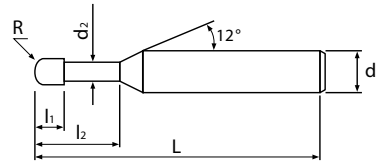


HMRB230

HY-MAX 리브 볼 엔드밀 2날 헬릭스30°
HY-MAX Rib Ball End Mill 2-Flute Helix30°



* 적용 피삭재 (Applicable Work Material)
◎ : 최적 (Most Suitable)
○ : 가능 (Applicable)

CARBIDE ULTRA
TiSiN
2
30° Helix
R ±0.005
R ±0.01
D 0/-0.008
D 0/-0.015
Shank h5
3D

R < 3 R ≥ 3 D < 6 D ≥ 6

피삭재 Work Material

P			H			M	S	N		
탄소강 Carbon Steels	합금강 Alloy Steels	프리하르텐강 Pre-Hardened Steels	열처리강 Hardened Steels			스테인레스강 Stainless Steels	내열합금강 Heat-resistant alloys	동 Copper	알루미늄합금 Aluminum Alloys	흑연 Graphite
S45C/S50C ~800 N/mm ²	SCM ~35HRC	NAK/HPM ~45HRC	SKD61 ~55HRC	SKD11 ~60HRC	SKH ~62HRC					
○	◎	◎	◎	◎	○	○	○	○		

단위(mm)/Unit(mm)

모델번호 Model No.	볼반경 Radius of Ball Nose	유효장 Effective Length	날장 Length of Cut	목부경 Neck Dia	전장 Overall Length	샙크경 Shank Dia	비고 Remark
	R	L ₂	L ₁	d ₂	L	d	
HMRB230-001003-045-S04	R0.05	0.3	0.1	0.085	45	4	
HMRB230-001005-045-S04	R0.05	0.5	0.1	0.085	45	4	
HMRB230-0015005-045-S04	R0.075	0.5	0.15	0.13	45	4	
HMRB230-001501-045-S04	R0.075	1	0.15	0.13	45	4	
HMRB230-002005-045-S04	R0.1	0.5	0.2	0.18	45	4	
HMRB230-00201-045-S04	R0.1	1	0.2	0.18	45	4	
HMRB230-002015-045-S04	R0.1	1.5	0.2	0.18	45	4	
HMRB230-00202-045-S04	R0.1	2	0.2	0.18	45	4	
HMRB230-003005-045-S04	R0.15	0.5	0.3	0.27	45	4	
HMRB230-00301-045-S04	R0.15	1	0.3	0.27	45	4	
HMRB230-003015-045-S04	R0.15	1.5	0.3	0.27	45	4	
HMRB230-00302-045-S04	R0.15	2	0.3	0.27	45	4	
HMRB230-00303-045-S04	R0.15	3	0.3	0.27	45	4	
HMRB230-00401-045-S04	R0.2	1	0.4	0.37	45	4	
HMRB230-004015-045-S04	R0.2	1.5	0.4	0.37	45	4	
HMRB230-00402-045-S04	R0.2	2	0.4	0.37	45	4	
HMRB230-00403-045-S04	R0.2	3	0.4	0.37	45	4	
HMRB230-00404-045-S04	R0.2	4	0.4	0.37	45	4	
HMRB230-00405-045-S04	R0.2	5	0.4	0.37	45	4	
HMRB230-00406-045-S04	R0.2	6	0.4	0.37	45	4	
HMRB230-00501-045-S04	R0.25	1	0.5	0.46	45	4	
HMRB230-00502-045-S04	R0.25	2	0.5	0.46	45	4	
HMRB230-00503-045-S04	R0.25	3	0.5	0.46	45	4	
HMRB230-00504-045-S04	R0.25	4	0.5	0.46	45	4	
HMRB230-00505-045-S04	R0.25	5	0.5	0.46	45	4	
HMRB230-00506-045-S04	R0.25	6	0.5	0.46	45	4	

HMRB230

모델번호 Model No.	볼반경 Radius of Ball Nose	유효장 Effective Length	날장 Length of Cut	목부경 Neck Dia	전장 Overall Length	샙크경 Shank Dia	비고 Remark
	R	L ₂	L ₁	d ₂	L	d	
HMRB230-00508-045-S04	R0.25	8	0.5	0.46	45	4	
HMRB230-00510-045-S04	R0.25	10	0.5	0.46	45	4	
HMRB230-00601-045-S04	R0.3	1	0.6	0.56	45	4	
HMRB230-00602-045-S04	R0.3	2	0.6	0.56	45	4	
HMRB230-00603-045-S04	R0.3	3	0.6	0.56	45	4	
HMRB230-00604-045-S04	R0.3	4	0.6	0.56	45	4	
HMRB230-00605-045-S04	R0.3	5	0.6	0.56	45	4	
HMRB230-00606-045-S04	R0.3	6	0.6	0.56	45	4	
NEW HMRB230-00607-045-S04	R0.3	7	0.6	0.56	45	4	
HMRB230-00608-045-S04	R0.3	8	0.6	0.56	45	4	
HMRB230-00610-045-S04	R0.3	10	0.6	0.56	45	4	
HMRB230-00612-045-S04	R0.3	12	0.6	0.56	45	4	
HMRB230-00702-045-S04	R0.35	2	0.7	0.66	45	4	
NEW HMRB230-00703-045-S04	R0.35	3	0.7	0.66	45	4	
HMRB230-00704-045-S04	R0.35	4	0.7	0.66	45	4	
NEW HMRB230-00705-045-S04	R0.35	5	0.7	0.66	45	4	
HMRB230-00706-045-S04	R0.35	6	0.7	0.66	45	4	
NEW HMRB230-00707-045-S04	R0.35	7	0.7	0.66	45	4	
HMRB230-00708-045-S04	R0.35	8	0.7	0.66	45	4	
HMRB230-00802-045-S04	R0.4	2	0.8	0.76	45	4	
HMRB230-00803-045-S04	R0.4	3	0.8	0.76	45	4	
HMRB230-00804-045-S04	R0.4	4	0.8	0.76	45	4	
HMRB230-00805-045-S04	R0.4	5	0.8	0.76	45	4	
HMRB230-00806-045-S04	R0.4	6	0.8	0.76	45	4	
NEW HMRB230-00807-045-S04	R0.4	7	0.8	0.76	45	4	
HMRB230-00808-045-S04	R0.4	8	0.8	0.76	45	4	
HMRB230-00810-045-S04	R0.4	10	0.8	0.76	45	4	
HMRB230-00812-045-S04	R0.4	12	0.8	0.76	45	4	
NEW HMRB230-01002-045-S04	R0.5	2	1	0.96	45	4	
HMRB230-010025-050-S06	R0.5	2.5	1	0.96	50	6	
HMRB230-01003-045-S04	R0.5	3	1	0.96	45	4	
HMRB230-01004-045-S04	R0.5	4	1	0.96	45	4	
NEW HMRB230-01004-050-S06	R0.5	4	1	0.96	50	6	
HMRB230-01005-045-S04	R0.5	5	1	0.96	45	4	
HMRB230-01006-045-S04	R0.5	6	1	0.96	45	4	
NEW HMRB230-01006-050-S06	R0.5	6	1	0.96	50	6	
HMRB230-01008-045-S04	R0.5	8	1	0.96	45	4	
NEW HMRB230-01008-050-S06	R0.5	8	1	0.96	50	6	
HMRB230-01010-045-S04	R0.5	10	1	0.96	45	4	
NEW HMRB230-01010-050-S06	R0.5	10	1	0.96	50	6	
HMRB230-01012-045-S04	R0.5	12	1	0.96	45	4	
HMRB230-01014-050-S04	R0.5	14	1	0.96	50	4	
HMRB230-01016-050-S04	R0.5	16	1	0.96	50	4	
HMRB230-01020-060-S04	R0.5	20	1	0.96	60	4	
HMRB230-01025-070-S04	R0.5	25	1	0.96	70	4	
HMRB230-01204-045-S04	R0.6	4	1.2	1.15	45	4	
HMRB230-01206-045-S04	R0.6	6	1.2	1.15	45	4	
HMRB230-01208-045-S04	R0.6	8	1.2	1.15	45	4	

HMRB230

볼 Ball	모델번호 Model No.	볼반경 Radius of Ball Nose	유효장 Effective Length	날장 Length of Cut	목부경 Neck Dia	전장 Overall Length	샹크경 Shank Dia	비고 Remark
		R	l ₂	l ₁	d ₂	L	d	
라디우스 Radius	HMRB230-01210-045-S04	R0.6	10	1.2	1.15	45	4	
	HMRB230-01212-045-S04	R0.6	12	1.2	1.15	45	4	
스퀘어 Square	HMRB230-01214-050-S04	R0.6	14	1.2	1.15	50	4	
	HMRB230-01216-050-S04	R0.6	16	1.2	1.15	50	4	
	HMRB230-01220-060-S04	R0.6	20	1.2	1.15	60	4	
	HMRB230-01504-045-S04	R0.75	4	1.5	1.45	45	4	
	HMRB230-01504-050-S06	R0.75	4	1.5	1.45	50	6	
	HMRB230-01506-045-S04	R0.75	6	1.5	1.45	45	4	
NEW	HMRB230-01506-050-S06	R0.75	6	1.5	1.45	50	6	
	HMRB230-01508-045-S04	R0.75	8	1.5	1.45	45	4	
NEW	HMRB230-01508-050-S06	R0.75	8	1.5	1.45	50	6	
	HMRB230-01510-045-S04	R0.75	10	1.5	1.45	45	4	
NEW	HMRB230-01510-050-S06	R0.75	10	1.5	1.45	50	6	
	HMRB230-01512-045-S04	R0.75	12	1.5	1.45	45	4	
NEW	HMRB230-01512-050-S06	R0.75	12	1.5	1.45	50	6	
	HMRB230-01514-050-S04	R0.75	14	1.5	1.45	50	4	
	HMRB230-01516-050-S04	R0.75	16	1.5	1.45	50	4	
	HMRB230-01520-060-S04	R0.75	20	1.5	1.45	60	4	
	HMRB230-02004-045-S04	R1	4	2	1.9	45	4	
	HMRB230-02006-045-S04	R1	6	2	1.9	45	4	
	HMRB230-02006-050-S06	R1	6	2	1.9	50	6	
	HMRB230-02008-045-S04	R1	8	2	1.9	45	4	
NEW	HMRB230-02008-050-S06	R1	8	2	1.9	50	6	
	HMRB230-02010-045-S04	R1	10	2	1.9	45	4	
NEW	HMRB230-02010-050-S06	R1	10	2	1.9	50	6	
	HMRB230-02012-045-S04	R1	12	2	1.9	45	4	
NEW	HMRB230-02012-050-S06	R1	12	2	1.9	50	6	
	HMRB230-02014-050-S04	R1	14	2	1.9	50	4	
	HMRB230-02016-050-S04	R1	16	2	1.9	50	4	
	HMRB230-02020-060-S04	R1	20	2	1.9	60	4	
	HMRB230-02025-070-S04	R1	25	2	1.9	70	4	
	HMRB230-02030-070-S04	R1	30	2	1.9	70	4	
	HMRB230-02035-080-S04	R1	35	2	1.9	80	4	
	HMRB230-02040-080-S04	R1	40	2	1.9	80	4	
	HMRB230-02506-045-S04	R1.25	6	2.5	2.35	45	4	
	HMRB230-02508-045-S04	R1.25	8	2.5	2.35	45	4	
	HMRB230-02510-045-S04	R1.25	10	2.5	2.35	45	4	
	HMRB230-02512-045-S04	R1.25	12	2.5	2.35	45	4	
	HMRB230-02516-050-S04	R1.25	16	2.5	2.35	50	4	
	HMRB230-02520-060-S04	R1.25	20	2.5	2.35	60	4	
	HMRB230-02525-070-S04	R1.25	25	2.5	2.35	70	4	
	HMRB230-03008-050-S06	R1.5	8	3	2.85	50	6	
	HMRB230-03010-050-S06	R1.5	10	3	2.85	50	6	
	HMRB230-03012-050-S06	R1.5	12	3	2.85	50	6	
	HMRB230-03014-060-S06	R1.5	14	3	2.85	60	6	
	HMRB230-03016-060-S06	R1.5	16	3	2.85	60	6	
	HMRB230-03020-060-S06	R1.5	20	3	2.85	60	6	
	HMRB230-03025-070-S06	R1.5	25	3	2.85	70	6	

HMRB230

볼 Ball	모델번호 Model No.	볼반경 Radius of Ball Nose	유효장 Effective Length	날장 Length of Cut	목부경 Neck Dia	전장 Overall Length	샹크경 Shank Dia	비고 Remark
		R	l ₂	l ₁	d ₂	L	d	
라디우스 Radius	HMRB230-03030-070-S06	R1.5	30	3	2.85	70	6	
	HMRB230-03035-080-S06	R1.5	35	3	2.85	80	6	
스퀘어 Square	HMRB230-03040-080-S06	R1.5	40	3	2.85	80	6	
	HMRB230-04010-050-S06	R2	10	4	3.85	50	6	
	HMRB230-04012-050-S06	R2	12	4	3.85	50	6	
	HMRB230-04016-060-S06	R2	16	4	3.85	60	6	
	HMRB230-04020-060-S06	R2	20	4	3.85	60	6	
	HMRB230-04025-070-S06	R2	25	4	3.85	70	6	
	HMRB230-04030-070-S06	R2	30	4	3.85	70	6	
	HMRB230-04035-080-S06	R2	35	4	3.85	80	6	
	HMRB230-04040-080-S06	R2	40	4	3.85	80	6	
	HMRB230-05012-050-S06	R2.5	12	5	4.8	50	6	
NEW	HMRB230-05016-060-S06	R2.5	16	5	4.8	60	6	
	HMRB230-05020-060-S06	R2.5	20	5	4.8	60	6	
	HMRB230-05030-070-S06	R2.5	30	5	4.8	70	6	
	HMRB230-06015-060-S06	R3	15	7	5.7	60	6	
	HMRB230-06020-060-S06	R3	20	7	5.7	60	6	
	HMRB230-06025-070-S06	R3	25	7	5.7	70	6	
	HMRB230-06030-080-S06	R3	30	7	5.7	80	6	
	HMRB230-08020-060-S08	R4	20	10	7.7	60	8	
NEW	HMRB230-08040-100-S08	R4	40	10	7.7	100	8	
	HMRB230-10025-070-S10	R5	25	12	9.7	70	10	
NEW	HMRB230-10050-100-S10	R5	50	12	9.7	100	10	
	HMRB230-12030-080-S12	R6	30	14	11.7	80	12	
NEW	HMRB230-12060-110-S12	R6	60	14	11.7	110	12	

NOTE

샹크 테이퍼 각도는 약12도 입니다. 정확한 값이 아니므로 피삭재와 간섭의 염려가 있을 경우에는 반드시 확인해 주십시오.

The shank taper angle is about 12°. This angle is not an exact value and to avoid contact with the workpiece, we recommend the user check the precise value of this angle.