

アルミ合金用

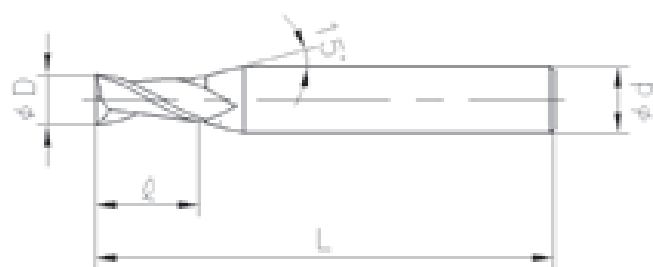
For Aluminum Alloy

# ALES-2DLC

## 超硬2枚刃アルミニウム合金用エンドミル(ショート形)

Tungsten Carbide 2 Flutes Short Endmill for Aluminum Alloy

- 刃形状をアルミ合金加工用にして切れ味を良好にしました  
Flute shape is arranged for Aluminum Alloy processing with sharp edge



極超微粒子合金 Super Micro Grain Tungsten Carbide



刃径の許容差 Flute Diameter Tolerance  
D 0~-0.01



柄径の許容差 Shank Diameter Tolerance  
d=h6



ネジレ角 45° Twist Angle 45°



DLCコート DLC Coating

- 切削条件表はP229に記載
- Cutting conditions are recommended on page 229.

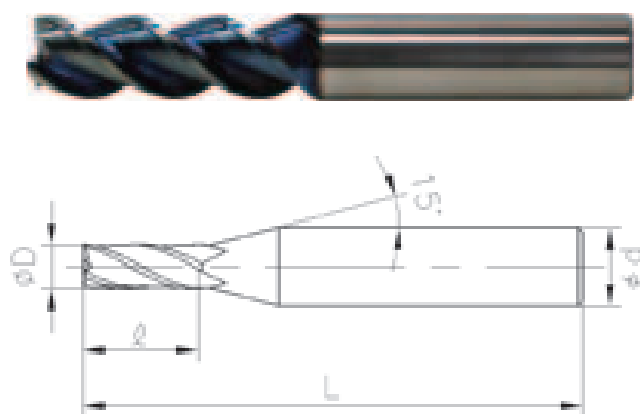
単位[寸法：mm/価格：円]  
Unit[Size：mm/Retail Price：JPY]

品番 Code No.	刃径D Flute Diameter	刃長ℓ Flute Length	全長L Total Length	柄径d Shank Diameter	標準価格 Retail Price
ALES-2010	1	2	45	4	6,000
ALES-2015	1.5	3	45	4	6,000
ALES-2020	2	4	45	4	6,200
ALES-2025	2.5	5	45	4	6,200
ALES-2030	3	6	50	6	7,500
ALES-2035	3.5	7	50	6	7,700
ALES-2040	4	8	50	6	7,700
ALES-2045	4.5	9	60	6	7,900
ALES-2050	5	10	60	6	7,900
ALES-2055	5.5	11	60	6	7,900
ALES-2060	6	12	60	6	7,900
ALES-2065	6.5	13	70	8	11,200
ALES-2070	7	14	70	8	11,200
ALES-2075	7.5	15	70	8	11,200
ALES-2080	8	16	70	8	11,200
ALES-2085	8.5	17	75	10	13,800
ALES-2090	9	18	75	10	13,800
ALES-2095	9.5	19	75	10	13,800
ALES-2100	10	20	75	10	13,800
ALES-2105	10.5	21	80	12	17,500
ALES-2110	11	22	80	12	17,800
ALES-2115	11.5	23	80	12	18,400
ALES-2120	12	24	80	12	18,600
ALES-2130	13	26	80	12	20,200
ALES-2140	14	28	80	12	24,800
ALES-2150	15	30	90	16	28,000
ALES-2160	16	32	100	16	28,800

# ALE-3DLC

## 超硬3枚刃アルミニウム合金用エンドミル Tungsten Carbide 3 Flutes Endmill for Aluminum Alloy

■刃形状をアルミ合金加工用に調整して切れ味を良好にしました  
Flute shape is arranged for Aluminum Alloy processing with sharp edge



**SMG** 極超微粒子合金 Super Micro Grain Tungsten Carbide

刃径の許容差 Flute Diameter Tolerance  
D 0~-0.01

柄径の許容差 Shank Diameter Tolerance  
d=h6

ネジレ角 45° Twist Angle 45°

**DLCコート** DLCコート DLC Coating

●切削条件表はP230に記載  
●Cutting conditions are recommended on page 230.

単位[寸法：mm/価格：円]  
Unit[Size：mm/Retail Price：JPY]

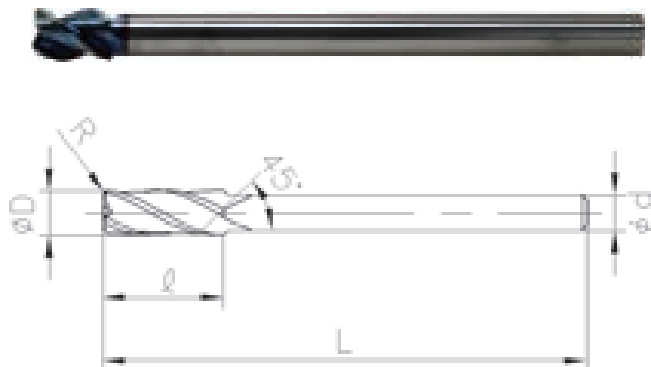
品番 Code No.	刃径D Flute Diameter	刃長ℓ Flute Length	全長L Total Length	柄径d Shank Diameter	標準価格 Retail Price
ALE-3030	3	9	60	6	8,500
ALE-3035	3.5	10	60	6	8,600
ALE-3040	4	12	60	6	8,600
ALE-3045	4.5	13	60	6	8,900
ALE-3050	5	15	60	6	8,900
ALE-3055	5.5	16	60	6	9,000
ALE-3060	6	18	60	6	9,000
ALE-3065	6.5	19	70	8	12,200
ALE-3070	7	21	70	8	12,200
ALE-3075	7.5	22	70	8	12,200
ALE-3080	8	24	70	8	12,600
ALE-3085	8.5	25	80	10	15,600
ALE-3090	9	27	80	10	15,600
ALE-3095	9.5	28	80	10	15,600
ALE-3100	10	30	80	10	15,600
ALE-3105	10.5	32	90	12	19,700
ALE-3110	11	33	90	12	19,700
ALE-3115	11.5	35	90	12	19,700
ALE-3120	12	36	90	12	20,200
ALE-3130	13	39	100	12	22,800
ALE-3140	14	42	100	12	27,000
ALE-3150	15	45	110	16	28,400
ALE-3160	16	48	110	16	29,200

# ALRE-3DLC

超硬3枚刃アルミニウム合金用コーナーR付エンドミル(立ち壁対応型)

Tungsten Carbide 3 Flutes Endmill with Corner R for Aluminum Alloy

■刃形状をアルミ合金加工用にして切れ味を良好にしました  
Flute shape is arranged for Aluminum Alloy processing with sharp edge



極超微粒子合金 Super Micro Grain Tungsten Carbide



刃径の許容差 Flute Diameter Tolerance  
D 0~-0.01



柄径の許容差 Shank Diameter Tolerance  
d=h6



ネジレ角 45° Twist Angle 45°



DLCコート DLC Coating

●切削条件表はP231に記載  
●Cutting conditions are recommended on page 231.

単位[寸法: mm/価格: 円]  
Unit[Size: mm/Retail Price: JPY]

品番 Code No.	刃径D Flute Diameter	コーナーR Corner R	刃長ℓ Flute Length	全長L Total Length	柄径d Shank Diameter	標準価格 Retail Price
ALRE-30800	8	-	12	100	6	16,300
ALRE-30805	8	0.5	12	100	6	17,500
ALRE-30810	8	1	12	100	6	17,500
ALRE-31000	10	-	15	120	8	21,000
ALRE-31005	10	0.5	15	120	8	22,100
ALRE-31010	10	1	15	120	8	22,100
ALRE-31020	10	2	15	120	8	22,100
ALRE-31030	10	3	15	120	8	22,100
ALRE-31200	12	-	18	140	10	25,600
ALRE-31205	12	0.5	18	140	10	27,000
ALRE-31210	12	1	18	140	10	27,000
ALRE-31215	12	1.5	18	140	10	27,000
ALRE-31220	12	2	18	140	10	27,000
ALRE-31230	12	3	18	140	10	27,000
ALRE-31400	14	-	21	150	12	33,600
ALRE-31410	14	1	21	150	12	34,700
ALRE-31415	14	1.5	21	150	12	34,700
ALRE-31420	14	2	21	150	12	34,700
ALRE-31430	14	3	21	150	12	34,700
ALRE-31600	16	-	24	160	14	40,000
ALRE-31610	16	1	24	160	14	42,000
ALRE-31630	16	3	24	160	14	42,000

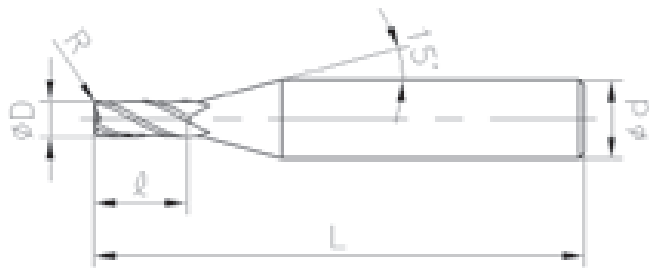


# ALERS-3DLC

## 超硬3枚刃アルミニウム合金用コーナーR付エンドミル(ショート型)

Tungsten Carbide 3 Flutes Short Endmill with Corner R for Aluminum Alloy

- 刃形状をアルミ合金加工用にして切れ味を良好にしました  
Flute shape is arranged for Aluminum Alloy processing with sharp edge



極超微粒子合金 Super Micro Grain Tungsten Carbide



刃径の許容差 Flute Diameter Tolerance  
D 0~-0.01



柄径の許容差 Shank Diameter Tolerance  
d=h6



ネジレ角 45° Twist Angle 45°



コーナーR許容差 Tolerance of Corner R  
+0.02~-0.02



DLCコート DLCコート DLC Coating

- 切削条件表はP230に記載
- Cutting conditions are recommended on page 230.

単位[寸法：mm/価格：円]  
Unit[Size：mm/Retail Price：JPY]

品番 Code No.	刃径D Flute Diameter	コーナーR Corner R	刃長ℓ Flute Length	全長L Total Length	柄径d Shank Diameter	標準価格 Retail Price
ALERS-30302R	3	0.2	6	60	6	9,700
ALERS-30305R	3	0.5	6	60	6	9,700
ALERS-30402R	4	0.2	8	60	6	9,800
ALERS-30405R	4	0.5	8	60	6	9,800
ALERS-30410R	4	1	8	60	6	9,800
ALERS-30502R	5	0.2	10	60	6	10,000
ALERS-30505R	5	0.5	10	60	6	10,000
ALERS-30510R	5	1	10	60	6	10,000
ALERS-30603R	6	0.3	12	60	6	10,200
ALERS-30605R	6	0.5	12	60	6	10,200
ALERS-30610R	6	1	12	60	6	10,200
ALERS-30803R	8	0.3	16	70	8	14,200
ALERS-30805R	8	0.5	16	70	8	14,200
ALERS-30810R	8	1	16	70	8	14,200
ALERS-30815R	8	1.5	16	70	8	14,200
ALERS-30820R	8	2	16	70	8	14,200
ALERS-31003R	10	0.3	20	75	10	17,000
ALERS-31005R	10	0.5	20	75	10	17,000
ALERS-31010R	10	1	20	75	10	17,000
ALERS-31015R	10	1.5	20	75	10	17,000
ALERS-31020R	10	2	20	75	10	17,000
ALERS-31030R	10	3	20	75	10	17,000
ALERS-31205R	12	0.5	24	80	12	20,500
ALERS-31210R	12	1	24	80	12	20,500
ALERS-31215R	12	1.5	24	80	12	20,500
ALERS-31220R	12	2	24	80	12	20,500
ALERS-31230R	12	3	24	80	12	20,500

