







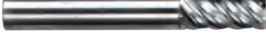




Neo Classic X-STAR Series















Neo Classic X-STAR Series

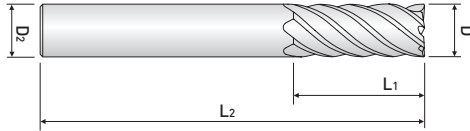


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Neo Classic X-STAR Series



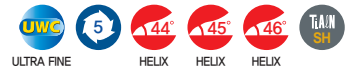
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5 FLUTES, STUB CUT LENGTH

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XE505A ... series

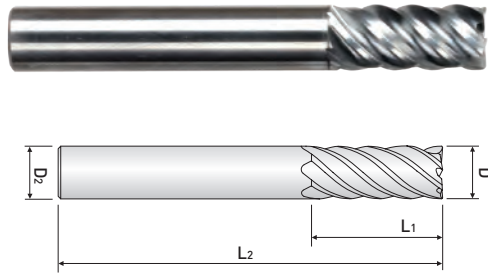


EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XE505 A 016	1/4	3/8	2	1/4	•
XE505 A 020	5/16	7/16	2	5/16	•
XE505 A 024	3/8	1/2	2	3/8	•
XE505 A 028	7/16	9/16	2-1/2	7/16	•
XE505 A 032	1/2	5/8	2-1/2	1/2	•
XE505 A 040	5/8	3/4	3	5/8	•
XE505 A 048	3/4	1	3	3/4	•
XE505 A 064	1	1	4	1	•

■ Tolerance

Mill Dia. (inch)		Shank Dia.
from 1/8 up to 1/4	0 ~ -.0012	-.0001 ~ -.0003
over 1/4 up to 3/8	0 ~ -.0016	
over 3/8 up to 1	0 ~ -.002	-.0001 ~ -.0004

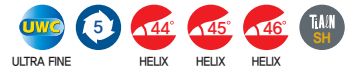
※Items can be changed for quality improvement without notice.



5 FLUTES, REGULAR CUT LENGTH

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XE515A ... series

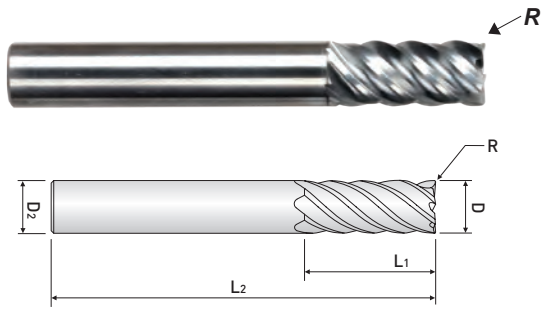


EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XE515 A 016	1/4	5/8	2-1/2	1/4	•
XE515 A 018	9/32	5/8	2-1/2	5/16	•
XE515 A 020	5/16	13/16	2-1/2	5/16	•
XE515 A 022	11/32	13/16	2-1/2	3/8	•
XE515 A 024	3/8	7/8	2-1/2	3/8	•
XE515 A 026	13/32	7/8	2-3/4	7/16	•
XE515 A 028	7/16	1	2-3/4	7/16	•
XE515 A 030	15/32	1	3	1/2	•
XE515 A 032	1/2	1	3	1/2	•
XE515 A 036	9/16	1-1/8	3-1/2	9/16	•
XE515 A 040	5/8	1-1/4	3-1/2	5/8	•
XE515 A 048	3/4	1-1/2	4	3/4	•
XE515 A 064	1	1-1/2	4	1	•

■ Tolerance

Mill Dia. (inch)	Shank Dia.
from 1/8 up to 1/4	0 ~ -.0012
over 1/4 up to 3/8	-.0001 ~ -.0003
over 3/8 up to 1	0 ~ -.002
	-.0001 ~ -.0004

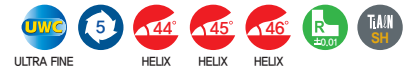
※Items can be changed for quality improvement without notice.



5 FLUTES, STUB CUT LENGTH CORNER RADIUS

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XR505A ... series

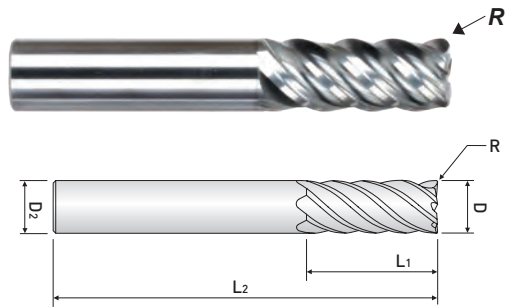


EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XR505 A 016 015	1/4	.015	3/8	2	1/4	•
XR505 A 016 030		.030				•
XR505 A 020 015	5/16	.015	7/16	2	5/16	•
XR505 A 020 030		.030				•
XR505 A 024 015	3/8	.015	1/2	2	3/8	•
XR505 A 024 030		.030				•
XR505 A 028 015	7/16	.015	9/16	2-1/2	7/16	•
XR505 A 028 030		.030				•
XR505 A 032 015	1/2	.015	5/8	2-1/2	1/2	•
XR505 A 032 030		.030				•
XR505 A 040 015	5/8	.015	3/4	3	5/8	•
XR505 A 040 030		.030				•
XR505 A 040 045		.045				•
XR505 A 048 015	3/4	.015	1	3	3/4	•
XR505 A 048 030		.030				•
XR505 A 048 045		.045				•
XR505 A 064 015	1	.015	1-1/2	4	1	•
XR505 A 064 030		.030				•
XR505 A 064 045		.045				•
XR505 A 064 060		.060				•
XR505 A 064 090		.090				•
XR505 A 064 125		.125				•

■ Tolerance

Mill Dia. (inch)		Shank Dia.
from 1/8 up to 1/4	0 ~ -.0012	-.0001 ~ -.0003
over 1/4 up to 3/8	0 ~ -.0016	
over 3/8 up to 1	0 ~ -.002	-.0001 ~ -.0004

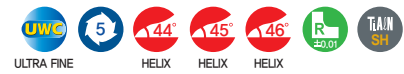
※Items can be changed for quality improvement without notice.



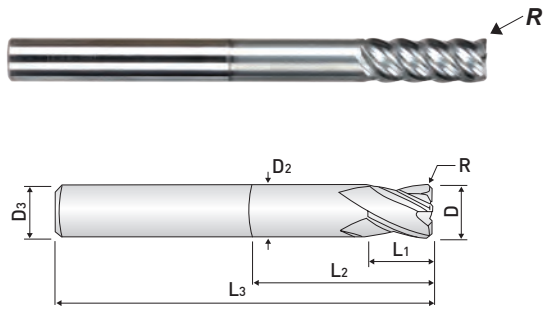
5 FLUTES, REGULAR CUT LENGTH CORNER RADIUS

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XR515A ... series



EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XR515 A 016 015	1/4	.015	5/8	2-1/2	1/4	•
XR515 A 016 030		.030				•
XR515 A 018 015	9/32	.015	5/8	2-1/2	5/16	•
XR515 A 018 030		.030				•
XR515 A 020 015	5/16	.015	13/16	2-1/2	5/16	•
XR515 A 020 030		.030				•
XR515 A 022 015	11/32	.015	13/16	2-1/2	3/8	•
XR515 A 022 030		.030				•
XR515 A 024 015	3/8	.015	7/8	2-1/2	3/8	•
XR515 A 024 030		.030				•
XR515 A 026 015	13/32	.015	7/8	2-3/4	7/16	•
XR515 A 026 030		.030				•
XR515 A 028 015	7/16	.015	1	2-3/4	7/16	•
XR515 A 028 030		.030				•
XR515 A 030 015	15/32	.015	1	3	1/2	•
XR515 A 030 030		.030				•
XR515 A 032 015	1/2	.015	1	3	1/2	•
XR515 A 032 030		.030				•
XR515 A 032 045		.045				•
XR515 A 032 060		.060				•
XR515 A 032 090		.090				•
XR515 A 032 125		.125				•
XR515 A 036 015		9/16				.015
XR515 A 036 030	.030		•			
XR515 A 040 015	5/8	.015	1-1/4	3-1/2	5/8	•
XR515 A 040 030		.030				•
XR515 A 040 045		.045				•
XR515 A 040 060		.060				•
XR515 A 040 090		.090				•
XR515 A 040 125		.125				•
XR515 A 048 015	3/4	.015	1-1/2	4	3/4	•
XR515 A 048 030		.030				•
XR515 A 048 045		.045				•
XR515 A 048 060		.060				•
XR515 A 048 090		.090				•
XR515 A 048 125		.125				•



5 FLUTES, REGULAR CUT LENGTH WITH EXTENDED NECK

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XR525A ... series

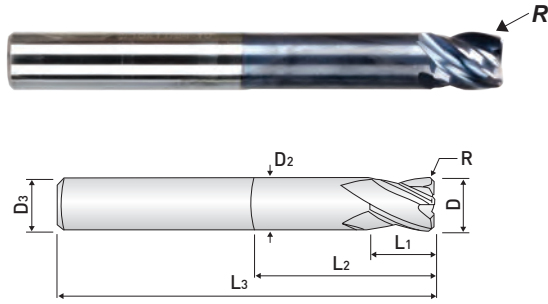


EDP. No.	D	R	L ₁	L ₂	L ₃	D ₂	D ₃	STOCK
XR525 A 016 015	1/4	.015	3/4	2-1/8	4	.242	1/4	•
XR525 A 016 030		.030						•
XR525 A 020 015	5/16	.015	1	2-1/8	4	.305	5/16	•
XR525 A 020 030		.030						•
XR525 A 024 015	3/8	.015	1	2-1/8	4	.367	3/8	•
XR525 A 024 030		.030						•
XR525 A 028 015	7/16	.015	-1/4	2-1/8	4	.430	7/16	•
XR525 A 028 030		.030						•
XR525 A 032 015	1/2	.015	1-1/4	2-1/8	4	.492	1/2	•
XR525 A 032 030		.030						•
XR525 A 032 015L		.015	1-3/8	3-1/8	5			•
XR525 A 032 030L		.030						•
XR525 A 040 015	5/8	.015	1-1/2	2-1/8	4	.617	5/8	•
XR525 A 040 030		.030						•
XR525 A 040 045		.045						•
XR525 A 040 015L		.015	1-3/4	3-1/8	5			•
XR525 A 040 030L		.030						•
XR525 A 040 045L		.045						•
XR525 A 048 015	3/4	.015	1-7/8	3	5	.742	3/4	•
XR525 A 048 030		.030						•
XR525 A 048 045		.045						•
XR525 A 064 015	1	.015	2-1/4	3	5	.992	1	•
XR525 A 064 030		.030						•
XR525 A 064 045		.045						•

■ Tolerance

Mill Dia. (inch)		Shank Dia.
from 1/8 up to 1/4	0 ~ -.0012	-.0001 ~ -.0003
over 1/4 up to 3/8	0 ~ -.0016	
over 3/8 up to 1	0 ~ -.002	-.0001 ~ -.0004

※Items can be changed for quality improvement without notice.



5 FLUTES, REGULAR CUT LENGTH WITH LONG EXTENDED NECK

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XR535A ...series

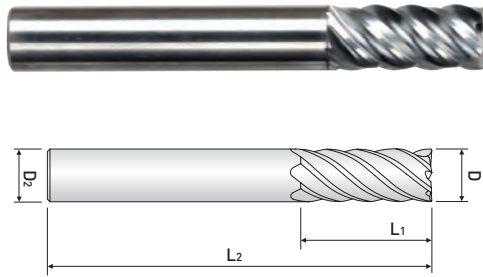


EDP. No.	D	R	L ₁	L ₂	L ₃	D ₂	D ₃	STOCK
XR535 A 024 015	3/8	.015	1-1/4	3-3/8	6	.367	3/8	•
XR535 A 024 030		.030						•
XR535 A 028 015	7/16	.015	1-1/2	3-3/8	6	.430	7/16	•
XR535 A 028 030		.030						•
XR535 A 032 015	1/2	.015	1-1/2	4-1/8	6	.492	1/2	•
XR535 A 032 030		.030						•
XR535 A 040 015	5/8	.015	2	4	6	.617	5/8	•
XR535 A 040 030		.030						•
XR535 A 040 045		.045						•
XR535 A 048 015	3/4	.015	2-1/4	4	6	.742	3/4	•
XR535 A 048 030		.030						•
XR535 A 048 045		.045						•
XR535 A 064 015	1	.015	3	4	6	.992	1	•
XR535 A 064 030		.030						•
XR535 A 064 045		.045						•

■ Tolerance

Mill Dia. (inch)		Shank Dia.
from 1/8 up to 1/4	0 ~ -.0012	-.0001 ~ -.0003
over 1/4 up to 3/8	0 ~ -.0016	
over 3/8 up to 1	0 ~ -.002	-.0001 ~ -.0004

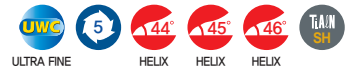
※Items can be changed for quality improvement without notice.



5 FLUTES, REGULAR CUT LENGTH

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XE505 ... series

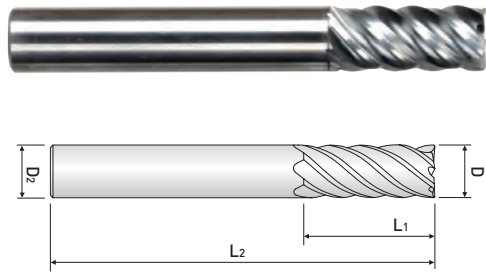


EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XE505 060	6	13	57	6	•
XE505 080	8	19	63	8	•
XE505 100	10	22	72	10	•
XE505 120	12	26	83	12	•
XE505 140	14	26	83	14	•
XE505 160	16	32	92	16	•
XE505 180	18	32	92	18	•
XE505 200	20	38	104	20	•
XE505 250	25	38	104	25	•

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 8	0 ~ -0,04	h6
over 8	0 ~ -0,05	

※Items can be changed for quality improvement without notice.



5 FLUTES, LONG CUT LENGTH

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XE515 ... series

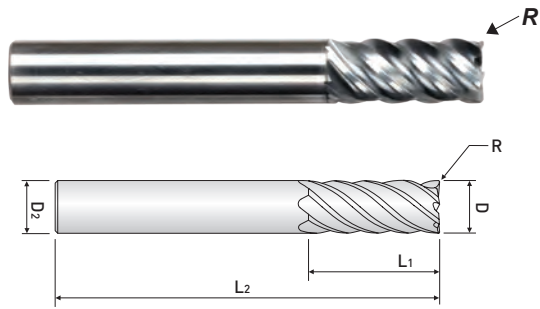


EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XE515 060	6	25	75	6	•
XE515 080	8	30	75	8	•
XE515 100	10	45	100	10	•
XE515 120	12	75	150	12	•
XE515 160	16	75	150	16	•
XE515 200	20	75	150	20	•

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 8	0 ~ -0.04	h6
over 8	0 ~ -0.05	

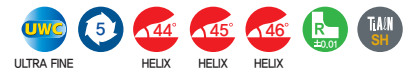
※Items can be changed for quality improvement without notice.



5 FLUTES, REGULAR CUT LENGTH CORNER RADIUS

- Maintains Cutting Edge Strength & Sharpness for Improved Tool Life
- Strong Cutting Edges Allowing for Increased depths of cut at Elevated Cutting Speeds & Feeds
- Higher Feeds and Speeds for increased Productivity. Reduced Vibration Harmonics.

XR505 ... series

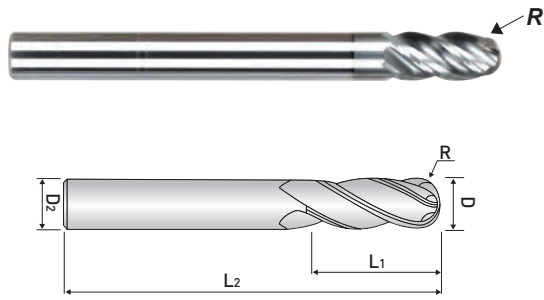


EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XR505 06 050	6	0.5	13	57	6	•
XR505 08 050	8	0.5	19	63	8	•
XR505 10 050	10	0.5	22	72	10	•
XR505 12 075	12	0.75	26	83	12	•
XR505 14 075	14	0.75	26	83	14	•
XR505 14 075 S16				92	16	•
XR505 16 100	16	1.0	32	92	16	•
XR505 18 100	18	1.0	32	92	18	•
XR505 18 100 S20				104	20	•
XR505 20 100	20	1.0	38	104	20	•
XR505 25 100	25	1.0	38	104	25	•

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 8	0 ~ -0,04	h6
over 8	0 ~ -0,05	

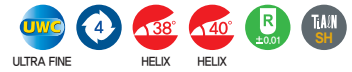
※ Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH, BALL NOSE

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance.
- Strengthened cutting edge geometry designed for excellent performance on high-temp alloys, high tensile stainless steel, inconel and titanium.

XXB504 ...series



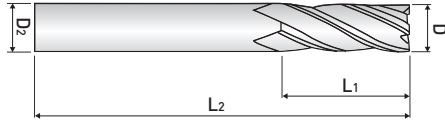
EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XXB504040	4	2	8	70	4	•
XXB504060	6	3	12	90	6	•
XXB504080	8	4	15	100	8	•
XXB504100	10	5	20	100	10	•
XXB504120	12	6	25	110	12	•

※ Flat shank is available upon request
ex) XXB504100F : Flat shank

■ Tolerance

Mill Dia. (mm)	Shank Dia.
0 ~ -0.02	h6

※ Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Reinforced bending moment because of double core geometry

XCE504 ...series



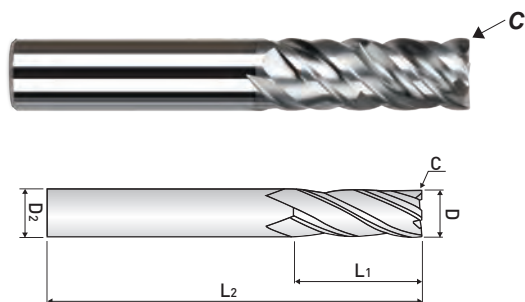
EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XCE504060	6	15	50	6	•
XCE504080	8	20	60	8	•
XCE504100	10	25	70	10	•
XCE504120	12	30	75	12	•
XCE504160	16	40	90	16	•
XCE504200	20	45	100	20	•
XCE504250	25	50	120	25	•

※ Flat shank is available upon request
ex) XCE504100F : Flat shank

■ Tolerance

Mill Dia, (mm)	Shank Dia,
0 ~ -0,02	h6

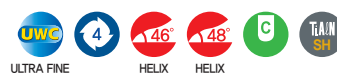
※Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
 - The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
 - Reinforced bending moment because of double core geometry
- * corner chamfer type

XCC504 ...series



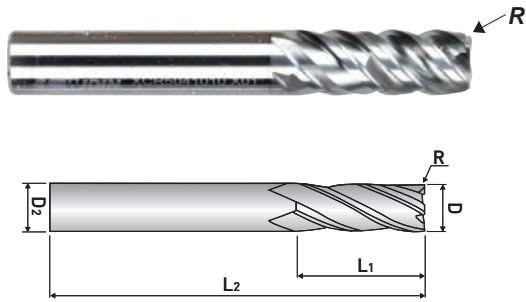
EDP. No.	D	C	L ₁	L ₂	D ₂	STOCK
XCC504060	6	0.075	15	50	6	•
XCC504080	8	0.1	20	60	8	•
XCC504100	10	0.125	25	70	10	•
XCC504120	12	0.15	30	75	12	•
XCC504160	16	0.2	40	90	16	•
XCC504200	20	0.3	45	100	20	•
XCC504250	25	0.3	50	120	25	•

※ Flat shank is available upon request
ex) XCC504100F : Flat shank

■ Tolerance

Mill Dia. (mm)	Shank Dia.
0 ~ -0.02	h6

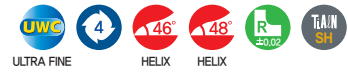
※ Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Reinforced bending moment because of double core geometry

XCR504 ...series



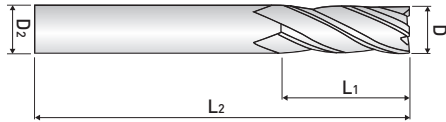
EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XCR5040602	6	0.2	15	50	6	•
XCR5040605		0.5				•
XCR5040610		1				•
XCR5040805	8	0.5	20	60	8	•
XCR5040810		1				•
XCR5041005	10	0.5	25	70	10	•
XCR5041010		1				•
XCR5041205	12	0.5	30	75	12	•
XCR5041210		1				•
XCR5041605	16	0.5	40	90	16	•
XCR5041610		1				•
XCR5042005	20	0.5	45	100	20	•
XCR5042010		1				•
XCR5042505	25	0.5	50	120	25	•
XCR5042510		1				•

※ Flat shank is available upon request
ex) XCR5041010F : Flat shank

■ Tolerance

Mill Dia, (mm)	Shank Dia,
0 ~ -0,02	h6

※Items can be changed for quality improvement without notice.



3 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Reinforced bending moment because of double core geometry

XCE503 ...series



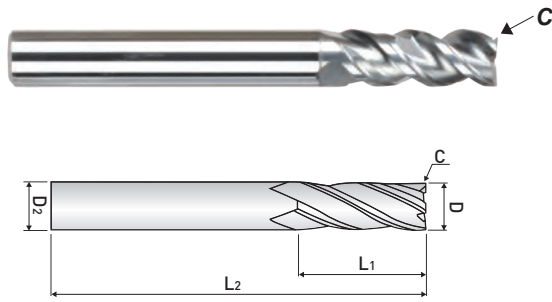
EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XCE503020	2	6	50	6	•
XCE503025	2.5	8	50	6	•
XCE503030	3	10	50	6	•
XCE503035	3.5	10	50	6	•
XCE503040	4	12	50	6	•
XCE503045	4.5	14	50	6	•
XCE503050	5	15	50	6	•
XCE503055	5.5	15	50	6	•
XCE503060	6	15	50	6	•
XCE503080	8	20	60	8	•
XCE503100	10	25	70	10	•
XCE503120	12	30	75	12	•
XCE503160	16	40	90	16	•
XCE503200	20	45	100	20	•
XCE503250	25	50	120	25	•

※ Flat shank is available upon request
ex) XCE503100F : Flat shank

■ Tolerance

Mill Dia. (mm)	Shank Dia.
0 ~ -0.02	h6

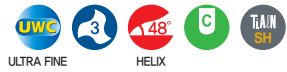
※ Items can be changed for quality improvement without notice.



3 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
 - The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
 - Reinforced bending moment because of double core geometry
- * corner chamfer type

XCC503 ...series



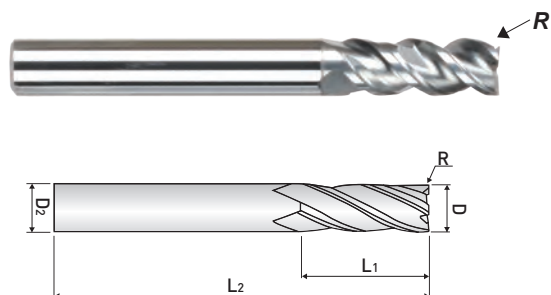
EDP. No.	D	C	L ₁	L ₂	D ₂	STOCK
XCC503020	2	0.025	6	50	6	•
XCC503025	2.5	0.025	8	50	6	•
XCC503030	3	0.035	10	50	6	•
XCC503035	3.5	0.035	10	50	6	•
XCC503040	4	0.045	12	50	6	•
XCC503045	4.5	0.045	14	50	6	•
XCC503050	5	0.055	15	50	6	•
XCC503055	5.5	0.055	15	50	6	•
XCC503060	6	0.075	15	50	6	•
XCC503080	8	0.1	20	60	8	•
XCC503100	10	0.125	25	70	10	•
XCC503120	12	0.150	30	75	12	•
XCC503160	16	0.200	40	90	16	•
XCC503200	20	0.250	45	100	20	•
XCC503250	25	0.300	50	120	25	•

※ Flat shank is available upon request
ex) XCC503100F : Flat shank

■ Tolerance

Mill Dia, (mm)	Shank Dia,
0 ~ -0,02	h6

※Items can be changed for quality improvement without notice.



3 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Reinforced bending moment because of double core geometry

XCR503 ...series



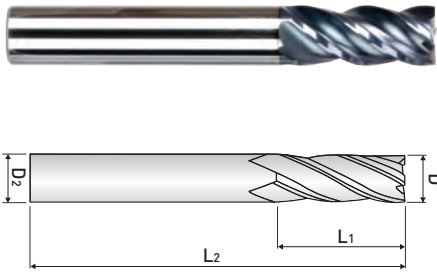
EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XCR5030502	5	0.2	15	50	6	•
XCR5030602		0.2				•
XCR5030605	6	0.5	15	50	6	•
XCR5030610		1				•
XCR5030805	8	0.5	20	60	8	•
XCR5030810		1				•
XCR5031005	10	0.5	25	70	10	•
XCR5031010		1				•
XCR5031205	12	0.5	30	75	12	•
XCR5031210		1				•
XCR5031605	16	0.5	40	90	16	•
XCR5031610		1				•
XCR5032005	20	0.5	45	100	20	•
XCR5032010		1				•
XCR5032505	25	0.5	50	120	25	•
XCR5032510		1				•

※ Flat shank is available upon request
ex) XCR5031010F : Flat shank

■ Tolerance

Mill Dia. (mm)	Shank Dia.
0 ~ -0.02	h6

※ Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Sharp cutting edge geometry designed for excellent performance on mild mold steel and stainless steel

XE504 ...series



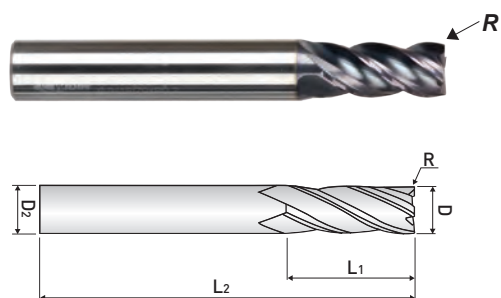
EDP. No.	D	L ₁	L ₂	D ₂	STOCK
XE504010	1	2.5	45	4	•
XE504020	2	5	45	4	•
XE504030	3	8	50	6	•
XE504040	4	11	50	6	•
XE504050	5	13	50	6	•
XE504060	6	13	50	6	•
XE504070	7	16	60	8	•
XE504080	8	19	60	8	•
XE504090	9	19	70	10	•
XE504100	10	22	70	10	•
XE504110	11	22	75	12	•
XE504120	12	26	75	12	•
XE504130	13	26	80	12	•
XE504140	14	26	80	14	•
XE504160	16	32	90	16	•
XE504180	18	32	100	18	•
XE504200	20	38	100	20	•
XE504250	25	45	120	25	•

※ Flat shank is available upon request
ex) XE504100F : Flat shank

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 12	0 ~ -0,02	h6
over 12	0 ~ -0,03	

※Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Sharp cutting edge geometry designed for excellent performance on mild mold steel and stainless steel

XR504 ...series



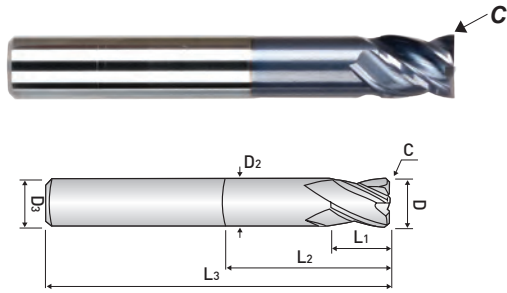
EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XR504020	2	0.1	5	45	4	•
XR504030	3	0.1	8	50	6	•
XR504040	4	0.2	11	50	6	•
XR504050	5	0.2	13	50	6	•
XR504060	6	0.2	13	50	6	•
XR504070	7	0.2	16	60	8	•
XR504080	8	0.2	19	60	8	•
XR504090	9	0.2	19	70	10	•
XR504100	10	0.3	22	70	10	•
XR504110	11	0.3	22	75	12	•
XR504120	12	0.3	26	75	12	•
XR504130	13	0.3	26	80	12	•
XR504140	14	0.3	26	80	14	•
XR504160	16	0.3	32	90	16	•
XR504180	18	0.3	32	100	18	•
XR504200	20	0.3	38	100	20	•
XR504250	25	0.3	45	120	25	•

※ Flat shank is available upon request
ex) XR504100F : Flat shank

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 12	0 ~ -0,02	h6
over 12	0 ~ -0,03	

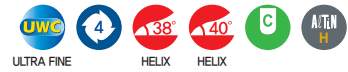
※ Items can be changed for quality improvement without notice.



4 FLUTE, STUB CUT LENGTH with EXTENDED NECK

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Sharp cutting edge geometry designed for excellent performance on mild mold steel and stainless steel
- * corner chamfer type

XE514 ...series



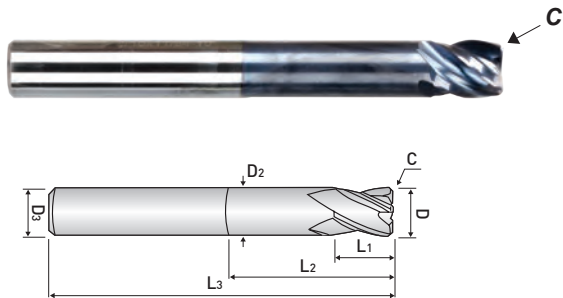
EDP. No.	D	L ₁	L ₂	L ₃	D ₂	D ₃	STOCK
XE514010	1	2	10	45	0.8	4	•
XE514020	2	3	12	45	1.8	4	•
XE514030	3	4	14	50	2.8	6	•
XE514040	4	5	16	50	3.8	6	•
XE514050	5	6	18	50	4.8	6	•
XE514060	6	7	20	50	5.8	6	•
XE514080	8	9	26	60	7.8	8	•
XE514100	10	11	31	70	9.8	10	•
XE514120	12	13	37	75	11.8	12	•
XE514160	16	17	43	90	15.8	16	•
XE514200	20	21	53	100	19.8	20	•

※ Flat shank is available upon request
ex) XE514100F : Flat shank

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 12	0 ~ -0.02	h6
over 12	0 ~ -0.03	

※ Items can be changed for quality improvement without notice.



4 FLUTE, STUB CUT LENGTH with EXTENDED LONG NECK

- High precision and excellent surface due to each 4F broken index geometry
 - The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
 - Sharp cutting edge geometry designed for excellent performance on mild mold steel and stainless steel
- * corner chamfer type

XE524 ...series



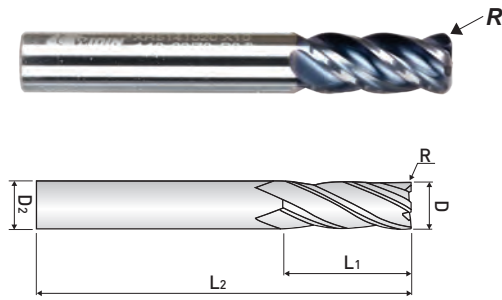
EDP. No.	D	L ₁	L ₂	L ₃	D ₂	D ₃	STOCK
XE524060	6	7	33	70	5.8	6	•
XE524080	8	9	43	80	7.8	8	•
XE524100	10	11	43	84	9.8	10	•
XE524120	12	13	51	97	11.8	12	•
XE524160	16	17	66	115	15.8	16	•

※ Flat shank is available upon request
ex) XE524100F : Flat shank

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 12	0 ~ -0,02	h6
over 12	0 ~ -0,03	

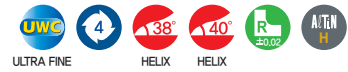
※ Items can be changed for quality improvement without notice.



4 FLUTE, REGULAR LENGTH

- High precision and excellent surface due to each 4F broken index geometry
- The unique patented design decrease chatter and resonance, can achieve an Axial Depth 1XD
- Applied various corner radius.
- Sharp cutting edge geometry designed for excellent performance on mild mold steel and stainless steel

XR514 ...series



EDP. No.	D	R	L ₁	L ₂	D ₂	STOCK
XR5140201	2	0.1	5	45	4	•
XR5140202		0.2				•
XR5140302	3	0.2	8	50	6	•
XR5140303		0.3				•
XR5140305		0.5				•
XR5140403	4	0.3	10	50	6	•
XR5140405		0.5				•
XR5140410		1.0				•
XR5140505	5	0.5	13	50	6	•
XR5140510		1.0				•
XR5140605	6	0.5	13	50	6	•
XR5140610		1.0				•
XR5140615		1.5				•
XR5140805	8	0.5	19	60	8	•
XR5140810		1.0				•
XR5140815		1.5				•
XR5140820		2.0				•
XR5141005	10	0.5	22	70	10	•
XR5141010		1.0				•
XR5141015		1.5				•
XR5141020		2.0				•
XR5141205	12	0.5	26	75	12	•
XR5141210		1.0				•
XR5141215		1.5				•
XR5141220		2.0				•
XR5141230		3.0				•
XR5141615	16	1.5	32	90	16	•
XR5141620		2.0				•
XR5141630		3.0				•
XR5142030	20	3.0	38	100	20	•
XR5142040		4.0				•
XR5142050		5.0				•

※ Flat shank is available upon request ex) XR514100F : Flat shank

■ Tolerance

Mill Dia. (mm)		Shank Dia.
Diameter	Tolerance	
up to 12	0 ~ -0,02	h6
over 12	0 ~ -0,03	

※ Items can be changed for quality improvement without notice.