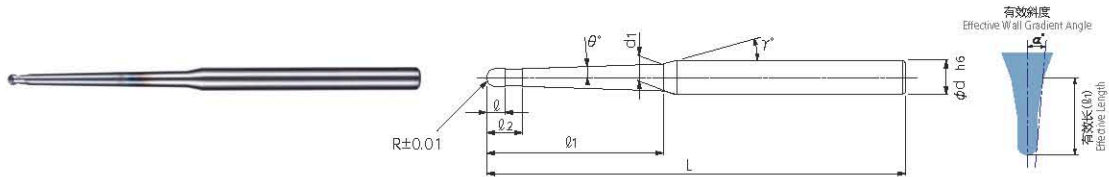


MRBTN230

无限白金涂层 长颈锥形2刀球头铣刀

MUGEN-COATING PREMIUM 2-Flute Long Taper Neck Ball End Mill



〔颈部形状〕

所述的颈角(θ°)和颈角2(γ°)的值仅为参考值。担心加工材料和颈部会干扰时,请务必实际测量进行确认。

〔Neck Shape〕

θ° and γ° 's reference value. Tool measurement required in order to avoid interference to the work material.

- 锥颈形状的球头铣刀, 能实现深沟加工的高精度化。
- 采用优化的锥颈形状和无限白金涂层, 加工高硬度材料时可发挥真正价值。
- 采用多功能的2刃设计, 共有159种规格。
- Taper neck type ball end mill improves accuracy for deep milling.
- Optimized taper neck design and MUGEN-COATING PREMIUM realized to show its higher ability for hardened steels.
- Lineup of total 159 size with high versatility 2-flute end mills.

技术资料

K-019



加工材料 Work Material

碳素钢 Carbon Steels	合金钢・工具钢 Alloy Steels・Tool Steels	预硬钢・调质钢 Prehardened Steels	淬火钢 Hardened Steels		不锈钢 Stainless Steels	钛合金 Titanium Alloy	铝合金 Aluminum	铜合金 Copper	树脂 Plastic
			~55HRC	55HRC~					
○	○	○	○	○	○	○	○	○	○

★返修对应 (详情请咨询本公司。)

单位 [规格: mm / 价格: 日元] Unit [size: mm / Retail Price: JPY]

产品代码 Code No.	(R)球头半径 Radius	(θ)颈角 Neck Taper Angle	(ℓ_1)有效长 Effective Length	(d_1)颈径 Neck Dia.	(ℓ)刃长 Length of Cut	(ℓ_2)颈长 Under Neck length	(γ)颈角2 Neck Taper Angle 2	(α)有效斜度 Effective Wall Gradient Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price
08-00588-01021	R0.1	30°	1.5	0.21	0.15	0.3	12°	0° 29'	4	50	9,900
08-00588-01023			2	0.22	0.15	0.3	12°	0° 28'	4	50	10,400
08-00588-01031		1°	1.5	0.24	0.15	0.3	12°	0° 58'	4	50	9,900
08-00588-01033			2	0.25	0.15	0.3	12°	0° 58'	4	50	10,400
08-00588-01041		1° 30'	1.5	0.26	0.15	0.3	12°	1° 29'	4	50	9,900
08-00588-01043			2	0.29	0.15	0.3	12°	1° 28'	4	50	10,400
08-00588-01051	R0.15	2°	1.5	0.29	0.15	0.3	12°	1° 59'	4	50	9,900
08-00588-01053			2	0.32	0.15	0.3	12°	1° 59'	4	50	10,400
08-00588-01521		30°	2	0.32	0.2	0.45	12°	0° 28'	4	50	9,900
08-00588-01523			3	0.34	0.2	0.45	12°	0° 29'	4	50	10,400
08-00588-01531		1°	2	0.35	0.2	0.45	12°	0° 59'	4	50	9,900
08-00588-01533			3	0.39	0.2	0.45	12°	0° 59'	4	50	10,400
08-00588-01541	R0.15	1° 30'	2	0.38	0.2	0.45	12°	1° 29'	4	50	9,900
08-00588-01543			3	0.44	0.2	0.45	12°	1° 29'	4	50	10,400
08-00588-01551		2°	2	0.42	0.2	0.45	12°	1° 58'	4	50	9,900
08-00588-01553			3	0.49	0.2	0.45	12°	1° 59'	4	50	10,400
08-00588-02021	R0.2	30°	3	0.43	0.3	0.6	12°	0° 29'	4	50	7,700
08-00588-02023			4	0.45	0.3	0.6	12°	0° 29'	4	50	7,700
08-00588-02025			6	0.48	0.3	0.6	12°	0° 29'	4	50	8,100
08-00588-02031		1°	3	0.48	0.3	0.6	12°	0° 59'	4	50	7,700
08-00588-02033			4	0.51	0.3	0.6	12°	0° 59'	4	50	7,700
08-00588-02035			6	0.58	0.3	0.6	12°	0° 59'	4	50	8,100
08-00588-02041		1° 30'	3	0.53	0.3	0.6	12°	1° 29'	4	50	7,700
08-00588-02043			4	0.58	0.3	0.6	12°	1° 29'	4	50	7,700
08-00588-02045			6	0.68	0.3	0.6	12°	1° 29'	4	50	8,100
08-00588-02051		2°	3	0.58	0.3	0.6	12°	1° 59'	4	50	7,700
08-00588-02053			4	0.65	0.3	0.6	12°	1° 59'	4	50	7,700
08-00588-02055			6	0.79	0.3	0.6	12°	1° 59'	4	50	8,100

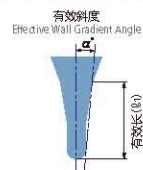
订购方法

请指定MRBTN230 球头半径(R)×颈角(θ)×有效长(ℓ_1)。

When you order, indicate MRBTN230 (R)×(θ)×(ℓ_1).

● 切削参数表记载于第E-052页

● Recommended Milling Conditions are shown on page E-052.



产品代码 Code No.	(R)球头半径 Radius	(θ)颈角 Neck Taper Angle	(l1)有效长 Effective Length	(d1)颈径 Neck Dia.	(L)刃长 Length of Cut	(L2)颈长 Under Neck Taper length	(γ)颈角2 Neck Taper Angle 2	(α)有效斜度 Effective Wall Gradient Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price
08-00588-02521	R0.25	30°	4	0.54	0.35	0.75	12°	0° 29'	4	50	7,300
08-00588-02523			5	0.56	0.35	0.75	12°	0° 29'	4	50	7,500
08-00588-02531		1°	4	0.61	0.35	0.75	12°	0° 59'	4	50	7,300
08-00588-02533			5	0.64	0.35	0.75	12°	0° 59'	4	50	7,500
08-00588-02541		1°30'	4	0.67	0.35	0.75	12°	1° 29'	4	50	7,300
08-00588-02543			5	0.73	0.35	0.75	12°	1° 29'	4	50	7,500
08-00588-02551		2°	4	0.74	0.35	0.75	12°	1° 59'	4	50	7,300
08-00588-02553			5	0.81	0.35	0.75	12°	1° 59'	4	50	7,500
08-00588-03021	R0.3	30°	4	0.64	0.45	0.9	12°	0° 29'	4	50	6,800
08-00588-03023			5	0.66	0.45	0.9	12°	0° 29'	4	50	7,100
08-00588-03025			6	0.67	0.45	0.9	12°	0° 29'	4	50	7,100
08-00588-03027			8	0.71	0.45	0.9	12°	0° 29'	4	50	7,300
08-00588-03031		1°	4	0.70	0.45	0.9	12°	0° 59'	4	50	6,800
08-00588-03033			5	0.74	0.45	0.9	12°	0° 59'	4	50	7,100
08-00588-03035			6	0.77	0.45	0.9	12°	0° 59'	4	50	7,100
08-00588-03037			8	0.84	0.45	0.9	12°	0° 59'	4	50	7,300
08-00588-03041		1°30'	4	0.77	0.45	0.9	12°	1° 29'	4	50	6,800
08-00588-03043			5	0.82	0.45	0.9	12°	1° 29'	4	50	7,100
08-00588-03045			6	0.87	0.45	0.9	12°	1° 29'	4	50	7,100
08-00588-03047			8	0.98	0.45	0.9	12°	1° 29'	4	50	7,300
08-00588-03053		2°	5	0.90	0.45	0.9	12°	1° 59'	4	50	7,100
08-00588-03055			6	0.97	0.45	0.9	12°	1° 59'	4	50	7,100
08-00588-03057			8	1.11	0.45	0.9	12°	1° 59'	4	50	7,300
08-00588-04021	R0.4	30°	8	0.89	0.6	1.2	12°	0° 29'	4	60	7,600
08-00588-04023			12	0.96	0.6	1.2	12°	0° 29'	4	60	8,000
08-00588-04031		1°	8	1.03	0.6	1.2	12°	0° 59'	4	60	7,600
08-00588-04033			12	1.17	0.6	1.2	12°	0° 59'	4	60	8,000
08-00588-04041		1°30'	8	1.16	0.6	1.2	12°	1° 29'	4	60	7,600
08-00588-04043			12	1.37	0.6	1.2	12°	1° 29'	4	60	8,000
08-00588-04051		2°	8	1.29	0.6	1.2	12°	1° 59'	4	60	7,600
08-00588-04053			12	1.57	0.6	1.2	12°	1° 59'	4	60	8,000
08-00588-05021	R0.5	30°	6	1.05	0.75	1.5	12°	0° 29'	4	60	5,400
08-00588-05022			8	1.08	0.75	1.5	12°	0° 29'	4	60	5,900
08-00588-05023			10	1.12	0.75	1.5	12°	0° 29'	4	60	6,500
08-00588-05024			12	1.15	0.75	1.5	12°	0° 29'	4	60	6,500
08-00588-05025			16	1.22	0.75	1.5	12°	0° 29'	4	60	6,800
08-00588-05026			20	1.29	0.75	1.5	12°	0° 29'	4	70	8,200
08-00588-05027			25	1.38	0.75	1.5	12°	0° 29'	4	70	8,700
08-00588-05028			30	1.47	0.75	1.5	12°	0° 29'	4	70	9,000
08-00588-05031		1°	6	1.15	0.75	1.5	12°	0° 59'	4	60	5,400
08-00588-05032			8	1.22	0.75	1.5	12°	0° 59'	4	60	5,900
08-00588-05033			10	1.29	0.75	1.5	12°	0° 59'	4	60	6,500
08-00588-05034			12	1.36	0.75	1.5	12°	0° 59'	4	60	6,500
08-00588-05035			16	1.50	0.75	1.5	12°	0° 59'	4	60	6,800

CBN铣刀 Cubic Boron Nitride	钻石铣刀 Diamond	平底铣刀 Square	长颈平底 铣刀 Long Neck Square	球头铣刀 Ball	长颈球头 铣刀 Long Neck Ball	圆鼻铣刀 Radius	长颈圆鼻 铣刀 Long Neck Radius	锥形铣刀 Taper	锥形球头 铣刀 Taper Ball	锥形圆鼻 铣刀 Taper Radius	钻头 Drilling	螺纹铣刀 Thread milling	倒角刀 Chamfering
PC·D涂层 PCD·Micrograin	涂层 Coating	涂层 Coating	无涂层 Non-Coating	涂层 Coating	无涂层 Non-Coating	涂层 Coating	无涂层 Non-Coating	涂层 Coating	无涂层 Non-Coating	无涂层 Non-Coating			

MRBTN230

无限白金涂层 长颈锥形2刀球头铣刀

MUGEN-COATING PREMIUM 2-Flute Long Taper Neck Ball End Mill

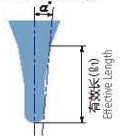
【颈部形状】

所述的颈角(θ°)和颈角2(γ°)的值仅为参考值。担心加工材料和颈部会干扰时,请务必实际测量进行确认。

(Neck Shape)

θ° and γ° 's reference value. Tool measurement required in order to avoid interference to the work material.

有效斜度
Effective Wall Gradient Angle



★返修对应 (详情请咨询本公司。)

单位 [规格 : mm / 价格 : 日元] Unit [size : mm / Retail Price : JPY]

产品代码 Code No.	(R)球头半径 Radius	(θ)颈角 Neck Taper Angle	(ℓ_1)有效长 Effective Length	(d_1)颈径 Neck Dia.	(ℓ)刃长 Length of Cut	(ℓ_2)颈长 Under Neck Lip Length	(γ)颈角2 Neck Taper Angle 2	(α)有效斜度 Effective Wall Gradient Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price
08-00588-05036	R0.5	1°	20	1.63	0.75	1.5	12°	0° 59'	4	70	8,200
08-00588-05037			25	1.81	0.75	1.5	12°	0° 59'	4	70	8,700
08-00588-05038			30	1.98	0.75	1.5	12°	0° 59'	4	70	9,000
08-00588-05041		1° 30'	6	1.24	0.75	1.5	12°	1° 29'	4	60	5,400
08-00588-05042			8	1.35	0.75	1.5	12°	1° 29'	4	60	5,900
08-00588-05043			10	1.45	0.75	1.5	12°	1° 29'	4	60	6,500
08-00588-05044			12	1.56	0.75	1.5	12°	1° 29'	4	60	6,500
08-00588-05045			16	1.77	0.75	1.5	12°	1° 29'	4	60	6,800
08-00588-05046			20	1.98	0.75	1.5	12°	1° 29'	4	70	8,200
08-00588-05047			25	2.24	0.75	1.5	12°	1° 29'	4	70	8,700
08-00588-05048			30	2.50	0.75	1.5	12°	1° 29'	4	70	9,000
08-00588-05052		2°	8	1.48	0.75	1.5	12°	1° 59'	4	60	5,900
08-00588-05053			10	1.62	0.75	1.5	12°	1° 59'	4	60	6,500
08-00588-05056			20	2.32	0.75	1.5	12°	1° 59'	4	70	8,200
08-00588-05058			30	3.01	0.75	1.5	12°	1° 59'	4	70	9,000
08-00588-07521	R0.75	30'	10	1.61	1.1	2.25	12°	0° 29'	4	60	6,800
08-00588-07523			15	1.69	1.1	2.25	12°	0° 29'	4	60	7,400
08-00588-07525			20	1.78	1.1	2.25	12°	0° 29'	4	70	8,200
08-00588-07527			25	1.87	1.1	2.25	12°	0° 29'	4	70	9,000
08-00588-07529			30	1.96	1.1	2.25	12°	0° 29'	4	70	10,300
08-00588-07531		1°	10	1.77	1.1	2.25	12°	0° 59'	4	60	6,800
08-00588-07533			15	1.94	1.1	2.25	12°	0° 59'	4	60	7,400
08-00588-07535			20	2.12	1.1	2.25	12°	0° 59'	4	70	8,200
08-00588-07537			25	2.29	1.1	2.25	12°	0° 59'	4	70	9,000
08-00588-07539			30	2.47	1.1	2.25	12°	0° 59'	4	70	10,300
08-00588-07541		1° 30'	10	1.93	1.1	2.25	12°	1° 29'	4	60	6,800
08-00588-07543			15	2.19	1.1	2.25	12°	1° 29'	4	60	7,400
08-00588-07545			20	2.45	1.1	2.25	12°	1° 29'	4	70	8,200
08-00588-07551		2°	10	2.09	1.1	2.25	12°	1° 59'	4	60	6,800
08-00588-07553			15	2.44	1.1	2.25	12°	1° 59'	4	60	7,400
08-00588-07555			20	2.79	1.1	2.25	12°	1° 59'	4	70	9,000
★ 08-00588-10021	R1	30'	12	2.14	1.5	3	12°	0° 29'	4	60	6,000
★ 08-00588-10022			16	2.21	1.5	3	12°	0° 29'	4	60	6,200
★ 08-00588-10023			20	2.28	1.5	3	12°	0° 29'	4	70	7,400
★ 08-00588-10024			25	2.37	1.5	3	12°	0° 29'	4	70	8,200
★ 08-00588-10025			30	2.46	1.5	3	12°	0° 29'	4	70	9,000
★ 08-00588-10026			35	2.54	1.5	3	12°	0° 29'	4	80	9,800
★ 08-00588-10027			40	2.63	1.5	3	12°	0° 29'	4	80	10,600
★ 08-00588-10028			50	2.81	1.5	3	12°	0° 30'	4	90	12,000
★ 08-00588-10031		1°	12	2.33	1.5	3	12°	0° 59'	4	60	6,000
★ 08-00588-10032			16	2.47	1.5	3	12°	0° 59'	4	60	6,200
★ 08-00588-10033			20	2.61	1.5	3	12°	0° 59'	4	70	7,400
★ 08-00588-10034			25	2.79	1.5	3	12°	0° 59'	4	70	8,200
★ 08-00588-10035			30	2.96	1.5	3	12°	0° 59'	4	70	9,000

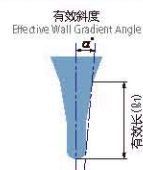
订购方法

请指定MRBTN230 球头半径(R)×颈角(θ)×有效长(ℓ_1)。

When you order, indicate MRBTN230 (R)×(θ)×(ℓ_1).

●切削参数表记载于第E-052页

●Recommended Milling Conditions are shown on page E-052.



产品代码 Code No.	(R)球头半径 Radius	(θ)颈角 Neck Taper Angle	(ℓ1)有效长 Effective Length	(d1)颈径 Neck Dia.	(ℓ)刃长 Length of Cut	(ℓ2)颈长 Under Neck Taper length	(γ)颈角2 Neck Taper Angle 2	(α)有效斜度 Effective Wall Gradient Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price
★ 08-00588-10036	R1	1°	35	3.14	1.5	3	12°	0° 59′	6	80	11,600
★ 08-00588-10037			40	3.31	1.5	3	12°	0° 59′	6	80	12,200
★ 08-00588-10038			50	3.66	1.5	3	12°	0° 59′	6	90	13,500
★ 08-00588-10041		1°30′	12	2.53	1.5	3	12°	1° 29′	4	60	6,000
★ 08-00588-10042			16	2.74	1.5	3	12°	1° 29′	4	60	6,200
★ 08-00588-10043			20	2.95	1.5	3	12°	1° 29′	4	70	7,400
★ 08-00588-10044			25	3.21	1.5	3	12°	1° 29′	4	70	8,200
★ 08-00588-10045			30	3.47	1.5	3	12°	1° 29′	6	70	10,600
★ 08-00588-10046			35	3.73	1.5	3	12°	1° 29′	6	80	11,600
★ 08-00588-10047			40	3.99	1.5	3	12°	1° 29′	6	80	12,200
★ 08-00588-10048			50	4.52	1.5	3	12°	1° 30′	6	90	13,500
★ 08-00588-10051		2°	12	2.72	1.5	3	12°	1° 59′	4	60	6,000
★ 08-00588-10052			16	3.00	1.5	3	12°	1° 59′	4	60	6,200
★ 08-00588-10053			20	3.28	1.5	3	12°	1° 59′	4	70	7,800
★ 08-00588-10054			25	3.63	1.5	3	12°	1° 59′	6	70	8,600
★ 08-00588-10055			30	3.98	1.5	3	12°	1° 59′	6	70	10,600
★ 08-00588-10057			40	4.67	1.5	3	12°	1° 59′	6	80	12,200
★ 08-00588-10058			50	5.37	1.5	3	12°	2° 00′	6	90	13,500
★ 08-00588-15021	R1.5	30°	15	3.13	2.5	4.5	12°	0° 29′	6	70	8,200
★ 08-00588-15022			20	3.22	2.5	4.5	12°	0° 29′	6	70	8,700
★ 08-00588-15023			25	3.31	2.5	4.5	12°	0° 29′	6	70	9,400
★ 08-00588-15024			30	3.40	2.5	4.5	12°	0° 29′	6	70	10,100
★ 08-00588-15025			40	3.57	2.5	4.5	12°	0° 29′	6	80	11,200
★ 08-00588-15026			50	3.74	2.5	4.5	12°	0° 29′	6	90	13,000
★ 08-00588-15031		1°	15	3.37	2.5	4.5	12°	0° 59′	6	70	8,200
★ 08-00588-15032			20	3.54	2.5	4.5	12°	0° 59′	6	70	8,700
★ 08-00588-15033			25	3.72	2.5	4.5	12°	0° 59′	6	70	9,400
★ 08-00588-15034			30	3.89	2.5	4.5	12°	0° 59′	6	70	10,100
★ 08-00588-15035			40	4.24	2.5	4.5	12°	0° 59′	6	80	11,200
★ 08-00588-15036			50	4.59	2.5	4.5	12°	0° 59′	6	90	13,000
★ 08-00588-15041		1°30′	15	3.61	2.5	4.5	12°	1° 29′	6	70	8,200
★ 08-00588-15042			20	3.87	2.5	4.5	12°	1° 29′	6	70	8,700
★ 08-00588-15043			25	4.13	2.5	4.5	12°	1° 29′	6	70	9,400
★ 08-00588-15044			30	4.39	2.5	4.5	12°	1° 29′	6	70	10,100
★ 08-00588-15045			40	4.91	2.5	4.5	12°	1° 29′	6	80	11,200
★ 08-00588-15046			50	5.44	2.5	4.5	12°	1° 29′	6	90	13,000
★ 08-00588-15051		2°	15	3.84	2.5	4.5	12°	1° 59′	6	70	8,200
★ 08-00588-15052			20	4.19	2.5	4.5	12°	1° 59′	6	70	8,700
★ 08-00588-15054			30	4.89	2.5	4.5	12°	1° 59′	6	70	11,700
★ 08-00588-20031	R2	1°	20	4.57	3	6	12°	0° 59′	6	80	10,800
★ 08-00588-20033			30	4.92	3	6	12°	0° 59′	6	80	10,800
★ 08-00588-20035			40	5.26	3	6	12°	0° 59′	6	80	14,200
★ 08-00588-20037			61.1	6.00	3	6	-	0° 59′	6	110	16,200

CBN铣刀
Cubic Boron Nitride钻石铣刀
Diamond平底铣刀
Square长颈平底
铣刀
Long Neck Square球头铣刀
Ball长颈球头
铣刀
Long Neck Ball圆鼻铣刀
Radius长颈圆鼻
铣刀
Long Neck Radius锥形铣刀
Taper锥形球头
铣刀
Taper Ball锥形圆鼻
铣刀
Taper Radius钻头
Drilling螺纹铣刀
Thread milling倒角刀
Chamfering