2	4	12°	1°23'	6	80	6,780.00
1	2°	12	2.56	2	4	12°	1°27'	4	60	3,280.00
1	2°	16	2.84	2	4	12°	1°36'	4	60	3,390.00

無限鍍膜刀具

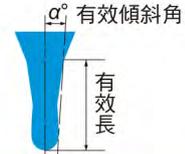
MUGEN Coating

# MRBTN230 無限鍍膜全鎢鋼斜刃長首徑圓球立銑刀

## 2-Flute Long Taper Neck Ball End Mills



$R < 0.25 \pm 0.005$   
 $R \geq 0.25 \pm 0.01$



\* 頸下部為斜刃型設計，可提升工具之剛性，且切削深度可大幅增加。

單位：mm

R角 (R)	首角 (θ)	有效長 (l <sub>1</sub> )	首徑 (d <sub>1</sub> )	刃長 (l)	首下長 (l <sub>2</sub> )	首角2 (γ)	有效斜角 (α)	柄徑 (d)	全長 (L)	價(支)格
1	2°	20	3.12	2	4	12°	1°41'	4	60	4,300.00
1	2°	30	3.82	2	4	12°	1°48'	6	70	5,880.00
1	2°	40	4.51	2	4	12°	1°51'	6	80	6,780.00
1	3°	12	2.84	2	4	12°	2°11'	4	60	3,280.00
1	3°	16	3.26	2	4	12°	2°24'	4	60	3,390.00
1	3°	20	3.68	2	4	12°	2°31'	6	70	4,520.00
1	3°	30	4.73	2	4	12°	2°41'	6	70	5,880.00
1	3°	40	5.77	2	4	12°	2°46'	6	80	6,780.00
1	5°	20	4.8	2	4	12°	4°13'	6	70	6,220.00
1	5°	26.8	6	2	4	-	4°25'	6	70	6,670.00
1	5°	38.2	8	2	4	-	4°36'	8	80	11,300.00
1.5	30'	15	3.16	3	6	12°	0°20'	6	70	4,520.00
1.5	30'	20	3.24	3	6	12°	0°22'	6	70	4,810.00
1.5	30'	30	3.43	3	6	12°	0°26'	6	70	5,600.00
1.5	30'	40	3.6	3	6	12°	0°27'	6	80	6,220.00
1.5	30'	50	3.77	3	6	12°	0°27'	6	90	7,240.00
1.5	1°	15	3.31	3	6	12°	0°39'	6	70	4,520.00
1.5	1°	20	3.49	3	6	12°	0°45'	6	70	4,810.00
1.5	1°	30	3.84	3	6	12°	0°51'	6	70	5,600.00
1.5	1°	40	4.19	3	6	12°	0°53'	6	80	6,220.00
1.5	1°	50	4.54	3	6	12°	0°54'	6	90	7,240.00
1.5	1°30'	15	3.47	3	6	12°	1°00'	6	70	4,520.00
1.5	1°30'	20	3.73	3	6	12°	1°07'	6	70	4,810.00
1.5	1°30'	30	4.26	3	6	12°	1°16'	6	70	5,600.00
1.5	1°30'	40	4.78	3	6	12°	1°19'	6	80	6,220.00
1.5	1°30'	50	5.3	3	6	12°	1°22'	6	90	7,240.00
1.5	2°	15	3.63	3	6	12°	1°20'	6	70	4,520.00
1.5	2°	20	3.98	3	6	12°	1°31'	6	70	4,810.00
1.5	2°	30	4.68	3	6	12°	1°41'	6	70	6,500.00
1.5	2°	48.9	6	3	6	-	1°49'	6	90	7,240.00
1.5	3°	20	4.47	3	6	12°	2°16'	6	70	5,090.00
1.5	3°	30	5.52	3	6	12°	2°32'	6	70	6,500.00
1.5	3°	50	7.61	3	6	12°	2°43'	8	90	11,930.00
1.5	5°	23.1	6	3	6	-	3°58'	6	70	7,240.00
2	30'	20	4.21	4	8	12°	0°19'	6	70	5,990.00
2	30'	40	4.56	4	8	12°	0°25'	6	90	7,910.00
2	30'	60	4.91	4	8	12°	0°27'	6	110	9,040.00
2	1°	20	4.42	4	8	12°	0°40'	6	70	5,990.00
2	1°	40	5.12	4	8	12°	0°50'	6	90	7,910.00
2	1°	60	5.82	4	8	12°	0°54'	6	110	9,040.00

無限鍍膜刀具 MUGEN Coating