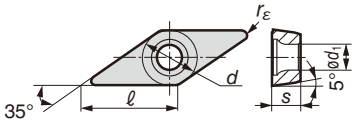
VB

35° Diamond Type
5° Relief
With Insert Hole



Grade Selection >>> A2
Chipbreaker Selection >>> From B8
Grade Selection By Work Material >>> From A8

(Legend) Continuous Cut ● : 1st Choice ○ : 2nd Choice | Medium Cut ◕ : 1st Choice ◔ : 2nd Choice | Interrupted Cut ✖ : 1st Choice ✿ : 2nd Choice

VB■■1103●●

- ℓ : 11.1
- s : 3.18
- ød : 6.35
- ød₁ : 2.8

SUMIBORON (CBN) Inserts From L86
Applicable Internal Holders E55, 56, 58, 59

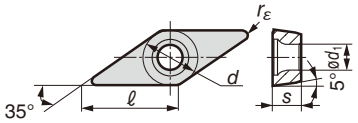
Recommended Application: P steel; M stainless steel; K cast iron; N non-ferrous metal; S exotic alloy; H hardened steel

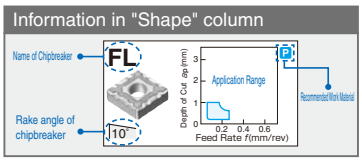
	Shape	Cat. No.	r_ε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC Z150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
				Coat																	Coated Cermet			Cermet				Carbide						
Finishing	FB (20°, P)	VBMT 110302N-FB New	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●		●	●			—	—	—	—	—	—	
		VBMT 110304N-FB New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●		●	●			—	—	—	—	—	—	
		VBMT 110308N-FB New	0.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●		●	●			—	—	—	—	—	—	
	LU (15°, P)	VBMT 110302N-LU	0.2													—			●		●			●	●									
		VBMT 110304N-LU	0.4	●	●		▲		●		●					—			●		●	●	▲	●	●		▲							
		VBMT 110308N-LU	0.8						●	●	●					—			●		—	—	—	—	—	—	—							—
	FX (15°, P)	VBGT 110301R-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110301L-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110302R-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110302L-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110304R-FX	0.4	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110304L-FX	0.4	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
	FY (15°, P)	VBGT 110301R-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110301L-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110302R-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110302L-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—				●		●			●	●			—	—	—	—	—	—	
		VBGT 110304R-FY	0.4	—	—	—	—	—	—	—	—	—	—	—	—				●															
		VBGT 110304L-FY	0.4	—	—	—	—	—	—	—	—	—	—	—	—				●															
Light Cutting	SU (8°, P)	VBMT 110302N-SU	0.2													—			●															
		VBMT 110304N-SU	0.4					●	●		●					—			●			●												
		VBMT 110308N-SU	0.8					●	●	●						—			●		—	—	—	—	—	—	—							—
for Aluminium	AY (15°, N)	VBGT 110301R-AY New	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 110301L-AY New	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 110302R-AY New	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 110302L-AY New	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 110304R-AY New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 110304L-AY New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●

▲mark : To be replaced by new item

VB

35° Diamond Type
5° Relief
With Insert Hole





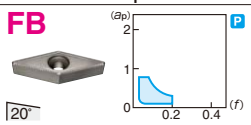
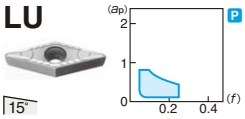
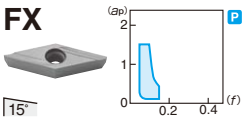
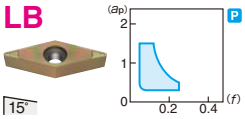
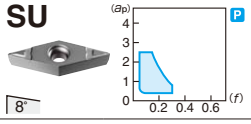
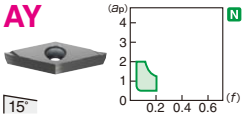
(Legend)
Continuous Cut: ● : 1st Choice ○ : 2nd Choice
Medium Cut: ◕ : 1st Choice ◔ : 2nd Choice
Interrupted Cut: ✖ : 1st Choice ✪ : 2nd Choice

VB■■1604●●

- ℓ : 16.6
- s : 4.76
- ød : 9.525
- ød₁ : 4.4

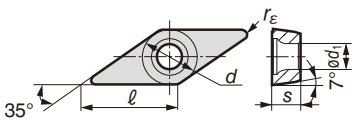
SUMIBORON (CBN) Inserts From L87

Recommended Application	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC Z150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
	Coat																	Coated Cermet			Cermet				Carbide						
P steel	●	◕	✖			◔								✪	✪			◕	✖		●	◕									
M stainless steel			✪		●	◔	◕	✖					◔	✪	✪																
K cast iron		✪							●	◕	✖			✪							●										
N non-ferrous metal																															◕
S exotic alloy													◕	✖																	
H hardened steel													●																		

	Shape	Cat. No.	r_ε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC Z150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
Finishing	FB 	VBMT 160404N-FB New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●	—	●	●	—	—	—	—	—	—	—	—	—
		VBMT 160408N-FB New	0.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●	—	●	●	—	—	—	—	—	—	—	—	—
Finishing	LU 	VBMT 160404N-LU	0.4	●	●		▲		●	●	●					—			●		●	●		●	●		▲							
		VBMT 160408N-LU	0.8	●	●		▲		●	●	●					—			●		●	●		●	●		▲							
Finishing	FX 	VBGT 160402R-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—								●	●			—	—	—	—	—	—	—
		VBGT 160402L-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—								●	●			—	—	—	—	—	—	—
		VBGT 160404R-FX	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—								●	●			—	—	—	—	—	—	—
		VBGT 160404L-FX	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—								●	●			—	—	—	—	—	—	—
Light Cutting	LB 	VBMT 160404N-LB New	0.4		●	●				●	●					—					●	●			●									
		VBMT 160408N-LB New	0.8		●	●				●	●					—					●	●			●									
		VBMT 160412N-LB New	1.2		●	●				●	●					—					●	●			●									
Light Cutting	SU 	VBMT 160404N-SU	0.4	●	●	●	▲	●	●	●	●					—					●	●		●	●		▲							
		VBMT 160408N-SU	0.8	●	●	●	▲	●	●	●	●					—					●	●		●	●		▲							
		VBMT 160412N-SU	1.2		●											—					—	—	—	—	—	—	—							—
Light-Medium Cut		VBMW 160404	0.4									●	●	●	▲	—					—	—	—	—	—	—	—							—
		VBMW 160408	0.8									●	●	●	▲	—					—	—	—	—	—	—	—							—
for Aluminium	AY 	VBGT 160402R-AY New	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 160402L-AY New	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 160404R-AY New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VBGT 160404L-AY New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●

▲mark : To be replaced by new item

VC 35° Diamond Type 7° Relief With Insert Hole



Grade Selection >>> A2
Chipbreaker Selection >>> From B8
Grade Selection By Work Material >>> From A8

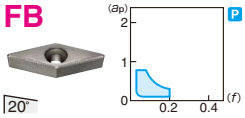
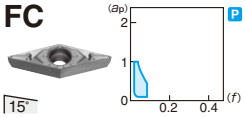
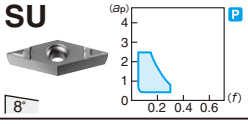
(Legend) Continuous Cut ● : 1st Choice ○ : 2nd Choice; Medium Cut ◕ : 1st Choice ◔ : 2nd Choice; Interrupted Cut ✖ : 1st Choice ✪ : 2nd Choice

VC■■0802●●

- ℓ : 8.3
- s : 2.38
- ød : 4.76
- ød1 : 2.3

SUMIBORON (CBN) Inserts L89
Applicable Internal Holders E55, E57, E58, E60

Recommended Application	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
	Coat																	Coated Cermet			Cermet				Carbide						
P steel	●	◕	✖			◔									✪	✪		◕	✖		●	◕									
M stainless steel			✪		●	◔	◕	✖						◔	✪	✪															
K cast iron		✪							●	◕	✖			✪							●										
N non-ferrous metal																															◕
S exotic alloy														◕	✖																
H hardened steel													●																		

	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
Finishing	FB 	VCMT 080202N-FB New	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●	—	●	●	—	—	—	—	—	—	—	—	—
		VCMT 080204N-FB New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●	—	●	●	—	—	—	—	—	—	—	—	—
Finishing	FC 	VCGT 080204MN-FC	<0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Light Cutting	SU 	VCMT 080204N-SU	0.4						●	●	●					—			●		—	—	—	—	—	—	—							—

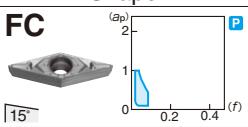
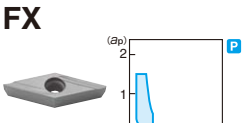
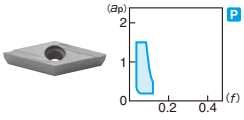
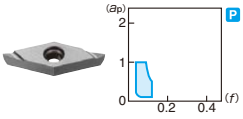
Nose radii (rε) indicated with "<" have negative tolerances.

VC■■1103●●

- ℓ : 11.1
- s : 3.18
- ød : 6.35
- ød1 : 2.8

SUMIBORON (CBN) Inserts L90
SUMIDIA (PCD) Inserts M20
Applicable External Holders C30, D15, 18, 31
Applicable Internal Holders E57 to E60

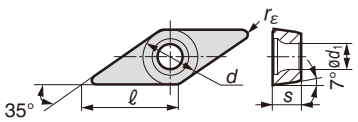
Recommended Application	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
	Coat																	Coated Cermet			Cermet				Carbide						
P steel	●	◕	✖			◔									✪	✪		◕	✖		●	◕									
M stainless steel			✪		●	◔	◕	✖						◔	✪	✪															
K cast iron		✪							●	◕	✖			✪							●										
N non-ferrous metal																															◕
S exotic alloy														◕	✖																
H hardened steel													●																		

	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
Finishing	FC 	VCGT 110301MN-FC	<0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	●				●	●			—	—	—	—	—	—	—
		VCGT 110302MN-FC	<0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	●				●	●			—	—	—	—	—	—	—
		VCGT 110304MN-FC	<0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●	●				●	●			—	—	—	—	—	—	—
	FX 	VCGT 110301R-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●					●	●		▲	—	—	—	—	—	—	—
		VCGT 110301L-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●					●	●		▲	—	—	—	—	—	—	—
		VCGT 110302R-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●					●	●		▲	—	—	—	—	—	—	—
		VCGT 110302L-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●					●	●		▲	—	—	—	—	—	—	—
		VCGT 110304R-FX	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		●									—	—	—	—	—	—	—
		VCGT 110304L-FX	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		●									—	—	—	—	—	—	—
	FX 	VCET 1103008R-FX	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—			●								—	—	—	—	—	—	—
		VCET 1103008L-FX	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—			●								—	—	—	—	—	—	—
		VCET 110301R-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—			●								—	—	—	—	—	—	—
		VCET 110301L-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—			●								—	—	—	—	—	—	—
		VCET 1103018R-FX	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—			●								—	—	—	—	—	—	—
		VCET 1103018L-FX	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—			●								—	—	—	—	—	—	—
	FY 	VCGT 110301R-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●									—	—	—	—	—	—	—
		VCGT 110301L-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●									—	—	—	—	—	—	—
		VCGT 110302R-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●									—	—	—	—	—	—	—
		VCGT 110302L-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	●									—	—	—	—	—	—	—
		VCGT 110304R-FY	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		●									—	—	—	—	—	—	—
		VCGT 110304L-FY	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		●									—	—	—	—	—	—	—

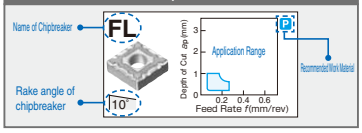
Nose radii (rε) indicated with "<" have negative tolerances.

▲mark : To be replaced by new item

VC 35° Diamond Type 7° Relief With Insert Hole



Information in "Shape" column



(Legend) Continuous Cut ● : 1st Choice ○ : 2nd Choice | Medium Cut ◐ : 1st Choice ◔ : 2nd Choice | Interrupted Cut ✖ : 1st Choice ✪ : 2nd Choice

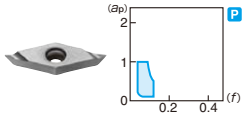
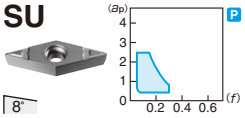
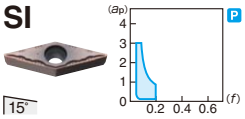
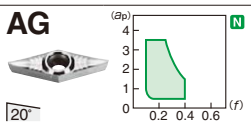
VC■■1103●●

- ℓ : 11.1
- s : 3.18
- ød : 6.35
- ød1 : 2.8

SUMIBORON (CBN) Inserts L90 | SUMIDIA (PCD) Inserts M20

Applicable External Holders C30, D15, 18, 31 | Applicable Internal Holders E57 to E60

Recommended Application: P steel, M stainless steel, K cast iron, N non-ferrous metal, S exotic alloy, H hardened steel

	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC Z150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
				Coat																	Coated Cermet			Cermet				Carbide						
Finishing	FY 	VCET 1103008R-FY	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		1103008L-FY	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301R-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301L-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		1103018R-FY	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		1103018L-FY	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Light Cutting	SU 	VCMT 110302N-SU	0.2						●	●						—					—	—	—	—	—	—	—							—
		110304N-SU	0.4						●	●						—					—	—	—	—	—	—	—							—
		110308N-SU	0.8						●	●						—					—	—	—	—	—	—	—							—
Light Cutting	SI 	VCGT 110301MN-SI	<0.1					●	●							—	●	●	●		●			●	●									
		110302MN-SI	<0.2					●	●							—	●	●	●		●			●	●									
		110304MN-SI	<0.4					●	●							—	●	●	●		●			●	●									
		110308MN-SI	<0.8					●	●							—	●	●	●		●			●	●									
for Aluminium	AG 	VCGT 110302N-AG	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		110304N-AG	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●

Nose radii (rε) indicated with "<" have negative tolerances.

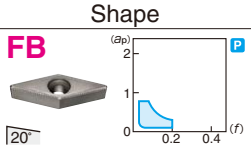
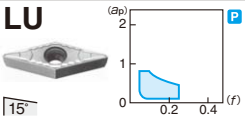
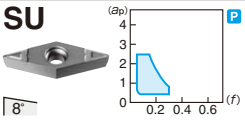
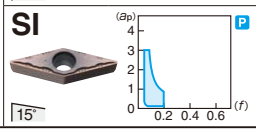
VC■■1604●●

- ℓ : 16.6
- s : 4.76
- ød : 9.525
- ød1 : 4.4

SUMIBORON (CBN) Inserts L91 | SUMIDIA (PCD) Inserts M20

Applicable Internal Holders E55, 56

Recommended Application: P steel, M stainless steel, K cast iron, N non-ferrous metal, S exotic alloy, H hardened steel

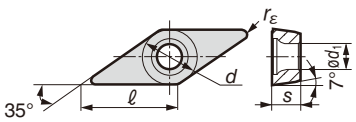
	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	AC Z150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
				Coat																	Coated Cermet			Cermet				Carbide						
Finishing	FB 	VCMT 160404N-FB New	0.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●	—	●	●	—	—	—	—	—	—	—	—	—
		160408N-FB New	0.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	●	●	—	●	●	—	—	—	—	—	—	—	—	—
Finishing	LU 	VCMT 160404N-LU	0.4	●	●		▲		●	●						—					●	●		●	●		▲							
		160408N-LU	0.8	●	●		▲		●	●						—					●	●		●	●		▲							
Light Cutting	SU 	VCMT 160404N-SU	0.4	●	●	●	▲	●	●	●						—		●	●		—	—	—	—	—	—	—							—
		160408N-SU	0.8	●	●	●	▲	●	●	●						—		●	●		—	—	—	—	—	—	—							—
Light Cutting	SI 	VCGT 160401MN-SI	<0.1					●	●	—	—					—	●	●	●		●			●	●									
		160402MN-SI	<0.2					●	●	—	—					—	●	●	●		●			●	●									
		160404MN-SI	<0.4					●	●	—	—					—	●	●	●		●			●	●									

Nose radii (rε) indicated with "<" have negative tolerances.

▲mark : To be replaced by new item

VC

35° Diamond Type
7° Relief
With Insert Hole



Grade Selection >>> A2
Chipbreaker Selection >>> From B8
Grade Selection By Work Material >>> From A8

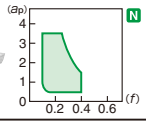
(Legend) Continuous Cut ● : 1st Choice ○ : 2nd Choice | Medium Cut ◕ : 1st Choice ◔ : 2nd Choice | Interrupted Cut ✖ : 1st Choice ✪ : 2nd Choice

VC■■1604●●

- ℓ : 16.6
- s : 4.76
- ød : 9.525
- ød1 : 4.4

SUMIBORON (CBN) Inserts L91
SUMIDIA (PCD) Inserts M20
Applicable Internal Holders E55, 56

Recommended Application		AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
		Coat																	Coated Cermet			Cermet				Carbide						
P steel		●	◕	✖			◔									✪	✪		◕	✖		●	◕									
M stainless steel				✪		●	◔	◕	✖						◔	✪	✪															
K cast iron			✪							●	◕	✖			✪							●										
N non-ferrous metal																																◕
S exotic alloy															◕	✖																
H hardened steel														●																		

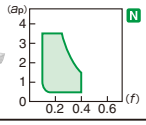
	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
for Aluminium	AW 25°	VCGT 160408N-AW	0.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VCGT 160412N-AW	1.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
	AG 20° 	VCGT 160408N-AG	0.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VCGT 160412N-AG	1.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●

VC■■2205●●

- ℓ : 20.2
- s : 5.56
- ød : 12.7
- ød1 : 5.5

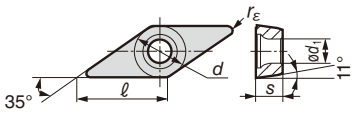
SUMIDIA (PCD) Inserts M20
Applicable External Holders C34

Recommended Application		AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
		Coat																	Coated Cermet			Cermet				Carbide						
P steel		●	◕	✖			◔									✪	✪		◕	✖		●	◕									
M stainless steel				✪		●	◔	◕	✖						◔	✪	✪															
K cast iron			✪							●	◕	✖			✪							●										
N non-ferrous metal																																◕
S exotic alloy															◕	✖																
H hardened steel														●																		

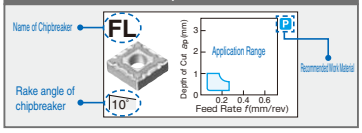
	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
for Aluminium	AW 25°	VCGT 220510N-AW	1.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		VCGT 220516N-AW	1.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		VCGT 220520N-AW	2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
		VCGT 220530N-AW	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●
	AG 20° 	VCGT 220530N-AG	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●

VP

35° Diamond Type
11° Relief
With Insert Hole



Information in "Shape" column



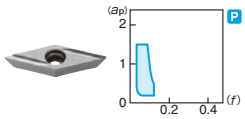
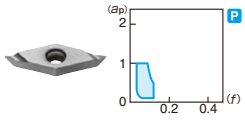
(Legend) Continuous Cut ● : 1st Choice ○ : 2nd Choice; Medium Cut ◐ : 1st Choice ◔ : 2nd Choice; Interrupted Cut ✖ : 1st Choice ✖ : 2nd Choice

VP■■0802●●

- ℓ : 8.3
- s : 2.38
- ød : 4.76
- ød1 : 2.4

Recommended Application

	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
P steel	●	◐	✖			◔								✖	✖			◐	✖		●	◐									
M stainless steel			✖		●	◔	◐	✖					◔	✖	✖																
K cast iron	✖								●	◐	✖			✖							●										
N non-ferrous metal																															◐
S exotic alloy														◐	✖																
H hardened steel													●																		

	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
Finishing	FX 	VPET 0802008R-FX	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802008L-FX	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802015R-FX	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802015L-FX	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802018R-FX	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802018L-FX	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	FY 	VPET 0802008R-FY	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802008L-FY	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802015R-FY	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802015L-FY	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802018R-FY	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		0802018L-FY	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—

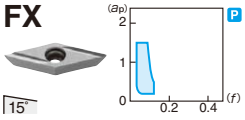
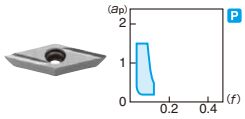
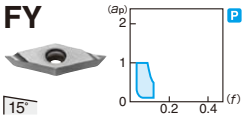
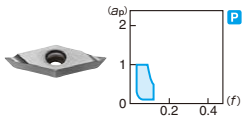
VP■■1103●●

- ℓ : 11.1
- s : 3.18
- ød : 6.35
- ød1 : 2.8

Recommended Application

	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
P steel	●	◐	✖			◔									✖	✖		◐	✖		●	◐									
M stainless steel			✖		●	◔	◐	✖					◔		✖	✖															
K cast iron	✖								●	◐	✖				✖						●										
N non-ferrous metal																															◐
S exotic alloy														◐	✖																
H hardened steel													●																		

Applicable External Holders D15, 33

	Shape	Cat. No.	rε	AC810P	AC820P	AC830P	AC2000	AC610M	AC630M	AC6030M	AC6040M	AC405K	AC415K	AC420K	AC410K	AC503U	AC510U	AC520U	AC530U	ACZ150	T1500Z	T3000Z	T2000Z	T1000A	T1500A	T110A	T1200A	ST10P	ST20E	A30	G10E	EH510	EH520	H1
Finishing	FX 	VPGT 110301R-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301L-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302R-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302L-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	FX 	VPET 1103003R-FX	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		1103003L-FX	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301R-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301L-FX	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302R-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302L-FX	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	FY 	VPGT 110301R-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301L-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302R-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302L-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	FY 	VPET 1103003R-FY	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		1103003L-FY	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301R-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110301L-FY	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302R-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		110302L-FY	0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	●	—	—	—	—	—	—	—	—	—	—	—	—	—	—

▲mark : To be replaced by new item