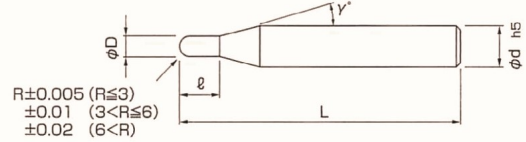


MSB230

무한코팅 2날 볼엔드밀 MUGEN-COATING 2-Flute Ball End Mill



단위 : mm / 가격 : 엔화
Unit [size:mm / Retail Price:JPY]

- 저속부터 고속까지의 3차원 정밀가공에 적당
- Suitable for precision three-dimensional cutting in the low to high speed range.

품번 Code No.	(R)볼반경 Radius	(L)날장 Length of Cut	(D)날경 Dia.	(γ)각도 Nasal Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price
08-00501-00005	R0.05	0.1	0.1	15°	4	50	10,100
08-00500-00005	R0.05	0.1	0.1	15°	6	50	11,100
08-00501-00007	R0.075	0.15	0.15	15°	4	50	9,400
08-00500-00007	R0.075	0.15	0.15	15°	6	50	10,500
08-00501-00010	R0.1	0.2	0.2	15°	4	50	7,100
08-00500-00010	R0.1	0.2	0.2	15°	6	50	8,200
08-00501-00015	R0.15	0.3	0.3	15°	4	50	5,800
08-00500-00015	R0.15	0.3	0.3	15°	6	50	7,000
08-00501-00020	R0.2	0.6	0.4	15°	4	50	3,900
08-00500-00020	R0.2	0.6	0.4	15°	6	50	5,100
08-00501-00025	R0.25	0.8	0.5	15°	4	50	3,600
08-00500-00025	R0.25	0.8	0.5	15°	6	50	4,800
08-00501-00030	R0.3	0.9	0.6	15°	4	50	3,500
08-00500-00030	R0.3	0.9	0.6	15°	6	50	4,600
08-00500-00035	R0.35	1.1	0.7	15°	6	50	7,800
08-00501-00040	R0.4	1.2	0.8	15°	4	50	3,500
08-00500-00040	R0.4	1.2	0.8	15°	6	50	4,600
08-00500-00045	R0.45	1.4	0.9	15°	6	50	7,800
08-00501-00050	R0.5	1.5	1	15°	4	50	3,200
08-00500-00050	R0.5	1.5	1	15°	6	50	4,300
08-00500-00055	R0.55	1.7	1.1	15°	6	50	7,800
08-00501-00060	R0.6	1.8	1.2	15°	4	50	4,500
08-00500-00060	R0.6	1.8	1.2	15°	6	50	5,500
08-00500-00065	R0.65	2	1.3	15°	6	50	7,800
08-00501-00070	R0.7	2.1	1.4	15°	4	50	4,500
08-00500-00070	R0.7	2.1	1.4	15°	6	50	5,500
08-00501-00075	R0.75	2.3	1.5	15°	4	50	3,900
08-00500-00075	R0.75	2.3	1.5	15°	6	50	5,000
08-00501-00080	R0.8	2.4	1.6	15°	4	50	4,500
08-00500-00080	R0.8	2.4	1.6	15°	6	50	5,500

품번 Code No.	(R)볼반경 Radius	(L)날장 Length of Cut	(D)날경 Dia.	(γ)각도 Nasal Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price
08-00500-00085	R0.85	2.6	1.7	15°	6	50	7,800
08-00500-00090	R0.9	2.7	1.8	15°	6	50	7,800
08-00500-00095	R0.95	2.9	1.9	15°	6	50	7,800
08-00501-00100	R1	3	2	9°	4	60	2,900
08-00500-00100	R1	3	2	9°	6	60	3,900
08-00500-00105	R1.05	3.2	2.1	9°	6	60	7,800
08-00500-00110	R1.1	3.3	2.2	9°	6	60	7,800
08-00500-00115	R1.15	3.5	2.3	9°	6	60	7,800
08-00500-00120	R1.2	3.6	2.4	9°	6	60	7,800
08-00501-00125	R1.25	3.8	2.5	9°	4	60	5,000
08-00500-00125	R1.25	3.8	2.5	9°	6	60	6,000
08-00500-00130	R1.3	3.9	2.6	9°	6	60	7,800
08-00500-00135	R1.35	4.1	2.7	9°	6	60	7,800
08-00500-00140	R1.4	4.2	2.8	9°	6	60	7,800
08-00500-00145	R1.45	4.4	2.9	9°	6	60	7,800
08-00501-00150	R1.5	5	3	9°	4	60	3,500
08-00500-00150	R1.5	5	3	9°	6	60	3,500
08-00500-00155	R1.55	5	3.1	9°	6	60	8,200
08-00500-00160	R1.6	5	3.2	9°	6	60	8,200
08-00500-00165	R1.65	5	3.3	9°	6	60	8,200
08-00500-00170	R1.7	5.1	3.4	9°	6	60	8,200
08-00500-00175	R1.75	5.3	3.5	9°	6	60	6,500
08-00500-00180	R1.8	5.4	3.6	9°	6	60	8,200
08-00500-00185	R1.85	5.6	3.7	9°	6	60	8,200
08-00500-00190	R1.9	5.7	3.8	9°	6	60	8,200
08-00500-00195	R1.95	5.9	3.9	9°	6	60	8,200
08-00500-00200	R2	6	4	9°	6	70	4,000
08-00500-00205	R2.05	6.2	4.1	9°	6	70	10,000
08-00500-00210	R2.1	6.3	4.2	9°	6	70	10,000
08-00500-00215	R2.15	6.5	4.3	9°	6	70	10,000

주문방법

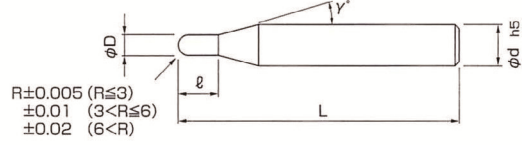
MSB230 볼반경(R)×샤크(d)를 선택하십시오.
When you order, indicate MSB230 (R)×(d).

※ (γ)은 참고값입니다.
※ (γ) is reference value.

- R3.5 이상의 샤크공차는 h6
- R3.5 and above, tolerance of Shank Dia. is h6.

MSB230

무한코팅 2날 볼엔드밀 MUGEN-COATING 2-Flute Ball End Mill



- 저속부터 고속까지의 3차원 정밀가공에 적당
- Suitable for precision three-dimensional cutting in the low to high speed range.



단위 : mm / 가격 : 엔화
Unit [size:mm / Retail Price:JPY]

품번 Code No.	(R)볼반경 Radius	(L)날장 Length of Cut	(D)날경 Dia.	(r)각도 Nose Taper Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price
08-00500-00220	R2.2	6.6	4.4	9°	6	70	10,000
08-00500-00225	R2.25	6.8	4.5	9°	6	70	10,000
08-00500-00230	R2.3	6.9	4.6	9°	6	70	10,000
08-00500-00235	R2.35	7.1	4.7	9°	6	70	10,000
08-00500-00240	R2.4	7.2	4.8	9°	6	70	10,000
08-00500-00245	R2.45	7.4	4.9	9°	6	70	10,000
08-00500-00250	R2.5	8	5	9°	6	70	4,800
08-00500-00255	R2.55	8	5.1	9°	6	70	10,000
08-00500-00260	R2.6	8	5.2	9°	6	70	10,000
08-00500-00265	R2.65	8	5.3	9°	6	70	10,000
08-00500-00270	R2.7	8.1	5.4	9°	6	70	10,000
08-00500-00275	R2.75	8.3	5.5	9°	6	70	10,000
08-00500-00280	R2.8	8.4	5.6	9°	6	70	10,000
08-00500-00285	R2.85	8.6	5.7	9°	6	70	10,000
08-00500-00290	R2.9	8.7	5.8	9°	6	70	10,000
08-00500-00295	R2.95	8.9	5.9	9°	6	70	10,000
08-00500-00300	R3	10	6	-	6	80	5,000
08-00500-00350	R3.5	10.5	7	-	6	80	9,700
08-00500-00400	R4	12	8	-	8	90	8,800
08-00500-00450	R4.5	13.5	9	-	8	90	13,500
08-00500-00500	R5	15	10	-	10	100	11,500
08-00500-00550	R5.5	16.5	11	-	10	100	22,500
08-00500-00600	R6	20	12	-	12	110	19,400
08-00500-00700	R7	21	14	-	12	160	48,600
08-00500-00800	R8	25	16	-	16	160	57,600
08-00500-00900	R9	27	18	-	16	170	86,900
08-00500-01000	R10	30	20	-	20	170	89,500

주문방법

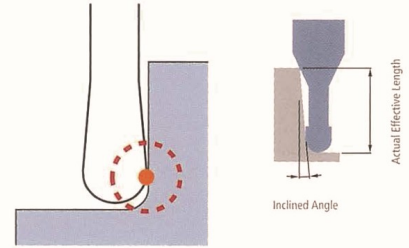
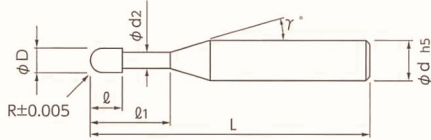
MSB230 볼반경(R)×샤크(d)를 선택하십시오.
When you order, indicate MSB230 (R)×(d).

※(r)은 참고값입니다.
※(r) is reference value.

- R3.5 이상의 샤크공차는 h6
- R3.5 and above, tolerance of Shank Dia. is h6.

MRBH230

고경도용 2날 롱넥 볼엔드밀 2-Flute Long Neck Ball End Mill for Hardened Steels



Suppress chattering by point milling

- 고경도용 무한 프리미엄 코팅과 독자적인 신개발 형상을 적용하여 내치핑성이 뛰어나고, 떨림을 억제시켜 정삭면의 조도를 향상시킴.
- 65HRC까지의 고경도재에 적용
- 총 190 사이즈

- MUGEN-COATING PREMIUM for hardened steels and unique new design excel in chipping prevention and resolves chattering to realize excellent finished surface.
- Applicable for hardened steels up to 65HRC.
- Total 190 sizes!



피삭재 Work Material

탄소강 Carbon Steels	합금강 · 공구강 Alloy Steels · Tool Steels	프리하드강 · 조질강 Prehardened Steels	열처리강 Hardened Steels		스테인리스강 Stainless Steels	티타늄합금 Titanium Alloy	알루미늄합금 Aluminum	동합금 Copper	수지 Plastic
			~55HRC	55HRC~					
○	○	◎	◎	◎	○	◎	○	○	○

★재연마가능

단위 : mm / 가격 : 엔화
Unit [size:mm / Retail Price:JPY]

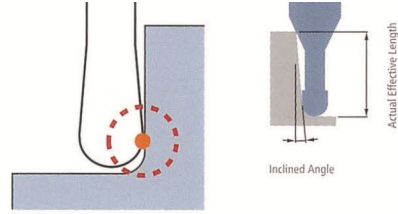
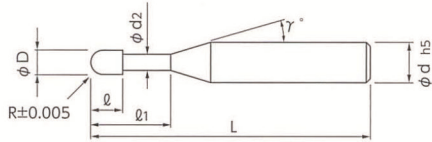
품번 Code No.	(R)볼반경 Radius	(ℓ)유효길이 Effective Length	(ℓ)날장 Length of Cut	(D)날경 Dia.	(d)목두께 Neck Dia.	(γ)각도 Neck Taper Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price	경사각도에 따른 실제 유효길이 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1° 30'	2°	3°
08-00527-00050	R0.05	0.2	0.07	0.1	0.085	12°	4	45	11,700	0.24	0.25	0.26	0.27	0.29
08-00527-00051		0.3	0.07	0.1	0.085	12°	4	45	10,300	0.34	0.36	0.37	0.39	0.42
08-00527-00053		0.5	0.07	0.1	0.085	12°	4	45	11,200	0.55	0.57	0.60	0.63	0.69
08-00527-00071	R0.075	0.3	0.1	0.15	0.13	12°	4	45	12,000	0.36	0.37	0.39	0.40	0.44
08-00527-00073		0.5	0.1	0.15	0.13	12°	4	45	12,700	0.57	0.59	0.61	0.64	0.70
08-00527-00075		1	0.1	0.15	0.13	12°	4	45	13,500	1.09	1.13	1.18	1.24	1.37
08-00527-00100	R0.1	0.3	0.15	0.2	0.18	12°	4	45	7,200	0.35	0.36	0.38	0.39	0.42
08-00527-00101		0.5	0.15	0.2	0.18	12°	4	45	7,200	0.56	0.58	0.61	0.63	0.69
08-00527-00102		0.75	0.15	0.2	0.18	12°	4	45	7,200	0.82	0.85	0.89	0.93	1.02
08-00527-00103		1	0.15	0.2	0.18	12°	4	45	7,200	1.08	1.13	1.18	1.23	1.35
08-00528-00103		1	0.15	0.2	0.18	12°	6	50	10,200	1.08	1.13	1.18	1.23	1.35
08-00527-00104		1.25	0.15	0.2	0.18	12°	4	45	7,800	1.34	1.40	1.46	1.53	1.68
08-00527-00105		1.5	0.15	0.2	0.18	12°	4	45	7,800	1.60	1.67	1.75	1.83	2.02
08-00527-00106		1.75	0.15	0.2	0.18	12°	4	45	8,700	1.86	1.94	2.03	2.13	2.35
08-00527-00107		2	0.15	0.2	0.18	12°	4	45	8,700	2.13	2.22	2.32	2.43	2.68
08-00527-00108		2.5	0.15	0.2	0.18	12°	4	45	9,500	2.65	2.76	2.89	3.02	3.34
08-00527-00109	3	0.15	0.2	0.18	12°	4	45	10,200	3.17	3.31	3.46	3.62	4.01	
08-00527-00162	R0.15	0.5	0.2	0.3	0.28	12°	4	45	7,100	0.56	0.58	0.60	0.63	0.68
08-00527-00150		0.6	0.2	0.3	0.28	12°	4	45	7,100	0.66	0.69	0.71	0.74	0.81
08-00527-00163		0.75	0.2	0.3	0.28	12°	4	45	7,100	0.82	0.86	0.89	0.93	1.01
08-00527-00151		1	0.2	0.3	0.28	12°	4	45	7,100	1.08	1.12	1.17	1.22	1.34
08-00527-00152		1.25	0.2	0.3	0.28	12°	4	45	7,600	1.34	1.39	1.45	1.52	1.67
08-00527-00153		1.5	0.2	0.3	0.28	12°	4	45	7,600	1.60	1.67	1.74	1.82	2.00
08-00528-00153		1.5	0.2	0.3	0.28	12°	6	50	10,700	1.60	1.67	1.74	1.82	2.00
08-00527-00154		1.75	0.2	0.3	0.28	12°	4	45	7,600	1.86	1.94	2.02	2.12	2.33
08-00527-00155		2	0.2	0.3	0.28	12°	4	45	7,600	2.12	2.21	2.31	2.42	2.66
08-00527-00156		2.25	0.2	0.3	0.28	12°	4	45	7,800	2.38	2.48	2.59	2.71	3.00
08-00527-00157		2.5	0.2	0.3	0.28	12°	4	45	7,800	2.64	2.76	2.88	3.01	3.33
08-00527-00159		3	0.2	0.3	0.28	12°	4	45	7,800	3.17	3.30	3.45	3.61	3.99

주문방법 MRBH230 볼반경(R)×유효길이(ℓ1)×샤크(d)를 선택하십시오.
When you order, indicate MRBH230 (R)×(ℓ1)×(d).

※(γ)은 참고값입니다.
※(γ) is reference value.

MRBH230

고경도용 2날 롱넥 볼엔드밀 2-Flute Long Neck Ball End Mill for Hardened Steels



★재연마가능

단위 : mm / 가격 : 엔화
Unit [size:mm / Retail Price:JPY]

품번 Code No.	(R)볼반경 Radius	(ℓ)유효길이 Effective Length	(ℓ)날장 Length of Cut	(D)날경 Dia.	(d)목두께 Neck Dia.	(γ)각도 Neck Taper Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price	경사각도에 따른 실제 유효길이 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1° 30'	2°	3°
08-00527-00160	R0.15	3.5	0.2	0.3	0.28	12°	4	45	8,200	3.69	3.85	4.02	4.21	4.65
08-00527-00161		4	0.2	0.3	0.28	12°	4	45	8,200	4.21	4.39	4.59	4.81	5.32
08-00527-00211	R0.2	0.5	0.3	0.4	0.37	12°	4	45	4,900	0.59	0.60	0.62	0.64	0.69
08-00527-00201		0.8	0.3	0.4	0.37	12°	4	45	4,900	0.89	0.93	0.96	1.00	1.09
08-00527-00202		1	0.3	0.4	0.37	12°	4	45	4,900	1.10	1.14	1.19	1.24	1.35
08-00528-00202		1	0.3	0.4	0.37	12°	6	50	7,200	1.10	1.14	1.19	1.24	1.35
08-00527-00203		1.5	0.3	0.4	0.37	12°	4	45	5,000	1.62	1.69	1.76	1.84	2.02
08-00527-00204		2	0.3	0.4	0.37	12°	4	45	5,100	2.15	2.23	2.33	2.43	2.68
08-00528-00204		2	0.3	0.4	0.37	12°	6	50	7,500	2.15	2.23	2.33	2.43	2.68
08-00527-00205		2.5	0.3	0.4	0.37	12°	4	45	5,300	2.67	2.78	2.90	3.03	3.34
08-00527-00206		3	0.3	0.4	0.37	12°	4	45	5,600	3.19	3.32	3.47	3.63	4.01
08-00527-00207		3.5	0.3	0.4	0.37	12°	4	45	6,100	3.71	3.87	4.04	4.23	4.67
08-00527-00208		4	0.3	0.4	0.37	12°	4	45	6,100	4.23	4.41	4.61	4.83	5.33
08-00527-00209		4.5	0.3	0.4	0.37	12°	4	45	6,400	4.75	4.96	5.18	5.43	6.00
08-00527-00210		5	0.3	0.4	0.37	12°	4	45	6,400	5.27	5.50	5.75	6.02	6.66
08-00527-00212		6	0.3	0.4	0.37	12°	4	45	7,500	6.33	6.60	6.90	7.23	8.00
08-00527-00250	1	0.35	0.5	0.46	12°	4	45	4,900	1.13	1.16	1.21	1.26	1.37	
08-00527-00251	1.5	0.35	0.5	0.46	12°	4	45	4,900	1.65	1.71	1.78	1.85	2.03	
08-00527-00252	2	0.35	0.5	0.46	12°	4	45	4,900	2.17	2.25	2.35	2.45	2.69	
08-00527-00253	2.5	0.35	0.5	0.46	12°	4	45	4,900	2.69	2.80	2.92	3.05	3.36	
08-00527-00254	3	0.35	0.5	0.46	12°	4	45	4,900	3.21	3.34	3.49	3.65	4.02	
08-00527-00255	3.5	0.35	0.5	0.46	12°	4	45	4,900	3.73	3.89	4.06	4.25	4.69	
08-00527-00256	4	0.35	0.5	0.46	12°	4	45	4,900	4.25	4.43	4.63	4.85	5.35	
08-00527-00257	4.5	0.35	0.5	0.46	12°	4	45	5,000	4.78	4.98	5.20	5.44	6.01	
08-00527-00258	5	0.35	0.5	0.46	12°	4	45	5,000	5.30	5.52	5.77	6.04	6.68	
08-00527-00259	5.5	0.35	0.5	0.46	12°	4	45	5,100	5.82	6.07	6.34	6.64	7.34	
08-00527-00260	6	0.35	0.5	0.46	12°	4	45	5,100	6.34	6.61	6.91	7.24	8.00	
08-00527-00262	8	0.35	0.5	0.46	12°	4	45	6,100	8.42	8.79	9.19	9.63	10.66	
08-00527-00264	10	0.35	0.5	0.46	12°	4	45	7,700	10.52	10.98	11.49	12.04	13.35	
08-00527-00300	R0.3	1	0.45	0.6	0.56	12°	4	45	4,200	1.12	1.16	1.20	1.25	1.35
08-00527-00301		1.5	0.45	0.6	0.56	12°	4	45	3,800	1.64	1.71	1.77	1.84	2.02
08-00527-00302		2	0.45	0.6	0.56	12°	4	45	3,800	2.17	2.25	2.34	2.44	2.68
08-00528-00302		2	0.45	0.6	0.56	12°	6	50	5,800	2.17	2.25	2.34	2.44	2.68
08-00527-00303		2.5	0.45	0.6	0.56	12°	4	45	3,900	2.69	2.79	2.91	3.04	3.34
08-00527-00304		3	0.45	0.6	0.56	12°	4	45	3,900	3.21	3.34	3.48	3.64	4.01
08-00528-00304		3	0.45	0.6	0.56	12°	6	50	5,900	3.21	3.34	3.48	3.64	4.01
08-00527-00305		3.5	0.45	0.6	0.56	12°	4	45	4,000	3.73	3.88	4.05	4.24	4.67
08-00527-00306		4	0.45	0.6	0.56	12°	4	45	4,000	4.25	4.43	4.62	4.84	5.33
08-00528-00306		4	0.45	0.6	0.56	12°	6	50	6,100	4.25	4.43	4.62	4.84	5.33
08-00527-00321		4.5	0.45	0.6	0.56	12°	4	45	4,000	4.78	4.98	5.20	5.45	6.02
08-00527-00308		5	0.45	0.6	0.56	12°	4	45	4,000	5.29	5.52	5.76	6.03	6.66
08-00527-00322		5.5	0.45	0.6	0.56	12°	4	45	4,000	5.82	6.07	6.34	6.64	7.35
08-00527-00310		6	0.45	0.6	0.56	12°	4	45	4,000	6.34	6.61	6.90	7.23	7.99

주문방법

MRBH230 볼반경(R)×유효길이(ℓ1)×샤크(d)를 선택하십시오.
When you order, indicate MRBH230 (R)×(ℓ1)×(d).

※(γ)은 참고값입니다.
※(γ) is reference value.

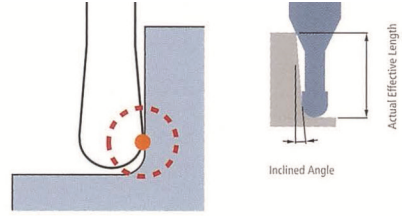
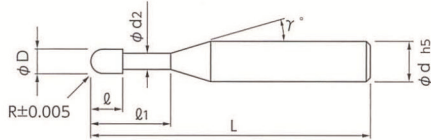
MRBH230



품 번 Code No.	(R)불반경 Radius	(L)유효길이 Effective Length	(L)날장 Length of Cut	(D)날경 Dia.	(d)목두께 Neck Dia.	(γ)각도 Neck Taper Angle	(d)샙크 Shank Dia.	(L)전장 Overall Length	엔화가격(PV) Retail Price	경사각도에 따른 실제 유효길이 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1° 30'	2°	3°
08-00527-00312	R0.3	7	0.45	0.6	0.56	12°	4	45	4,500	7.38	7.70	8.04	8.43	9.31
08-00527-00314		8	0.45	0.6	0.56	12°	4	45	5,300	8.42	8.79	9.18	9.62	10.64
08-00527-00316		9	0.45	0.6	0.56	12°	4	45	5,600	9.47	9.88	10.33	10.82	11.97
08-00527-00318		10	0.45	0.6	0.56	12°	4	45	5,400	10.51	10.97	11.47	12.02	13.30
08-00527-00320		12	0.45	0.6	0.56	12°	4	45	6,100	12.59	13.14	13.75	14.41	15.95
08-00527-00350	R0.35	2	0.5	0.7	0.66	12°	4	45	4,300	2.17	2.25	2.34	2.44	2.67
08-00527-00351		4	0.5	0.7	0.66	12°	4	45	4,600	4.25	4.43	4.62	4.84	5.33
08-00527-00352		6	0.5	0.7	0.66	12°	4	45	4,600	6.34	6.61	6.91	7.23	8.00
08-00527-00353		8	0.5	0.7	0.66	12°	4	45	4,600	8.43	8.79	9.19	9.63	10.66
08-00527-00401	R0.4	2	0.6	0.8	0.76	12°	4	45	3,800	2.16	2.24	2.33	2.42	2.65
08-00528-00401		2	0.6	0.8	0.76	12°	6	50	5,800	2.16	2.24	2.33	2.42	2.65
08-00527-00402		3	0.6	0.8	0.76	12°	4	45	4,000	3.20	3.33	3.47	3.62	3.97
08-00527-00403		4	0.6	0.8	0.76	12°	4	45	4,000	4.25	4.42	4.61	4.82	5.30
08-00527-00404		5	0.6	0.8	0.76	12°	4	45	4,000	5.29	5.51	5.75	6.01	6.63
08-00527-00405		6	0.6	0.8	0.76	12°	4	45	4,000	6.33	6.60	6.89	7.21	7.96
08-00527-00406		7	0.6	0.8	0.76	12°	4	45	4,000	7.38	7.69	8.03	8.41	9.28
08-00527-00407		8	0.6	0.8	0.76	12°	4	45	4,000	8.42	8.78	9.17	9.60	10.61
08-00527-00409		10	0.6	0.8	0.76	12°	4	45	5,300	10.50	10.96	11.45	12.00	13.26
08-00527-00410		12	0.6	0.8	0.76	12°	4	45	5,800	12.59	13.14	13.73	14.39	15.92
08-00527-00450	R0.45	2	0.65	0.9	0.86	12°	4	45	4,300	2.16	2.24	2.33	2.42	2.64
08-00527-00451		4	0.65	0.9	0.86	12°	4	45	4,600	4.25	4.42	4.61	4.82	5.30
08-00527-00452		6	0.65	0.9	0.86	12°	4	45	4,600	6.34	6.60	6.89	7.21	7.96
08-00527-00453		8	0.65	0.9	0.86	12°	4	45	4,600	8.42	8.78	9.17	9.61	10.62
08-00527-00500	R0.5	2	0.75	1	0.95	12°	4	45	3,200	2.18	2.26	2.34	2.43	2.65
08-00527-00514		2.5	0.75	1	0.95	12°	4	45	3,200	2.71	2.81	2.92	3.04	3.32
08-00527-00501		3	0.75	1	0.95	12°	4	45	3,200	3.22	3.35	3.48	3.63	3.97
08-00528-00501		3	0.75	1	0.95	12°	6	50	5,100	3.22	3.35	3.48	3.63	3.97
08-00527-00502		4	0.75	1	0.95	12°	4	45	3,600	4.27	4.44	4.62	4.83	5.30
08-00528-00502		4	0.75	1	0.95	12°	6	50	5,600	4.27	4.44	4.62	4.83	5.30
08-00527-00503		5	0.75	1	0.95	12°	4	45	3,600	5.31	5.53	5.76	6.02	6.63
08-00528-00503		5	0.75	1	0.95	12°	6	50	5,600	5.31	5.53	5.76	6.02	6.63
08-00527-00504		6	0.75	1	0.95	12°	4	45	3,900	6.35	6.62	6.90	7.22	7.96
08-00528-00504		6	0.75	1	0.95	12°	6	50	5,900	6.35	6.62	6.90	7.22	7.96
08-00527-00505		7	0.75	1	0.95	12°	4	45	3,900	7.40	7.71	8.04	8.42	9.28
08-00528-00505		7	0.75	1	0.95	12°	6	50	5,900	7.40	7.71	8.04	8.42	9.28
08-00527-00506		8	0.75	1	0.95	12°	4	45	3,900	8.44	8.79	9.18	9.61	10.61
08-00528-00506		8	0.75	1	0.95	12°	6	50	5,900	8.44	8.79	9.18	9.61	10.61
08-00527-00507		9	0.75	1	0.95	12°	4	45	3,900	9.48	9.88	10.32	10.81	11.94
08-00527-00508		10	0.75	1	0.95	12°	4	45	3,900	10.52	10.97	11.46	12.01	13.26
08-00528-00508		10	0.75	1	0.95	12°	6	50	5,900	10.52	10.97	11.46	12.01	13.26
08-00527-00509		12	0.75	1	0.95	12°	4	45	3,900	12.61	13.15	13.75	14.40	15.92
08-00527-00515		13	0.75	1	0.95	12°	4	45	4,500	13.66	14.25	14.90	15.62	17.29
08-00527-00510		14	0.75	1	0.95	12°	4	50	4,500	14.70	15.33	16.03	16.79	18.57

MRBH230

고경도용 2날 롱넥 볼엔드밀 2-Flute Long Neck Ball End Mill for Hardened Steels



★재연마가능

단위 : mm / 가격 : 엔화
Unit [size:mm / Retail Price:JPY]

품 번 Code No.	(R)볼반경 Radius	(ℓ)유효길이 Effective Length	(ℓ)날장 Length of Cut	(D)날경 Dia.	(d2)목두께 Neck Dia.	(γ)각도 Neck Taper Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price	경사각도에 따른 실제 유효길이 Actual effective length depending on inclined angle of workpiece.					
										30°	1°	1°30'	2°	3°	
08-00527-00511	R0.5	16	0.75	1	0.95	12°	4	50	5,300	16.78	17.51	18.31	19.18	21.23	
08-00527-00512		18	0.75	1	0.95	12°	4	55	5,300	18.87	19.69	20.59	21.58	23.88	
08-00527-00513		20	0.75	1	0.95	12°	4	55	6,400	20.95	21.87	22.87	23.97	26.54	
08-00528-00516		22	0.75	1	0.95	12°	6	60	9,600	22.82	23.59	24.43	25.33	27.34	
08-00527-00600	R0.6	2.4	0.9	1.2	1.15	12°	4	45	4,800	2.59	2.68	2.78	2.89	3.15	
08-00527-00601		4	0.9	1.2	1.15	12°	4	45	4,800	4.26	4.43	4.61	4.81	5.27	
08-00527-00602		6	0.9	1.2	1.15	12°	4	45	5,200	6.35	6.61	6.89	7.20	7.92	
08-00527-00603		8	0.9	1.2	1.15	12°	4	45	5,200	8.43	8.79	9.17	9.59	10.58	
08-00527-00604		10	0.9	1.2	1.15	12°	4	45	5,200	10.52	10.96	11.45	11.99	13.23	
08-00527-00605		12	0.9	1.2	1.15	12°	4	45	5,200	12.61	13.14	13.73	14.38	15.89	
08-00527-00606		14	0.9	1.2	1.15	12°	4	50	5,700	14.69	15.32	16.01	16.77	18.54	
08-00527-00607		16	0.9	1.2	1.15	12°	4	50	6,200	16.78	17.50	18.29	19.17	21.20	
08-00527-00700	R0.7	8	1	1.4	1.35	12°	4	45	4,500	8.44	8.78	9.17	9.59	10.57	
08-00527-00701		12	1	1.4	1.35	12°	4	50	4,500	12.61	13.14	13.73	14.38	15.90	
08-00527-00702		16	1	1.4	1.35	12°	4	50	4,500	16.78	17.50	18.30	19.17	21.22	
08-00527-00750	R0.75	3	1.1	1.5	1.45	12°	4	45	3,700	3.21	3.33	3.45	3.58	3.89	
08-00527-00751		4	1.1	1.5	1.45	12°	4	45	3,700	4.26	4.41	4.59	4.78	5.22	
08-00527-00753		6	1.1	1.5	1.45	12°	4	45	3,700	6.34	6.59	6.87	7.17	7.88	
08-00528-00753		6	1.1	1.5	1.45	12°	6	50	6,000	6.34	6.59	6.87	7.17	7.88	
08-00527-00755		8	1.1	1.5	1.45	12°	4	45	3,900	8.43	8.77	9.15	9.56	10.53	
08-00528-00755		8	1.1	1.5	1.45	12°	6	50	6,000	8.43	8.77	9.15	9.56	10.53	
08-00527-00757		10	1.1	1.5	1.45	12°	4	45	4,200	10.51	10.95	11.43	11.96	13.18	
08-00527-00758		12	1.1	1.5	1.45	12°	4	45	4,500	12.60	13.13	13.71	14.35	15.84	
08-00527-00759		14	1.1	1.5	1.45	12°	4	50	4,500	14.69	15.31	15.99	16.74	18.49	
08-00527-00760		16	1.1	1.5	1.45	12°	4	50	4,500	16.77	17.49	18.27	19.14	21.15	
08-00527-00761		18	1.1	1.5	1.45	12°	4	55	4,500	18.86	19.68	20.57	21.56	23.87	
08-00527-00762		20	1.1	1.5	1.45	12°	4	55	4,500	20.94	21.85	22.84	23.92	Free	
08-00527-00763		22	1.1	1.5	1.45	12°	4	60	4,500	23.03	24.02	25.12	26.32	Free	
08-00527-00764		30	1.1	1.5	1.45	12°	4	70	4,500	31.37	32.74	34.24	35.89	Free	
08-00527-00803		R0.8	8	1.2	1.6	1.55	12°	4	45	5,200	8.43	8.77	9.14	9.55	10.51
08-00527-00805			12	1.2	1.6	1.55	12°	4	45	5,200	12.60	13.13	13.70	14.34	15.82
08-00527-00807	16		1.2	1.6	1.55	12°	4	50	5,200	16.77	17.48	18.27	19.13	21.13	
08-00527-00809	20		1.2	1.6	1.55	12°	4	55	5,200	20.94	21.84	22.83	23.91	Free	

주문방법

MRBH230 볼반경(R)×유효길이(ℓ1)×샤크(d)를 선택하십시오.
When you order, indicate MRBH230 (R)×(ℓ1)×(d).

※(γ)는 참고값입니다.
※(γ) is reference value.

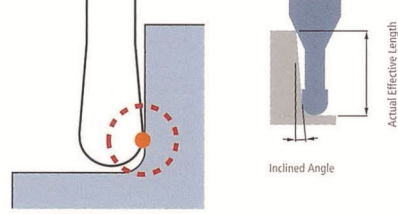
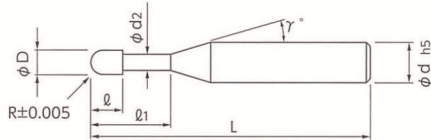
MRBH230



품 번 Code No.	(R)반경 Radius	(L)유효길이 Effective Length	(L)날장 Length of Cut	(D)날경 Dia.	(d)목두께 Neck Dia.	(r)각도 Neck Taper Angle	(d)상크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price	경사각도에 따른 실제 유효길이 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1° 30'	2°	3°
08-00527-01001	R1	3	1.5	2	1.94	12°	4	45	3,200	3.23	3.33	3.44	3.56	3.85
08-00527-01002		4	1.5	2	1.94	12°	4	45	3,200	4.27	4.42	4.58	4.76	5.17
08-00528-01002		4	1.5	2	1.94	12°	6	50	5,100	4.27	4.42	4.58	4.76	5.17
★ 08-00527-01004		6	1.5	2	1.94	12°	4	45	3,600	6.36	6.60	6.86	7.15	7.83
★ 08-00528-01004		6	1.5	2	1.94	12°	6	50	5,500	6.36	6.60	6.86	7.15	7.83
★ 08-00527-01006		8	1.5	2	1.94	12°	4	45	3,900	8.44	8.78	9.14	9.54	10.48
★ 08-00528-01006		8	1.5	2	1.94	12°	6	50	5,900	8.44	8.78	9.14	9.54	10.48
★ 08-00527-01008		10	1.5	2	1.94	12°	4	45	3,900	10.53	10.95	11.42	11.94	13.14
★ 08-00528-01008		10	1.5	2	1.94	12°	6	50	5,900	10.53	10.95	11.42	11.94	13.14
★ 08-00527-01010		12	1.5	2	1.94	12°	4	45	3,900	12.61	13.13	13.70	14.33	15.79
★ 08-00527-01020		13	1.5	2	1.94	12°	4	45	3,900	13.66	14.23	14.86	15.55	17.16
★ 08-00527-01011		14	1.5	2	1.94	12°	4	50	3,900	14.70	15.31	15.98	16.72	18.45
★ 08-00527-01012		16	1.5	2	1.94	12°	4	50	3,900	16.78	17.49	18.27	19.12	Free
★ 08-00528-01012		16	1.5	2	1.94	12°	6	60	5,900	16.78	17.49	18.27	19.12	Free
★ 08-00527-01013		18	1.5	2	1.94	12°	4	55	3,900	18.87	19.67	20.55	21.51	Free
★ 08-00527-01014		20	1.5	2	1.94	12°	4	55	3,900	20.96	21.85	22.83	23.90	Free
★ 08-00527-01015		22	1.5	2	1.94	12°	4	60	5,300	23.04	24.03	25.11	26.30	Free
★ 08-00527-01016		25	1.5	2	1.94	12°	4	65	5,400	26.17	27.30	28.53	29.89	Free
★ 08-00528-01016		25	1.5	2	1.94	12°	6	80	5,500	26.17	27.30	28.53	29.89	Free
★ 08-00527-01017		30	1.5	2	1.94	12°	4	70	6,100	31.38	32.74	34.23	Free	Free
★ 08-00527-01018	35	1.5	2	1.94	12°	4	70	8,300	36.60	38.19	39.93	Free	Free	
★ 08-00527-01019	40	1.5	2	1.94	12°	4	90	8,300	41.81	43.64	Free	Free	Free	
★ 08-00527-01250	R1.25	6	2.3	2.5	2.4	12°	4	45	4,800	6.45	6.68	6.94	7.22	7.89
★ 08-00527-01251		8	2.3	2.5	2.4	12°	4	45	4,200	8.54	8.86	9.22	9.62	10.55
★ 08-00527-01252		10	2.3	2.5	2.4	12°	4	45	5,100	10.62	11.04	11.49	12.00	13.18
★ 08-00527-01253		15	2.3	2.5	2.4	12°	4	50	5,200	15.83	16.48	17.20	17.98	Free
★ 08-00527-01254		20	2.3	2.5	2.4	12°	4	55	6,100	21.04	21.93	22.90	Free	Free
★ 08-00527-01255		25	2.3	2.5	2.4	12°	4	65	6,500	26.26	27.38	28.60	Free	Free
★ 08-00527-01256		30	2.3	2.5	2.4	12°	4	70	7,500	31.47	32.82	Free	Free	Free
★ 08-00527-01257	35	2.3	2.5	2.4	12°	4	70	9,300	36.69	38.27	Free	Free	Free	
★ 08-00527-01501	R1.5	6	2.5	3	2.85	12°	6	60	3,900	6.56	6.78	7.03	7.31	7.95
★ 08-00527-01502		8	2.5	3	2.85	12°	6	60	3,900	8.64	8.96	9.31	9.70	10.60
★ 08-00527-01503		10	2.5	3	2.85	12°	6	60	4,500	10.73	11.14	11.59	12.09	13.26
★ 08-00527-01504		12	2.5	3	2.85	12°	6	60	4,700	12.81	13.32	13.88	14.49	15.91
★ 08-00527-01505		14	2.5	3	2.85	12°	6	60	5,200	14.90	15.50	16.16	16.88	18.57
★ 08-00527-01506		16	2.5	3	2.85	12°	6	60	5,200	16.98	17.68	18.44	19.27	21.22
★ 08-00527-01508		20	2.5	3	2.85	12°	6	65	5,000	21.16	22.04	23.00	24.06	26.53
★ 08-00527-01509		25	2.5	3	2.85	12°	6	65	5,000	26.37	27.48	28.70	30.04	Free
★ 08-00527-01510		30	2.5	3	2.85	12°	6	70	5,700	31.58	32.93	34.40	36.03	Free
★ 08-00527-01511		35	2.5	3	2.85	12°	6	80	7,200	36.80	38.38	40.11	42.01	Free
★ 08-00527-01512	40	2.5	3	2.85	12°	6	90	9,000	42.01	43.83	45.81	Free	Free	

MRBH230

고경도용 2날 롱넥 볼엔드밀 2-Flute Long Neck Ball End Mill for Hardened Steels



★ 재연가능

단위 : mm / 가격 : 엔화
Unit [size: mm / Retail Price: JPY]

품 번 Code No.	(R)볼반경 Radius	(ℓ ₁)유효길이 Effective Length	(ℓ ₂)날장 Length of Cut	(D)날경 Dia.	(d ₂)목두께 Neck Dia.	(γ)각도 Neck Taper Angle	(d)샤크 Shank Dia.	(L)전장 Overall Length	엔화가격(JPY) Retail Price	경사각도에 따른 실제 유효길이 Actual effective length depending on inclined angle of workpiece.				
										30°	1°	1°30'	2°	3°
★ 08-00527-01750	R1.75	15	2.8	3.5	3.35	12°	6	60	6,600	15.94	16.58	17.28	18.05	19.86
★ 08-00527-01754		20	2.8	3.5	3.35	12°	6	65	6,600	21.14	22.01	22.96	24.01	Free
★ 08-00527-01751		25	2.8	3.5	3.35	12°	6	65	7,000	26.37	27.47	28.69	30.03	Free
★ 08-00527-01755		30	2.8	3.5	3.35	12°	6	70	7,000	31.57	32.91	34.37	35.98	Free
★ 08-00527-01752		35	2.8	3.5	3.35	12°	6	80	9,000	36.79	38.37	40.10	Free	Free
★ 08-00527-01756		40	2.8	3.5	3.35	12°	6	90	9,000	42.00	43.80	45.77	Free	Free
★ 08-00527-01753		45	2.8	3.5	3.35	12°	6	90	11,000	47.22	49.27	Free	Free	Free
★ 08-00527-02000	R2	8	3	4	3.8	—	4	65	3,800	8.74	9.05	9.38	9.74	10.60
★ 08-00527-02001		8	3	4	3.8	12°	6	65	4,000	8.74	9.05	9.38	9.74	10.60
★ 08-00527-02002		10	3	4	3.8	12°	6	65	4,000	10.83	11.22	11.66	12.14	13.25
★ 08-00527-02003		12	3	4	3.8	12°	6	65	5,200	12.91	13.40	13.94	14.53	15.91
★ 08-00527-02101		14	3	4	3.8	12°	6	65	5,200	15.00	15.58	16.22	16.92	18.56
★ 08-00527-02004		15	3	4	3.8	12°	6	65	5,200	16.04	16.67	17.36	18.12	19.89
★ 08-00527-02006		20	3	4	3.8	12°	6	65	5,200	21.26	22.12	23.06	24.10	Free
★ 08-00527-02008		25	3	4	3.8	12°	6	70	5,200	26.47	27.57	28.77	30.09	Free
★ 08-00527-02010		30	3	4	3.8	12°	6	70	5,200	31.68	33.01	34.47	Free	Free
★ 08-00527-02011		35	3	4	3.8	12°	6	80	6,000	36.90	38.46	40.17	Free	Free
★ 08-00527-02012		40	3	4	3.8	12°	6	85	6,700	42.11	43.91	Free	Free	Free
★ 08-00527-02013		45	3	4	3.8	12°	6	90	8,700	47.33	49.36	Free	Free	Free
★ 08-00527-02014		50	3	4	3.8	12°	6	100	9,500	52.54	54.80	Free	Free	Free
★ 08-00527-02500	R2.5	10	3.5	5	4.8	12°	6	70	6,100	10.81	11.18	11.59	12.04	Free
★ 08-00527-02501		15	3.5	5	4.8	12°	6	70	8,600	16.02	16.63	17.29	Free	Free
★ 08-00527-02502		20	3.5	5	4.8	12°	6	70	8,700	21.24	22.08	Free	Free	Free
★ 08-00527-02503		25	3.5	5	4.8	12°	6	70	8,700	26.45	27.52	Free	Free	Free
★ 08-00527-02504		30	3.5	5	4.8	12°	6	80	9,300	31.66	Free	Free	Free	Free
★ 08-00527-02506		40	3.5	5	4.8	12°	6	90	11,600	42.09	Free	Free	Free	Free
★ 08-00527-03000	R3	10	6	6	5.7	—	6	70	6,500	Free	Free	Free	Free	Free
★ 08-00527-03001		15	6	6	5.7	—	6	70	6,500	Free	Free	Free	Free	Free
★ 08-00527-03002		20	6	6	5.7	—	6	70	6,500	Free	Free	Free	Free	Free
★ 08-00527-03003		25	6	6	5.7	—	6	70	6,500	Free	Free	Free	Free	Free
★ 08-00527-03004		30	6	6	5.7	—	6	80	6,700	Free	Free	Free	Free	Free
★ 08-00527-03007		35	6	6	5.7	—	6	85	6,700	Free	Free	Free	Free	Free
★ 08-00527-03005		40	6	6	5.7	—	6	90	7,300	Free	Free	Free	Free	Free
★ 08-00527-03006		50	6	6	5.7	—	6	120	7,900	Free	Free	Free	Free	Free
★ 08-00527-03008		60	6	6	5.7	—	6	120	8,500	Free	Free	Free	Free	Free

주문방법

MRBH230 볼반경(R)×유효길이(ℓ₁)×샤크(d)를 선택하십시오.
When you order, indicate MRBH230 (R)×(ℓ₁)×(d).

※ (γ)은 참고값입니다.
※ (γ) is reference value.