



- 고경도강(HRC52~68), 프리하든강 계열의 고정밀가공 엔드밀
- 고품량 실리콘계 코팅(Si) 처리하여 내마모성이 우수합니다.
- 고정밀 공차 적용으로 초정밀 가공에 적합합니다.
- 코너R 형상을 날부치핑이 적도록 설계하였습니다.
- 다양한 코너R과 유효장으로 맞춤 가공이 가능합니다.
- 초미립자 초경합금(0.2 μ m)을 채택, 고속절삭시 뛰어난 성능을 발휘합니다.
- Endmills for pre-hardened and hardened steel (HRC52~68)
- Good wear resistance by high quality Si-based PVD coating.
- High precise edge tolerance.
- Designed for minimizing edge chipping by corner R shape.
- Various corner R and flute length for wide range application.
- Outstanding performance at high speed machining by ultra fine (0.2 μ m) WC grade.

2

UWC
초미립자

TISIN-S
Coating

R
 ± 0.005

R
 ± 0.01

R
 ± 0.015

30°
Helix Angle

R0.02 ~ 0.5 R1 ~ 1.5 R2 ~ 3

D Size	D Tolerance
$\phi 0.2 \sim 5$	+0 ~ -0.01mm
$\phi 6 \sim 12$	-0.005 ~ -0.015mm
$\phi 16$	-0.01 ~ -0.02mm

단위 : mm

Order Number	날경 Diameter D x R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고	Order Number	날경 Diameter D x R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
New 2JJCR 002 0002 005	0.2 X R0.02	0.2	0.5	40	4		2JJCR 005 001 060	0.5 X R0.1	0.5	6	45	4	
2JJCR 002 0002 010	0.2 X R0.02	0.2	1	40	4		New 2JJCR 006 0002 020	0.6 X R0.02	0.6	2	45	4	
2JJCR 002 0002 015	0.2 X R0.02	0.2	1.5	40	4		New 2JJCR 006 0002 030	0.6 X R0.02	0.6	3	45	4	
New 2JJCR 002 0005 005	0.2 X R0.05	0.2	0.5	40	4		2JJCR 006 0002 040	0.6 X R0.02	0.6	4	45	4	
2JJCR 002 0005 010	0.2 X R0.05	0.2	1	40	4		New 2JJCR 006 0002 060	0.6 X R0.02	0.6	6	45	4	
2JJCR 002 0005 015	0.2 X R0.05	0.2	1.5	40	4		New 2JJCR 006 0002 080	0.6 X R0.02	0.6	8	45	4	
New 2JJCR 003 0002 010	0.3 X R0.02	0.3	1	40	4		2JJCR 006 0005 020	0.6 X R0.05	0.6	2	45	4	
New 2JJCR 003 0002 020	0.3 X R0.02	0.3	2	40	4		2JJCR 006 0005 030	0.6 X R0.05	0.6	3	45	4	
New 2JJCR 003 0002 030	0.3 X R0.02	0.3	3	40	4		2JJCR 006 0005 040	0.6 X R0.05	0.6	4	45	4	
2JJCR 003 0005 010	0.3 X R0.05	0.3	1	40	4		2JJCR 006 0005 060	0.6 X R0.05	0.6	6	45	4	
2JJCR 003 0005 020	0.3 X R0.05	0.3	2	40	4		2JJCR 006 0005 080	0.6 X R0.05	0.6	8	45	4	
2JJCR 003 0005 030	0.3 X R0.05	0.3	3	40	4		2JJCR 006 001 020	0.6 X R0.1	0.6	2	45	4	
New 2JJCR 004 0002 010	0.4 X R0.02	0.4	1	40	4		2JJCR 006 001 030	0.6 X R0.1	0.6	3	45	4	
New 2JJCR 004 0002 020	0.4 X R0.02	0.4	2	40	4		2JJCR 006 001 040	0.6 X R0.1	0.6	4	45	4	
New 2JJCR 004 0002 030	0.4 X R0.02	0.4	3	40	4		2JJCR 006 001 060	0.6 X R0.1	0.6	6	45	4	
New 2JJCR 004 0002 040	0.4 X R0.02	0.4	4	40	4		2JJCR 006 001 080	0.6 X R0.1	0.6	8	45	4	
2JJCR 004 0005 010	0.4 X R0.05	0.4	1	40	4		2JJCR 007 001 020	0.7 X R0.1	0.7	2	45	4	
2JJCR 004 0005 020	0.4 X R0.05	0.4	2	40	4		2JJCR 007 001 040	0.7 X R0.1	0.7	4	45	4	
2JJCR 004 0005 030	0.4 X R0.05	0.4	3	40	4		2JJCR 007 001 060	0.7 X R0.1	0.7	6	45	4	
2JJCR 004 0005 040	0.4 X R0.05	0.4	4	40	4		New 2JJCR 008 0002 020	0.8 X R0.02	0.8	2	45	4	
2JJCR 004 001 010	0.4 X R0.1	0.4	1	40	4		New 2JJCR 008 0002 040	0.8 X R0.02	0.8	4	45	4	
2JJCR 004 001 015	0.4 X R0.1	0.4	1.5	40	4		New 2JJCR 008 0002 060	0.8 X R0.02	0.8	6	45	4	
2JJCR 004 001 020	0.4 X R0.1	0.4	2	40	4		New 2JJCR 008 0002 080	0.8 X R0.02	0.8	8	45	4	
2JJCR 004 001 030	0.4 X R0.1	0.4	3	40	4		New 2JJCR 008 0005 020	0.8 X R0.05	0.8	2	45	4	
2JJCR 004 001 040	0.4 X R0.1	0.4	4	40	4		New 2JJCR 008 0005 040	0.8 X R0.05	0.8	4	45	4	
New 2JJCR 005 0002 010	0.5 X R0.02	0.5	1	45	4		New 2JJCR 008 0005 060	0.8 X R0.05	0.8	6	45	4	
New 2JJCR 005 0002 015	0.5 X R0.02	0.5	1.5	45	4		New 2JJCR 008 0005 080	0.8 X R0.05	0.8	8	45	4	
New 2JJCR 005 0002 020	0.5 X R0.02	0.5	2	45	4		2JJCR 008 001 020	0.8 X R0.1	0.8	2	45	4	
New 2JJCR 005 0002 025	0.5 X R0.02	0.5	2.5	45	4		2JJCR 008 001 040	0.8 X R0.1	0.8	4	45	4	
New 2JJCR 005 0002 030	0.5 X R0.02	0.5	3	45	4		2JJCR 008 001 060	0.8 X R0.1	0.8	6	45	4	
New 2JJCR 005 0002 040	0.5 X R0.02	0.5	4	45	4		2JJCR 008 001 080	0.8 X R0.1	0.8	8	45	4	
New 2JJCR 005 0002 050	0.5 X R0.02	0.5	5	45	4		2JJCR 008 002 020	0.8 X R0.2	0.8	2	45	4	
New 2JJCR 005 0002 060	0.5 X R0.02	0.5	6	45	4		2JJCR 008 002 040	0.8 X R0.2	0.8	4	45	4	
2JJCR 005 0005 010	0.5 X R0.05	0.5	1	45	4		2JJCR 008 002 060	0.8 X R0.2	0.8	6	45	4	
2JJCR 005 0005 015	0.5 X R0.05	0.5	1.5	45	4		2JJCR 008 002 080	0.8 X R0.2	0.8	8	45	4	
2JJCR 005 0005 020	0.5 X R0.05	0.5	2	45	4		New 2JJCR 010 0002 040	1 X R0.02	1	4	45	4	
2JJCR 005 0005 025	0.5 X R0.05	0.5	2.5	45	4		New 2JJCR 010 0002 060	1 X R0.02	1	6	45	4	
2JJCR 005 0005 030	0.5 X R0.05	0.5	3	45	4		New 2JJCR 010 0002 080	1 X R0.02	1	8	45	4	
2JJCR 005 0005 040	0.5 X R0.05	0.5	4	45	4		New 2JJCR 010 0002 100	1 X R0.02	1	10	50	4	
2JJCR 005 0005 050	0.5 X R0.05	0.5	5	45	4		New 2JJCR 010 0002 120	1 X R0.02	1	12	50	4	
2JJCR 005 0005 060	0.5 X R0.05	0.5	6	45	4		New 2JJCR 010 0002 160	1 X R0.02	1	16	50	4	
2JJCR 005 001 010	0.5 X R0.1	0.5	1	45	4		New 2JJCR 010 0002 200	1 X R0.02	1	20	50	4	
2JJCR 005 001 015	0.5 X R0.1	0.5	1.5	45	4		New 2JJCR 010 0005 040	1 X R0.05	1	4	45	4	
2JJCR 005 001 020	0.5 X R0.1	0.5	2	45	4		New 2JJCR 010 0005 060	1 X R0.05	1	6	45	4	
2JJCR 005 001 025	0.5 X R0.1	0.5	2.5	45	4		New 2JJCR 010 0005 080	1 X R0.05	1	8	45	4	
2JJCR 005 001 030	0.5 X R0.1	0.5	3	45	4		New 2JJCR 010 0005 100	1 X R0.05	1	10	50	4	
2JJCR 005 001 040	0.5 X R0.1	0.5	4	45	4		New 2JJCR 010 0005 120	1 X R0.05	1	12	50	4	
2JJCR 005 001 050	0.5 X R0.1	0.5	5	45	4		New 2JJCR 010 0005 160	1 X R0.05	1	16	50	4	

단위 : mm

Order Number	날경 D×R	날장 L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
New 2JJCR 010 0005 200	1 X R0.05	1	20	50	4	
2JJCR 010 001 040	1 X R0.1	1	4	45	4	
2JJCR 010 001 060	1 X R0.1	1	6	45	4	
2JJCR 010 001 080	1 X R0.1	1	8	45	4	
2JJCR 010 001 100	1 X R0.1	1	10	50	4	
2JJCR 010 001 120	1 X R0.1	1	12	50	4	
2JJCR 010 001 160	1 X R0.1	1	16	50	4	
2JJCR 010 001 200	1 X R0.1	1	20	50	4	
2JJCR 010 002 040	1 X R0.2	1	4	45	4	
2JJCR 010 002 060	1 X R0.2	1	6	45	4	
2JJCR 010 002 080	1 X R0.2	1	8	45	4	
2JJCR 010 002 100	1 X R0.2	1	10	50	4	
2JJCR 010 002 120	1 X R0.2	1	12	50	4	
2JJCR 010 002 160	1 X R0.2	1	16	50	4	
2JJCR 010 002 200	1 X R0.2	1	20	50	4	
2JJCR 010 003 040	1 X R0.3	1	4	45	4	
2JJCR 010 003 060	1 X R0.3	1	6	45	4	
2JJCR 010 003 080	1 X R0.3	1	8	45	4	
2JJCR 010 003 100	1 X R0.3	1	10	50	4	
2JJCR 010 003 120	1 X R0.3	1	12	50	4	
2JJCR 010 003 160	1 X R0.3	1	16	50	4	
2JJCR 010 003 200	1 X R0.3	1	20	50	4	
New 2JJCR 012 0002 040	1.2 X R0.02	1.2	4	45	4	
New 2JJCR 012 0002 060	1.2 X R0.02	1.2	6	45	4	
New 2JJCR 012 0002 080	1.2 X R0.02	1.2	8	45	4	
New 2JJCR 012 0002 100	1.2 X R0.02	1.2	10	50	4	
New 2JJCR 012 0002 120	1.2 X R0.02	1.2	12	50	4	
New 2JJCR 012 0002 160	1.2 X R0.02	1.2	16	50	4	
New 2JJCR 012 0002 200	1.2 X R0.02	1.2	20	50	4	
New 2JJCR 012 0005 040	1.2 X R0.05	1.2	4	45	4	
New 2JJCR 012 0005 060	1.2 X R0.05	1.2	6	45	4	
New 2JJCR 012 0005 080	1.2 X R0.05	1.2	8	45	4	
New 2JJCR 012 0005 100	1.2 X R0.05	1.2	10	50	4	
New 2JJCR 012 0005 120	1.2 X R0.05	1.2	12	50	4	
New 2JJCR 012 0005 160	1.2 X R0.05	1.2	16	50	4	
New 2JJCR 012 0005 200	1.2 X R0.05	1.2	20	50	4	
2JJCR 012 001 040	1.2 X R0.1	1.2	4	45	4	
2JJCR 012 001 060	1.2 X R0.1	1.2	6	45	4	
2JJCR 012 001 080	1.2 X R0.1	1.2	8	45	4	
2JJCR 012 001 100	1.2 X R0.1	1.2	10	50	4	
2JJCR 012 001 120	1.2 X R0.1	1.2	12	50	4	
2JJCR 012 001 160	1.2 X R0.1	1.2	16	50	4	
2JJCR 012 001 200	1.2 X R0.1	1.2	20	50	4	
2JJCR 012 002 040	1.2 X R0.2	1.2	4	45	4	
2JJCR 012 002 060	1.2 X R0.2	1.2	6	45	4	
2JJCR 012 002 080	1.2 X R0.2	1.2	8	45	4	
2JJCR 012 002 100	1.2 X R0.2	1.2	10	50	4	
2JJCR 012 002 120	1.2 X R0.2	1.2	12	50	4	
2JJCR 012 002 160	1.2 X R0.2	1.2	16	50	4	
2JJCR 012 002 200	1.2 X R0.2	1.2	20	50	4	
2JJCR 012 003 040	1.2 X R0.3	1.2	4	45	4	
2JJCR 012 003 060	1.2 X R0.3	1.2	6	45	4	
2JJCR 012 003 080	1.2 X R0.3	1.2	8	45	4	
2JJCR 012 003 100	1.2 X R0.3	1.2	10	50	4	
2JJCR 012 003 120	1.2 X R0.3	1.2	12	50	4	
2JJCR 012 003 160	1.2 X R0.3	1.2	16	50	4	
2JJCR 012 003 200	1.2 X R0.3	1.2	20	50	4	
New 2JJCR 015 0002 040	1.5 X R0.02	1.5	4	45	4	
New 2JJCR 015 0002 060	1.5 X R0.02	1.5	6	45	4	
New 2JJCR 015 0002 080	1.5 X R0.02	1.5	8	45	4	
New 2JJCR 015 0002 100	1.5 X R0.02	1.5	10	50	4	
New 2JJCR 015 0002 120	1.5 X R0.02	1.5	12	50	4	
New 2JJCR 015 0002 160	1.5 X R0.02	1.5	16	50	4	

Order Number	날경 D×R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
New 2JJCR 015 0002 200	1.5 X R0.02	1.5	20	50	4	
New 2JJCR 015 0005 040	1.5 X R0.05	1.5	4	45	4	
New 2JJCR 015 0005 060	1.5 X R0.05	1.5	6	45	4	
New 2JJCR 015 0005 080	1.5 X R0.05	1.5	8	45	4	
New 2JJCR 015 0005 100	1.5 X R0.05	1.5	10	50	4	
New 2JJCR 015 0005 120	1.5 X R0.05	1.5	12	50	4	
New 2JJCR 015 0005 160	1.5 X R0.05	1.5	16	50	4	
New 2JJCR 015 0005 200	1.5 X R0.05	1.5	20	50	4	
2JJCR 015 001 040	1.5 X R0.1	1.5	4	45	4	
2JJCR 015 001 060	1.5 X R0.1	1.5	6	45	4	
2JJCR 015 001 080	1.5 X R0.1	1.5	8	45	4	
2JJCR 015 001 100	1.5 X R0.1	1.5	10	50	4	
2JJCR 015 001 120	1.5 X R0.1	1.5	12	50	4	
2JJCR 015 001 160	1.5 X R0.1	1.5	16	50	4	
2JJCR 015 001 200	1.5 X R0.1	1.5	20	50	4	
2JJCR 015 002 040	1.5 X R0.2	1.5	4	45	4	
2JJCR 015 002 060	1.5 X R0.2	1.5	6	45	4	
2JJCR 015 002 080	1.5 X R0.2	1.5	8	45	4	
2JJCR 015 002 100	1.5 X R0.2	1.5	10	50	4	
2JJCR 015 002 120	1.5 X R0.2	1.5	12	50	4	
2JJCR 015 002 160	1.5 X R0.2	1.5	16	50	4	
2JJCR 015 002 200	1.5 X R0.2	1.5	20	50	4	
2JJCR 015 003 040	1.5 X R0.3	1.5	4	45	4	
2JJCR 015 003 060	1.5 X R0.3	1.5	6	45	4	
2JJCR 015 003 080	1.5 X R0.3	1.5	8	45	4	
2JJCR 015 003 100	1.5 X R0.3	1.5	10	50	4	
2JJCR 015 003 120	1.5 X R0.3	1.5	12	50	4	
2JJCR 015 003 160	1.5 X R0.3	1.5	16	50	4	
2JJCR 015 003 200	1.5 X R0.3	1.5	20	50	4	
2JJCR 015 005 040	1.5 X R0.5	1.5	4	45	4	
2JJCR 015 005 060	1.5 X R0.5	1.5	6	45	4	
2JJCR 015 005 080	1.5 X R0.5	1.5	8	45	4	
2JJCR 015 005 100	1.5 X R0.5	1.5	10	50	4	
2JJCR 015 005 120	1.5 X R0.5	1.5	12	50	4	
2JJCR 015 005 160	1.5 X R0.5	1.5	16	50	4	
2JJCR 015 005 200	1.5 X R0.5	1.5	20	50	4	
New 2JJCR 020 0002 060	2 X R0.02	2	6	45	4	
New 2JJCR 020 0002 080	2 X R0.02	2	8	45	4	
New 2JJCR 020 0002 100	2 X R0.02	2	10	50	4	
New 2JJCR 020 0002 120	2 X R0.02	2	12	50	4	
New 2JJCR 020 0002 160	2 X R0.02	2	16	50	4	
New 2JJCR 020 0002 200	2 X R0.02	2	20	50	4	
New 2JJCR 020 0002 250	2 X R0.02	2	25	60	4	
New 2JJCR 020 0005 060	2 X R0.05	2	6	45	4	
New 2JJCR 020 0005 080	2 X R0.05	2	8	45	4	
New 2JJCR 020 0005 100	2 X R0.05	2	10	50	4	
New 2JJCR 020 0005 120	2 X R0.05	2	12	50	4	
New 2JJCR 020 0005 160	2 X R0.05	2	16	50	4	
New 2JJCR 020 0005 200	2 X R0.05	2	20	50	4	
New 2JJCR 020 0005 250	2 X R0.05	2	25	60	4	
2JJCR 020 001 060	2 X R0.1	2	6	45	4	
2JJCR 020 001 080	2 X R0.1	2	8	45	4	
2JJCR 020 001 100	2 X R0.1	2	10	50	4	
2JJCR 020 001 120	2 X R0.1	2	12	50	4	
2JJCR 020 001 160	2 X R0.1	2	16	50	4	
2JJCR 020 001 200	2 X R0.1	2	20	50	4	
2JJCR 020 001 250	2 X R0.1	2	25	60	4	
2JJCR 020 002 060	2 X R0.2	2	6	45	4	
2JJCR 020 002 080	2 X R0.2	2	8	45	4	
2JJCR 020 002 100	2 X R0.2	2	10	50	4	
2JJCR 020 002 120	2 X R0.2	2	12	50	4	
2JJCR 020 002 160	2 X R0.2	2	16	50	4	
2JJCR 020 002 200	2 X R0.2	2	20	50	4	

단위 : mm

Order Number	날경 Diameter D×R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고	Order Number	날경 Diameter D×R	날장 Length of cut L1	유효장 Effective Length L2	전장 Overall Length L	샙크 Shank Dia d	비고
2JJCR 020 002 250	2 X R0.2	2	25	60	4		2JJCR 030 010 250	3 X R1	3	25	65	6	
2JJCR 020 003 060	2 X R0.3	2	6	45	4		New 2JJCR 030 010 300	3 X R1	3	30	70	6	
2JJCR 020 003 080	2 X R0.3	2	8	45	4		New 2JJCR 030 010 350	3 X R1	3	35	75	6	
2JJCR 020 003 100	2 X R0.3	2	10	50	4		New 2JJCR 030 010 400	3 X R1	3	40	80	6	
2JJCR 020 003 120	2 X R0.3	2	12	50	4		2JJCR 040 001 120	4 X R0.1	4	12	50	6	
2JJCR 020 003 160	2 X R0.3	2	16	50	4		2JJCR 040 001 160	4 X R0.1	4	16	55	6	
2JJCR 020 003 200	2 X R0.3	2	20	50	4		2JJCR 040 001 200	4 X R0.1	4	20	60	6	
2JJCR 020 003 250	2 X R0.3	2	25	60	4		2JJCR 040 001 250	4 X R0.1	4	25	65	6	
2JJCR 020 005 060	2 X R0.5	2	6	45	4		2JJCR 040 001 300	4 X R0.1	4	30	70	6	
2JJCR 020 005 080	2 X R0.5	2	8	45	4		New 2JJCR 040 001 350	4 X R0.1	4	35	75	6	
2JJCR 020 005 100	2 X R0.5	2	10	50	4		New 2JJCR 040 001 400	4 X R0.1	4	40	80	6	
2JJCR 020 005 120	2 X R0.5	2	12	50	4		2JJCR 040 002 120	4 X R0.2	4	12	50	6	
2JJCR 020 005 160	2 X R0.5	2	16	50	4		2JJCR 040 002 160	4 X R0.2	4	16	55	6	
2JJCR 020 005 200	2 X R0.5	2	20	50	4		2JJCR 040 002 200	4 X R0.2	4	20	60	6	
2JJCR 020 005 250	2 X R0.5	2	25	60	4		2JJCR 040 002 250	4 X R0.2	4	25	65	6	
2JJCR 025 001 100	2.5 X R0.1	2.5	10	50	4		2JJCR 040 002 300	4 X R0.2	4	30	70	6	
2JJCR 025 001 160	2.5 X R0.1	2.5	16	50	4		New 2JJCR 040 002 350	4 X R0.2	4	35	75	6	
2JJCR 025 001 200	2.5 X R0.1	2.5	20	50	4		New 2JJCR 040 002 400	4 X R0.2	4	40	80	6	
2JJCR 025 002 100	2.5 X R0.2	2.5	10	50	4		2JJCR 040 003 120	4 X R0.3	4	12	50	6	
2JJCR 025 002 160	2.5 X R0.2	2.5	16	50	4		2JJCR 040 003 160	4 X R0.3	4	16	55	6	
2JJCR 025 002 200	2.5 X R0.2	2.5	20	50	4		2JJCR 040 003 200	4 X R0.3	4	20	60	6	
2JJCR 025 003 100	2.5 X R0.3	2.5	10	50	4		2JJCR 040 003 250	4 X R0.3	4	25	65	6	
2JJCR 025 003 160	2.5 X R0.3	2.5	16	50	4		2JJCR 040 003 300	4 X R0.3	4	30	70	6	
2JJCR 025 003 200	2.5 X R0.3	2.5	20	50	4		New 2JJCR 040 003 350	4 X R0.3	4	35	75	6	
2JJCR 025 005 100	2.5 X R0.5	2.5	10	50	4		New 2JJCR 040 003 400	4 X R0.3	4	40	80	6	
2JJCR 025 005 160	2.5 X R0.5	2.5	16	50	4		2JJCR 040 005 120	4 X R0.5	4	12	50	6	
2JJCR 025 005 200	2.5 X R0.5	2.5	20	50	4		2JJCR 040 005 160	4 X R0.5	4	16	55	6	
2JJCR 030 001 100	3 X R0.1	3	10	50	6		2JJCR 040 005 200	4 X R0.5	4	20	60	6	
2JJCR 030 001 120	3 X R0.1	3	12	50	6		2JJCR 040 005 250	4 X R0.5	4	25	65	6	
2JJCR 030 001 160	3 X R0.1	3	16	55	6		2JJCR 040 005 300	4 X R0.5	4	30	70	6	
2JJCR 030 001 200	3 X R0.1	3	20	60	6		New 2JJCR 040 005 350	4 X R0.5	4	35	75	6	
2JJCR 030 001 250	3 X R0.1	3	25	65	6		New 2JJCR 040 005 400	4 X R0.5	4	40	80	6	
New 2JJCR 030 001 300	3 X R0.1	3	30	70	6		2JJCR 040 010 120	4 X R1	4	12	50	6	
New 2JJCR 030 001 350	3 X R0.1	3	35	75	6		2JJCR 040 010 160	4 X R1	4	16	55	6	
New 2JJCR 030 001 400	3 X R0.1	3	40	80	6		2JJCR 040 010 200	4 X R1	4	20	60	6	
2JJCR 030 002 100	3 X R0.2	3	10	50	6		2JJCR 040 010 250	4 X R1	4	25	65	6	
2JJCR 030 002 120	3 X R0.2	3	12	50	6		2JJCR 040 010 300	4 X R1	4	30	70	6	
2JJCR 030 002 160	3 X R0.2	3	16	55	6		New 2JJCR 040 010 350	4 X R1	4	35	75	6	
2JJCR 030 002 200	3 X R0.2	3	20	60	6		New 2JJCR 040 010 400	4 X R1	4	40	80	6	
2JJCR 030 002 250	3 X R0.2	3	25	65	6		2JJCR 050 002 150	5 X R0.2	6	15	60	6	
New 2JJCR 030 002 300	3 X R0.2	3	30	70	6		2JJCR 050 002 250	5 X R0.2	6	25	70	6	
New 2JJCR 030 002 350	3 X R0.2	3	35	75	6		New 2JJCR 050 002 300	5 X R0.2	6	30	70	6	
New 2JJCR 030 002 400	3 X R0.2	3	40	80	6		New 2JJCR 050 002 400	5 X R0.2	6	40	80	6	
2JJCR 030 003 100	3 X R0.3	3	10	50	6		2JJCR 050 005 150	5 X R0.5	6	15	60	6	
2JJCR 030 003 120	3 X R0.3	3	12	50	6		2JJCR 050 005 250	5 X R0.5	6	25	70	6	
2JJCR 030 003 160	3 X R0.3	3	16	55	6		New 2JJCR 050 005 300	5 X R0.5	6	30	70	6	
2JJCR 030 003 200	3 X R0.3	3	20	60	6		New 2JJCR 050 005 400	5 X R0.5	6	40	80	6	
2JJCR 030 003 250	3 X R0.3	3	25	65	6		2JJCR 050 010 150	5 X R1	6	15	60	6	
New 2JJCR 030 003 300	3 X R0.3	3	30	70	6		2JJCR 050 010 250	5 X R1	6	25	70	6	
New 2JJCR 030 003 350	3 X R0.3	3	35	75	6		New 2JJCR 050 010 300	5 X R1	6	30	70	6	
New 2JJCR 030 003 400	3 X R0.3	3	40	80	6		New 2JJCR 050 010 400	5 X R1	6	40	80	6	
2JJCR 030 005 100	3 X R0.5	3	10	50	6		2JJCR 060 001 200	6 X R0.1	7	20	60	6	
2JJCR 030 005 120	3 X R0.5	3	12	50	6		2JJCR 060 001 400	6 X R0.1	7	40	80	6	
2JJCR 030 005 160	3 X R0.5	3	16	55	6		2JJCR 060 002 200	6 X R0.2	7	20	60	6	
2JJCR 030 005 200	3 X R0.5	3	20	60	6		2JJCR 060 002 400	6 X R0.2	7	40	80	6	
2JJCR 030 005 250	3 X R0.5	3	25	65	6		2JJCR 060 003 200	6 X R0.3	7	20	60	6	
New 2JJCR 030 005 300	3 X R0.5	3	30	70	6		2JJCR 060 003 400	6 X R0.3	7	40	80	6	
New 2JJCR 030 005 350	3 X R0.5	3	35	75	6		2JJCR 060 005 200	6 X R0.5	7	20	60	6	
New 2JJCR 030 005 400	3 X R0.5	3	40	80	6		2JJCR 060 005 400	6 X R0.5	7	40	80	6	
2JJCR 030 010 100	3 X R1	3	10	50	6		2JJCR 060 010 200	6 X R1	7	20	60	6	
2JJCR 030 010 120	3 X R1	3	12	50	6		2JJCR 060 010 400	6 X R1	7	40	80	6	
2JJCR 030 010 160	3 X R1	3	16	55	6		2JJCR 060 015 200	6 X R1.5	7	20	60	6	
2JJCR 030 010 200	3 X R1	3	20	60	6		2JJCR 060 015 400	6 X R1.5	7	40	80	6	

