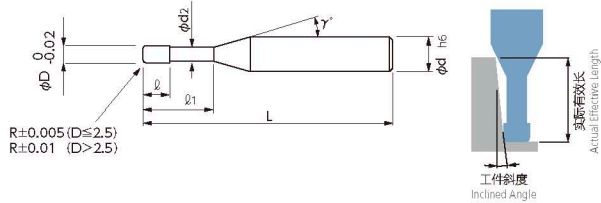


MHR430R

无限涂层 4刃长颈圆鼻铣刀

MUGEN-COATING 4-Flute Long Neck Radius End Mill



- 加工领域更广的4刃型。共有146种规格。
- 短刃长专用的铣刀！与工件的接触大幅减小，可有效抑制振动。
- 角部R精度高达 $\pm 5\mu\text{m}$ ！（D2.5以下）
- 经过优化之后的无限涂层，在加工淬火钢、调质钢时可发挥超群威力，而且也适合于铜电极加工。
- Enhanced selectivity for machining process in all 146 sizes.
- Employing short flute length. Less contact to work material reduces chattering.
- Corner R accuracy: $\pm 5\mu\text{m}$ (2.5D and below)
- Upgraded MUGEN-COATING brings outstanding performance for milling of Prehardened Steels and Copper Electrode as well.



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~					
◎	◎	◎	◎	◎	◎	○	◎	◎	◎

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

产品代码 Code No.	(D)刃径 Dia.	(R)角半径 Corner Radius	(L1)有效长 Effective Length	(L)刃长 Length of Cut	(d2)颈径 Neck Dia.	(γ)颈角 Neck Taper Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price	相对于工件斜度的有效长 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1° 30'	2°	3°
08-00230-10021	1	R0.05	3	0.8	0.95	12°	4	50	7,200	3.25	3.39	3.55	3.73	4.13
08-00230-10022			4					50	7,200	4.29	4.48	4.69	4.92	5.46
08-00230-10023			5					50	7,200	5.34	5.57	5.83	6.12	6.80
08-00230-10024			6					50	7,200	6.38	6.66	6.98	7.32	8.13
08-00230-10025			8					50	7,200	8.46	8.84	9.26	9.72	10.79
08-00230-10026			10					50	7,200	10.55	11.02	11.54	12.11	13.45
08-00230-10027		12	50					7,200	12.64	13.20	13.82	14.51	16.11	
08-00230-10031		R0.1	3					50	7,200	3.25	3.39	3.54	3.72	4.12
08-00230-10032			4					50	7,200	4.29	4.48	4.69	4.91	5.45
08-00230-10033			5					50	7,200	5.33	5.57	5.83	6.11	6.78
08-00230-10034			6					50	7,200	6.38	6.66	6.97	7.31	8.11
08-00230-10035			8					50	7,200	8.46	8.84	9.25	9.71	10.77
08-00230-10036			10					50	7,200	10.55	11.02	11.53	12.10	13.43
08-00230-10037		12	50					7,200	12.63	13.20	13.82	14.50	16.10	
08-00230-10041		R0.2	3					50	7,200	3.24	3.38	3.53	3.70	4.08
08-00230-10042			4					50	7,200	4.29	4.47	4.67	4.89	5.42
08-00230-10043			5					50	7,200	5.33	5.56	5.81	6.09	6.75
08-00230-10044			6					50	7,200	6.37	6.65	6.95	7.29	8.08
08-00230-10045			8					50	7,200	8.46	8.83	9.24	9.69	10.74
08-00230-10046			10					50	7,200	10.54	11.01	11.52	12.08	13.40
08-00230-10047		12	50					7,200	12.63	13.19	13.80	14.48	16.06	
08-00230-10051		R0.3	3					50	7,200	3.24	3.37	3.52	3.68	4.05
08-00230-10052			4					50	7,200	4.28	4.46	4.66	4.87	5.38
08-00230-10053			5					50	7,200	5.32	5.55	5.80	6.07	6.71
08-00230-10054	6		50	7,200	6.37	6.64	6.94	7.27	8.04					
08-00230-10055	8		50	7,200	8.45	8.82	9.22	9.67	10.71					
08-00230-10056	10		50	7,200	10.54	11.00	11.51	12.06	13.37					
08-00230-10057	12		50	7,200	12.62	13.18	13.79	14.46	16.03					

订购方法

请指定MHR430R 刃径(D)×(R)角半径×有效长(L1)。
When you order, indicate MHR430R (D)×(R)×(L1).

※(γ)为参考值。
※(γ) is reference value.

- 切削参数表记载于第F-038页

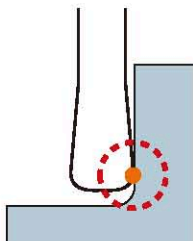
● Recommended Milling Conditions are shown on page F-038.

CBN 铣刀 Cubic Boron Nitride	钻石 铣刀 Diamond	涂层 Coating	P.C.D.·单晶 PCD·Monocrystal
平底 铣刀 Square	长颈平底 铣刀 Long Neck Square	涂层 Coating	沟槽 侧面 平面
球头 铣刀 Ball	长颈球头 铣刀 Long Neck Ball	涂层 Coating	螺旋角 30 圆鼻 ~55 HRC
圆锥 铣刀 Taper	圆锥球头 铣刀 Taper Ball	涂层 Coating	硬质合金 MG 无限涂层 4
倒角 刀 Chamfering	螺纹 铣刀 Thread milling	涂层 Coating	无涂层 Non-Coating

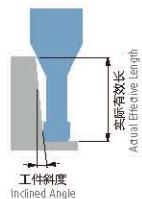
MHR430R

无限涂层 4刃长颈圆鼻铣刀

MUGEN-COATING 4-Flute Long Neck Radius End Mill



单点切削，切削阻力较小，
不易振刀并提升了加工表面光洁度。
Point milling with reducing the machining
load to realize fine surface.



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

产品代码 Code No.	(D) 刀径 Dia.	(R) 角半径 Corner Radius	(L1) 有效长 Effective length	(L) 刃长 Length of Cut	(d2) 颈径 Neck Dia.	(γ) 颈角 Neck Taper Angle	(d) 柄径 Shank Dia.	(L) 全长 Overall Length	定价(日元) Retail Price	相对于工件斜度的有效长 Actual effective length depending on inclined angle of workpiece.				
										30	1°	1°30	2°	3°
08-00230-12031	1.2	R0.1	5	1	1.14	12°	4	50	7,600	5.33	5.57	5.83	6.11	6.78
08-00230-12032			10					50	7,600	10.55	11.02	11.53	12.10	13.43
08-00230-12033			15					60	11,400	15.76	16.47	17.24	18.09	20.09
08-00230-12041		R0.2	5					50	7,600	5.33	5.56	5.81	6.09	6.75
08-00230-12042			10					50	7,600	10.54	11.01	11.52	12.08	13.40
08-00230-12043			15					60	11,400	15.76	16.46	17.23	18.07	20.06
08-00230-12051		R0.3	5					50	7,600	5.32	5.55	5.80	6.07	6.71
08-00230-12052			10					50	7,600	10.54	11.00	11.51	12.06	13.37
08-00230-12053			15					60	11,400	15.75	16.45	17.21	18.05	20.02
08-00230-15031	1.5	R0.1	6	1.2	1.45	12°	4	50	7,600	6.38	6.66	6.97	7.31	8.11
08-00230-15032			12					50	7,600	12.63	13.20	13.82	14.50	16.10
08-00230-15033			18					60	7,600	18.89	19.74	20.66	21.69	24.08
08-00230-15041		R0.2	6					50	7,600	6.37	6.65	6.95	7.29	8.08
08-00230-15042			12					50	7,600	12.63	13.19	13.80	14.48	16.06
08-00230-15043			18					60	7,600	18.89	19.73	20.65	21.67	24.05
08-00230-15051		R0.3	6					50	7,600	6.37	6.64	6.94	7.27	8.04
08-00230-15052			12					50	7,600	12.62	13.18	13.79	14.46	16.03
08-00230-15053			18					60	7,600	18.88	19.72	20.64	21.65	24.01
08-00230-15061		R0.5	6					50	7,600	6.36	6.62	6.91	7.23	7.98
08-00230-15062			12					50	7,600	12.62	13.16	13.76	14.42	15.96
08-00230-15063			18					60	7,600	18.87	19.70	20.61	21.61	23.95
08-00230-20031	2	R0.1	8	1.6	1.91	12°	4	50	7,600	8.49	8.86	9.28	9.73	10.80
08-00230-20032			12					50	7,600	12.66	13.22	13.84	14.53	16.13
08-00230-20033			16					60	7,600	16.83	17.58	18.41	19.32	Free
08-00230-20034			20					60	7,600	21.00	21.94	22.97	24.11	Free
08-00230-20035			24					70	7,600	25.17	26.30	27.54	28.90	Free
08-00230-20041		R0.2	8					50	7,600	8.48	8.85	9.26	9.71	10.77
08-00230-20042			12					50	7,600	12.65	13.21	13.83	14.51	16.09
08-00230-20043			16					60	7,600	16.83	17.57	18.39	19.30	Free
08-00230-20044			20					60	7,600	21.00	21.93	22.96	24.09	Free
08-00230-20045			24					70	7,600	25.17	26.29	27.52	28.88	Free
08-00230-20051		R0.3	8					50	7,600	8.48	8.85	9.25	9.70	10.74
08-00230-20052			12					50	7,600	12.65	13.20	13.81	14.49	16.06
08-00230-20053			16					60	7,600	16.82	17.56	18.38	19.28	Free
08-00230-20054			20					60	7,600	20.99	21.92	22.95	24.07	Free
08-00230-20055			24					70	7,600	25.16	26.28	27.51	28.86	Free

订购方法

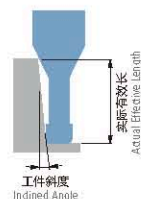
请指定MHR430R 刀径(D)×(R)角半径×有效长(L1)。
When you order, indicate MHR430R (D)×(R)×(L1).

※(γ)为参考值。

※(γ) is reference value.

●切削参数表记载于第F-038页

●Recommended Milling Conditions are shown on page F-038.



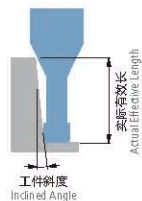
产品代码 Code No.	(D)刃径 Dia.	(R)角半径 Corner Radius	(L1)有效长 Effective Length	(L)刃长 Length of Cut	(d2)颈径 Neck Dia.	(γ)颈角 Neck Taper Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price	相对于工件斜度的有效长 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1°30'	2°	3°
08-00230-20061	2	R0.5	8	1.6	1.91	12°	4	50	7,600	8.47	8.83	9.22	9.66	10.67
08-00230-20062			12					50	7,600	12.64	13.19	13.79	14.45	15.98
08-00230-20063			16					60	7,600	16.81	17.55	18.35	19.24	Free
08-00230-20064			20					60	7,600	20.98	21.91	22.92	24.03	Free
08-00230-20065			24					70	7,600	25.16	26.26	27.48	28.82	Free
08-00230-25031	2.5	R0.1	10	2	2.39	12°	4	50	8,000	10.67	11.15	11.67	12.24	13.59
08-00230-25032			20					60	8,000	21.10	22.04	23.08	Free	Free
08-00230-25033			30					70	8,400	31.53	32.94	Free	Free	Free
08-00230-25041		R0.2	10					50	8,000	10.67	11.14	11.65	12.22	13.56
08-00230-25042			20					60	8,000	21.10	22.04	23.07	Free	Free
08-00230-25043			30					70	8,400	31.52	32.93	Free	Free	Free
08-00230-25051		R0.3	10					50	8,000	10.66	11.13	11.64	12.20	13.53
08-00230-25052			20					60	8,000	21.09	22.03	23.05	Free	Free
08-00230-25053			30					70	8,400	31.52	32.92	Free	Free	Free
08-00230-25061		R0.5	10					50	8,000	10.65	11.11	11.61	12.16	13.46
08-00230-25062			20					60	8,000	21.08	22.01	23.02	Free	Free
08-00230-25063			30					70	8,400	31.51	32.91	Free	Free	Free
08-00230-30031	3	R0.1	12	2.5	2.85	12°	6	50	10,400	12.88	13.45	14.09	14.78	16.41
08-00230-30032			18					60	10,400	19.14	19.99	20.93	21.97	24.40
08-00230-30033			24					70	11,000	25.39	26.53	27.78	29.16	Free
08-00230-30034			30					70	11,000	31.65	33.07	34.63	36.35	Free
08-00230-30035			36					80	11,400	37.91	39.61	41.48	43.54	Free
08-00230-30041		R0.2	12					50	10,400	12.87	13.45	14.07	14.76	16.38
08-00230-30042			18					60	10,400	19.13	19.98	20.92	21.95	24.36
08-00230-30043			24					70	11,000	25.39	26.52	27.77	29.14	Free
08-00230-30044			30					70	11,400	31.65	33.06	34.62	36.33	Free
08-00230-30045			36					80	11,400	37.90	39.60	41.46	43.52	Free
08-00230-30051		R0.3	12					50	10,400	12.87	13.44	14.06	14.74	16.34
08-00230-30052			20					60	10,400	21.21	22.15	23.19	24.33	26.99
08-00230-30053			24					70	11,000	25.39	26.51	27.75	29.12	Free
08-00230-30054			30					70	11,400	31.64	33.05	34.60	36.31	Free
08-00230-30055			36					80	11,400	37.90	39.59	41.45	43.50	Free

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

MHR430R

无限涂层 4刃长颈圆鼻铣刀

MUGEN-COATING 4-Flute Long Neck Radius End Mill



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

产品代码 Code No.	(D) 刀径 Dia.	(R) 角半径 Corner Radius	(L1) 有效长 Effective length	(L) 刃长 Length of Cut	(d2) 颈径 Neck Dia.	(γ) 颈角 Neck Taper Angle	(d) 柄径 Shank Dia.	(L) 全长 Overall Length	定价(日元) Retail Price	相对于工件斜度的有效长 Actual effective length depending on inclined angle of workpiece.				
										30	1°	1°30	2°	3°
08-00230-30061	3	R0.5	12	2.5	2.85	12°	6	50	10,400	12.86	13.42	14.03	14.70	16.28
08-00230-30062			20					60	10,400	21.21	22.14	23.16	24.29	26.93
08-00230-30063			24					70	11,000	25.38	26.50	27.72	29.08	Free
08-00230-30064			30					70	11,400	31.63	33.03	34.57	36.27	Free
08-00230-30065			36					80	11,400	37.89	39.57	41.42	43.46	Free
08-00230-30071		R1	12					50	10,400	12.84	13.37	13.96	14.60	16.11
08-00230-30072			20					60	10,400	21.18	22.09	23.09	24.19	26.76
08-00230-30073			24					70	11,000	25.36	26.45	27.65	28.98	Free
08-00230-30074			30					70	11,400	31.61	32.99	34.50	36.17	Free
08-00230-30075			36					80	11,400	37.87	39.53	41.35	43.36	Free
08-00230-40031	4	R0.1	16	3.2	3.8	12°	6	60	10,400	17.17	17.94	18.79	19.72	Free
08-00230-40032			24					70	10,400	25.52	26.66	27.92	29.30	Free
08-00230-40033			32					70	10,400	33.86	35.38	37.05	Free	Free
08-00230-40034			48					100	16,600	50.55	52.82	Free	Free	Free
08-00230-40041		R0.2	16					60	10,400	17.17	17.93	18.77	19.70	Free
08-00230-40042			24					70	10,400	25.51	26.65	27.90	29.28	Free
08-00230-40043			32					70	10,400	33.86	35.37	37.03	Free	Free
08-00230-40044			48					100	16,600	50.54	52.81	Free	Free	Free
08-00230-40051		R0.3	16					60	10,400	17.16	17.92	18.76	19.68	Free
08-00230-40052			24					70	10,400	25.51	26.64	27.89	29.26	Free
08-00230-40053			32					70	10,400	33.85	35.36	37.02	Free	Free
08-00230-40054			48					100	16,600	50.54	52.80	Free	Free	Free
08-00230-40061		R0.5	16					60	10,400	17.16	17.91	18.73	19.64	Free
08-00230-40062			24					70	10,400	25.50	26.62	27.86	29.22	Free
08-00230-40063			32					70	10,400	33.84	35.34	36.99	Free	Free
08-00230-40064			48					100	16,600	50.53	52.78	Free	Free	Free
08-00230-40071		R1	16					60	10,400	17.13	17.86	18.66	19.54	Free
08-00230-40072			24					70	10,400	25.48	26.58	27.79	29.12	Free
08-00230-40073			32					70	10,400	33.82	35.30	36.92	Free	Free
08-00230-40074			48					100	16,600	50.51	52.73	Free	Free	Free
08-00230-50031	5	R0.1	20	4	4.75	12°	6	70	13,000	21.35	22.30	Free	Free	Free
08-00230-50032			40					90	16,600	42.20	Free	Free	Free	Free
08-00230-50041		R0.2	20					70	13,000	21.34	22.29	Free	Free	Free
08-00230-50042			40					90	16,600	42.20	Free	Free	Free	Free
08-00230-50051		R0.3	20					70	13,000	21.34	22.28	Free	Free	Free
08-00230-50052			40					90	16,600	42.19	Free	Free	Free	Free

订购方法

请指定 MHR430R 刀径(D) × (R) 角半径 × 有效长(L1)。

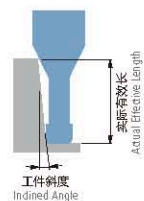
※(γ) 为参考值。

When you order, indicate MHR430R (D) × (R) × (L1).

※(γ) is reference value.

● 切削参数表记载于第F-038页

● Recommended Milling Conditions are shown on page F-038.



产品代码 Code No.	(D)刃径 Dia.	(R)角半径 Corner Radius	(L1)有效长 Effective Length	(L)刃长 Length of Cut	(d2)颈径 Neck Dia.	(γ)颈角 Neck Taper Angle	(d)柄径 Shank Dia.	(L)全长 Overall Length	定价(日元) Retail Price	相对于工件斜度的有效长 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1°30'	2°	3°
08-00230-50061	5	R0.5	20	4	4.75	12°	6	70	13,000	21.33	22.27	Free	Free	Free
08-00230-50062			40					90	16,600	42.19	Free	Free	Free	Free
08-00230-50071		R1	20					70	13,000	21.31	22.22	Free	Free	Free
08-00230-50072			40					90	16,600	42.16	Free	Free	Free	Free
08-00230-60031	6	R0.1	24	5	5.7	-	6	90	13,000	Free	Free	Free	Free	Free
08-00230-60032			48					110	20,600	Free	Free	Free	Free	Free
08-00230-60041		R0.2	24					90	13,000	Free	Free	Free	Free	Free
08-00230-60042			48					110	20,600	Free	Free	Free	Free	Free
08-00230-60051		R0.3	24					90	13,000	Free	Free	Free	Free	Free
08-00230-60052			48					110	20,600	Free	Free	Free	Free	Free
08-00230-60061		R0.5	24					90	13,000	Free	Free	Free	Free	Free
08-00230-60062			48					110	20,600	Free	Free	Free	Free	Free
08-00230-60071		R1	24					90	13,000	Free	Free	Free	Free	Free
08-00230-60072			48					110	20,600	Free	Free	Free	Free	Free

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