APPLITEC

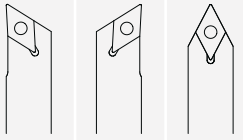
Nouveautés présentées dans ce catalogue
Neuheiten dieses Kataloges
New products introduced in this catalogue

Index

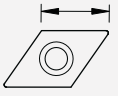
Codification des porte-outils ISO-Line
ISO-Line Bezeichnungssystem für Halter
ISO-Line designation system for holders

Méthode de serrage Klemmsystem Clamping system	Forme de la plaquette Plattenform Insert shape	Géométrie du porte-outil Halterform Holder geometry	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Direction de coupe Schneidrichtung Cut direction		Hauteur du porte-outil Halter Höhe Holder height	Largeur du porte-outil Halter Breite Holder width	Longueur du porte-outil Halter Länge Holder length		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)
S	**D**	**J**	**C**	**R**	**–**	**12**	**12**	**G**	**–**	**11**

R **L** **N**



L



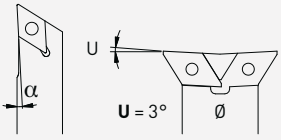
[mm]

C = 7°

A x B (or Ø) [mm]
08 x 08
10 x 10
12 x 12
12.7 x 12.7 (1/2 in)
16 x 16
20 x 20
Ø: D10 / D20 / D25.4 (Ø1 in)

Length: [mm]
F = 75
G = 90
J = 110
X = Special

α:
A = 0°
J = 3°
L = 5°
H = 17.5°
X = 27.5°

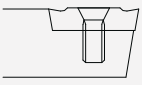


C = 80°

D = 55°

V = 35°

S = vis
Schraube
screw



Compatibilité porte-outil - plaquette
WSP - Halter Kompatibilität
Holder - insert compatibility

S	D	J	C	R	–	12	12	G	–	11
D	C	G	T	–	11	T3	04	–	FN	–

Codification des plaquettes ISO-Line
ISO-Line Bezeichnungssystem für WSP
ISO-Line designation system for inserts

Forme de la plaquette Plattenform Insert shape	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Classe de tolérance Toleranz Klasse Tolerance class	Brise-copeau Spanbrecher Chip breaker		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)	Epaisseur de la plaquette (E) WSP Dicke (E) Insert thickness (E)	Rayon de pointe de la plaquette WSP Eckenradius Insert corner radius		Exécution d'arête et direction de coupe Schneidkante Ausführung und Schneidrichtung Edge type and cutting direction		Géométrie de coupe Spanformgeometrie Cutting geometry
D	**C**	**G**	**T**	**–**	**11**	**T3**	**04**	**–**	**FN**	**–**	**X8**

T

W

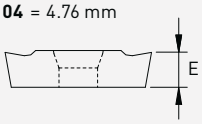
R:
003 = 0.03 mm
005 = 0.05 mm
008 = 0.08 mm
01 = 0.1 mm
015 = 0.15 mm
02 = 0.2 mm
04 = 0.4 mm
08 = 0.8 mm

cf.: Géométrie de coupe
Spanformgeometrie
Cutting geometry

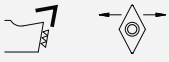
G = ±0.025 mm

M = ±0.05 mm

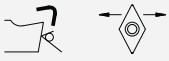
02 = 2.38 mm
03 = 3.18 mm
T3 = 3.97 mm
04 = 4.76 mm



FN

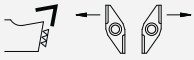


EN

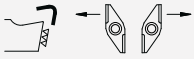


ENP

FL / FR



ELP / ERP

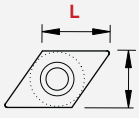


C = 7°

C = 80°

D = 55°

V = 35°



[mm]

L	Ø d [mm]
CC...**06** DC...**07** VC... **11**	6,350
VC... **13**	7,940
CC...**09** DC... **11** VC... **16**	9,525

Géométries de coupe
Spanformgeometrien
Cutting geometries

G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

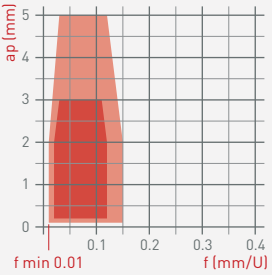
Finishing

FN-X8

8°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★★★
M ★★★★
N ★★★★
S ★★★

CCGT DCGT VCGT

p. 7.16 p. 7.30 p. 7.46

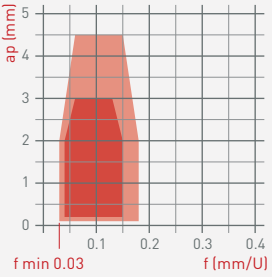
Semi-finishing
Finishing

ENP-X8

8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



P ★★★★★
M ★★★
N ★★★
S ★★★

CCGT DCGT VCGT

p. 7.16 p. 7.30 p. 7.46

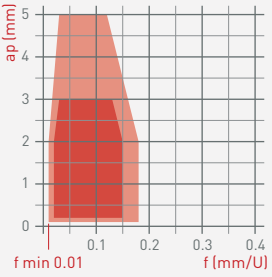
Finishing

FN-X17

17°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★
M ★★★★★
N ★★★★
S ★★★★★

CCGT DCGT VCGT

p. 7.17 p. 7.31 p. 7.47

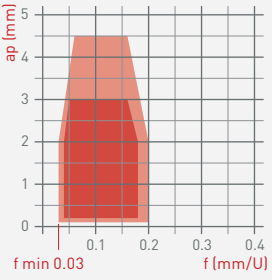
Semi-finishing
Finishing

ENP-X17

17°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



P ★★★
M ★★★★★
N ★★★
S ★★★★

CCGT DCGT VCGT

p. 7.17 p. 7.31 p. 7.47

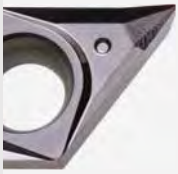
Géométries de coupe
Spanformgeometrien
Cutting geometries

G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Finishing

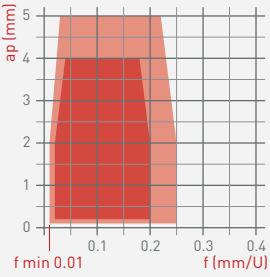
FN-X25



25°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



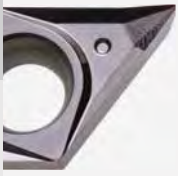
P
M ★★★
N ★★★★★
S ★★★★

CCGT DCGT VCGT

p. 7.18 p. 7.32 p. 7.48

Semi-finishing
Finishing

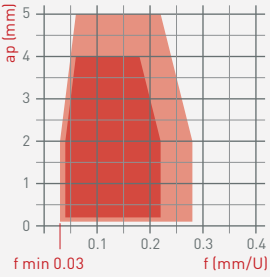
ENP-X25



25°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

Poli
Poliert
Polished



P
M ★★★
N ★★★★★
S ★★★★

CCGT DCGT VCGT

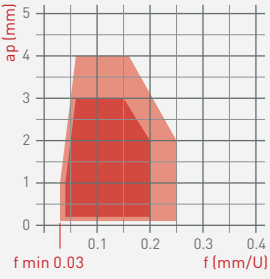
p. 7.18 p. 7.32 p. 7.48

Semi-finishing
Finishing

ENP-X20

20°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P
M ★★★★★
N ★★★
S ★★★★★

CCGT DCGT VCGT

p. 7.19 p. 7.33 p. 7.49

Géométries de coupe
Spanformgeometrien
Cutting geometries

M
tolerance class

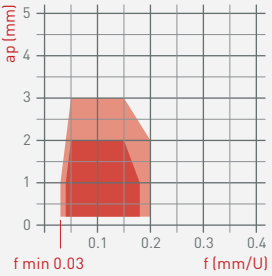
Plaquettes en métal dur
VHM-Wendeplatten
Carbide inserts

Semi-finishing
Finishing

EN-XF3

12°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★
M ★★★★★
N ★★★
S ★★★

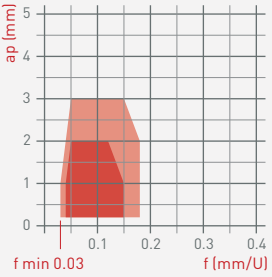
CCMT p. 7.20 | DCMT p. 7.34 | VCMT p. 7.50

Semi-finishing
Finishing

EN-XF2

6°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★★
M ★★★
N
S ★★★

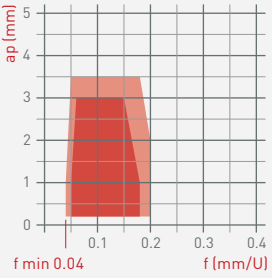
CCMT p. 7.20 | DCMT p. 7.34 | VCMT p. 7.50

Semi-finishing

EN-MF2

8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★
M ★★★★
N ★★★
S ★★★

CCMT p. 7.20 | DCMT p. 7.34

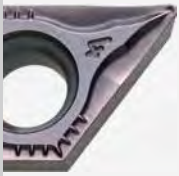
Géométries de coupe
Spanformgeometrien
Cutting geometries

M
tolerance class

Plaquettes en métal dur
VHM-Wendeplatten
Carbide inserts

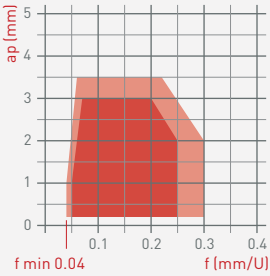
Semi-finishing

EN-MF



5°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

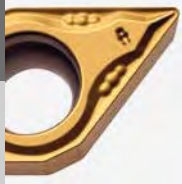


P	★★★★★
M	★★★
N	
S	

CCMT p. 7.21 · DCMT p. 7.35 · VCMT p. 7.51

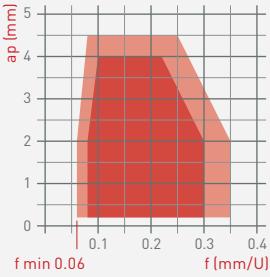
Roughing
Semi-finishing

EN-HF3



10°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★★
M	★★★★★
N	
S	★★★

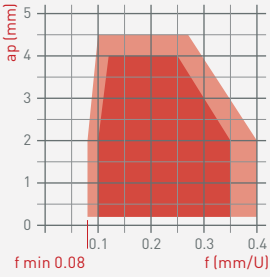
CCMT p. 7.21 · DCMT p. 7.35

Roughing
Semi-finishing

EN-HF

12°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P	★★★★★
M	★★★★★
N	
S	

CCMT p. 7.21 · DCMT p. 7.35 · VCMT p. 7.51

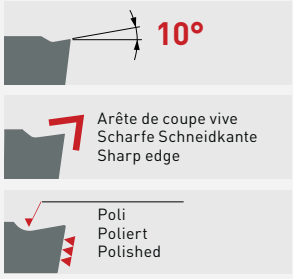
Géométries de coupe
Spanformgeometrien
Cutting geometries

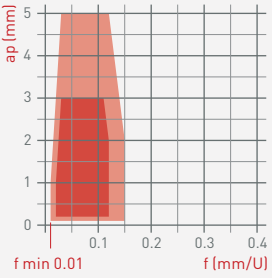
G
tolerance class

Plaquettes en métal dur rectifiées
VHM geschliffene WSP
Carbide ground inserts

Super-finishing
Finishing

FL/FR-X10



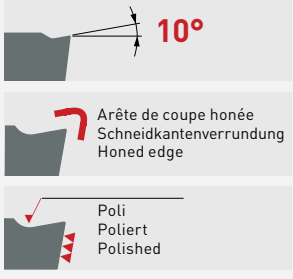


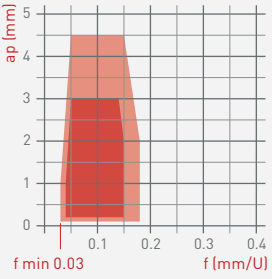
VCGT

p. 7.44

Semi-finishing
Finishing

ELP/ERP-X10



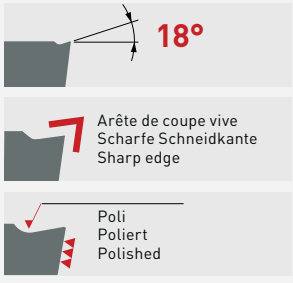


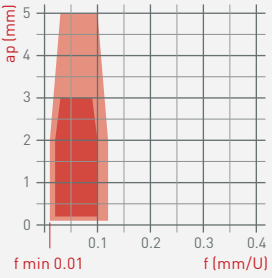
VCGT

p. 7.44

Super-finishing
Finishing

FN-K18



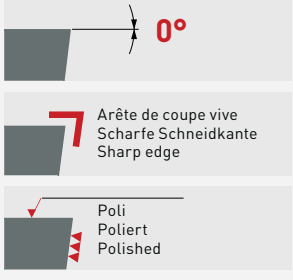


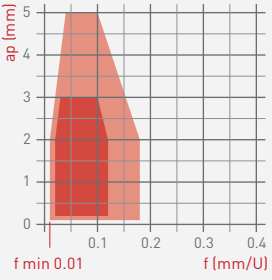
VCGT

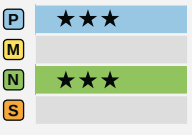
p. 7.45

Finishing

FN-0







VCGW

p. 7.45

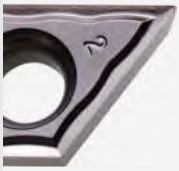
Géometries de coupe
Spanformgeometrien
Cutting geometries

G / M
tolerance class

CERMET

Finishing

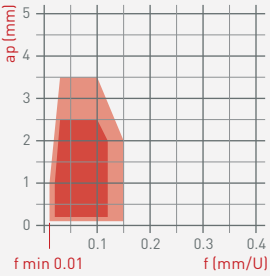
FN-X8 CERMET



8°

Arête de coupe vive
Scharfe Schneidkante
Sharp edge

Poli
Poliert
Polished



P ★★★★★
M ★★★
N
S

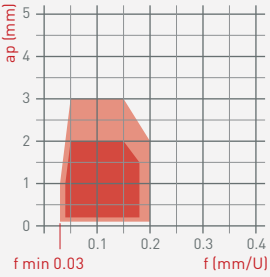
CCGT p. 7.22 | DCGT p. 7.36 | VCGT p. 7.52

Semi-finishing
Finishing

ENP-KX CERMET

8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge

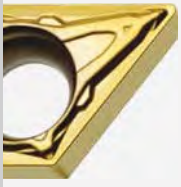


P ★★★★★
M ★★★
N
S

CCGT p. 7.22 | DCGT p. 7.36

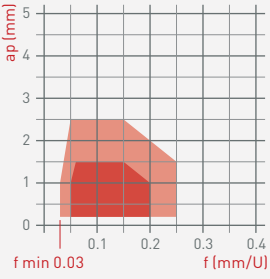
Semi-finishing

EN-KM CERMET



8°

Arête de coupe honée
Schneidkantenverrundung
Honed edge



P ★★★★★
M ★★★
N
S

CCMT p. 7.23 | DCMT p. 7.37

Nuances
Sorten
Grades

Nuances Sorten Grades	Domaine d'application Anwändungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + PVD										
TiAlN	★★★★★ ★★★★★ ★★★★ ★★★★	■	■	■	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■■□	■■■■□	■■■■□	PVD	
HTA	★★★★★ ★★★★★ ★★★★ ★★★★	■			FN-X8 FN-X17 FN-X25 L/R-X10 FN-K18 FN-0	■■■■■	■■■□□	■■■■□	PVD	
TiN	★★★★ ★★★★ ★★★★★	■	■	■	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■□□	■■■■□	■■■□□	PVD	High resistance to edge build up
HTiN	★★★★ ★★★★ ★★★★★	■			FN-K18 FN-0	■■■■□	■■■□□	■■■□□	PVD	High resistance to edge build up
TAC	★★★★★ ★★★★★ ★★★★ ★★★★	■	■	■	EN-XF3 EN-XF2 EN-MF2 EN-HF	■■■■□	■■■■□	■■■■□	PVD	
HTAC	★★★★★ ★★★★★ ★★★★ ★★★★	■	■		EN-XF3 EN-XF2 EN-MF2	■■■■■	■■■□□	■■■■□	PVD	
TiX	★★★★★ ★★★★★ ★★★			■	EN-HF3	■■■□□	■■■■□	■■■□□	PVD	Easy wear out control with TiN top layer
HTiX	★★★★★ ★★★★★ ★★★★ ★★★		■	■	ENP-X20 EN-HF3	■■■■□	■■■□□	■■■□□	PVD	Easy wear out control with TiN top layer
Tmax	★★★★★ ★★★★★ ★★★★ ★★★★		■	■	EN-MF EN-HF	■■■■□	■■■■□	■■■■□	PVD	
ZTA	★★★★★ ★★★ ★★★★★	■	■		ENP-X20	■■■■□	■■■■□	■■■■□	PVD	perfect for titanium alloys & superalloys
TiAlX	★★★★ ★★★★ ★★★★★	■	■		R-X10	■■■■□	■■■■□	■■■■□	PVD	perfect for titanium alloys & superalloys
HTAX	★★★★ ★★★★ ★★★★★	■			R-X10	■■■■■	■■■□□	■■■■□	PVD	perfect for titanium alloys & superalloys

Nuances
Sorten
Grades

Nuances Sorten Grades	Domaine d'application Anwändungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + CVD										
Ti4	★★★★★ ★★★		■	■	EN-MF EN-HF3 EN-HF	■■■■□	■■■■□	■■■■■	CVD	
Ti5	★★★★★ ★★★		■	■	EN-MF2 EN-HF	■■■■□	■■■■□	■■■■■	CVD	Easy wear out control with TiN top layer
HTi5	★★★★★ ★★★		■	■	EN-XF2 EN-MF2 EN-HF	■■■■■	■■■□□	■■■■■	CVD	Easy wear out control with TiN top layer
Ti6	★★★ ★★★★★ ★★★★		■	■	EN-HF3	■■■■□	■■■■□	■■■■■	CVD	
Carbide uncoated										
K10	★★★ ★★★	■			FN-X8 FN-X17 FN-X25 ELP-X10/ERP-X10 FN-K18 FN-0	■■■□□	■■■□□	■■□□□	uncoated	
K20	★★ ★★	■			FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 ELP-X10/ERP-X10	■■□□□	■■■■□	■■□□□	uncoated	
CERMET										
CTA	★★★★★ ★★★	■			FN-X8	■■■■□	■■■■□	■■■■■	CERMET +PVD	
CT7	★★★★★ ★★★	■	■	■	ENP-KX EN-KM	■■■■□	■■■■□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
HCT7	★★★★★ ★★★	■	■		ENP-KX EN-KM	■■■■■	■■■□□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
CN6	★★★★	■			FN-X8 ENP-KX EN-KM	■■□□□	■■■■□	■■■■□	CERMET uncoated	

Outils de tournage 80°
80°-Drehwerkzeuge
Turning tools 80°

80°

SCM

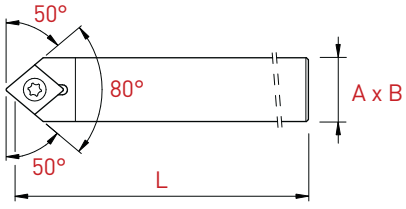
SCA

SCL

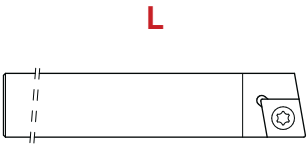
Porte-outils
Halter
Holders

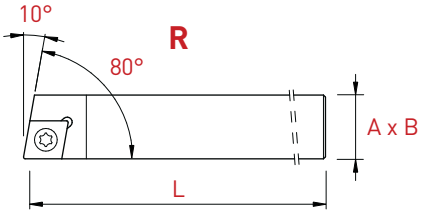
80°

SCM



Plaquettes WSP Inserts	A x B x L	Art. N°
CC..-0602..	8 x 8 x 115	SCMCN-0808X-06
	10 x 10 x 115	SCMCN-1010X-06
	12 x 12 x 130	SCMCN-1212X-06
	12 x 12 x 90	SCMCN-1212G-06
	12.7 x 12.7 x 130	SCMCN-12.7-X-06
	16 x 16 x 130	SCMCN-1616X-06
	16 x 16 x 75	SCMCN-1616F-06
CC..-09T3..	12 x 12 x 130	SCMCN-1212X-09
	12 x 12 x 90	SCMCN-1212G-09
	12.7 x 12.7 x 130	SCMCN-12.7-X-09
	16 x 16 x 130	SCMCN-1616X-09
	16 x 16 x 75	SCMCN-1616F-09
	20 x 20 x 120	SCMCN-2020X-09



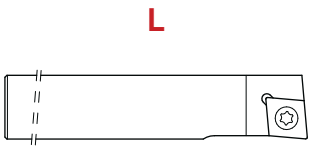


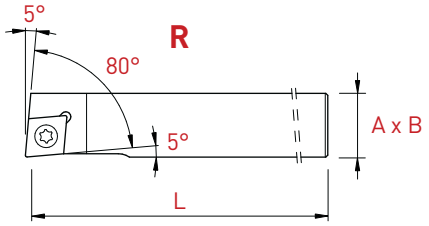
		L	R
Plaquettes WSP Inserts	A x B x L	Art. N°	Art. N°
CC..-0602..	8 x 8 x 115	**SCACL-0808X-06**	**SCACR-0808X-06**
	10 x 10 x 115	**SCACL-1010X-06**	**SCACR-1010X-06**
	12 x 12 x 130	**SCACL-1212X-06**	**SCACR-1212X-06**
	12 x 12 x 90	**SCACL-1212G-06**	**SCACR-1212G-06**
	12.7 x 12.7 x 130	**SCACL-12.7-X-06**	**SCACR-12.7-X-06**
	16 x 16 x 130	**SCACL-1616X-06**	**SCACR-1616X-06**
	16 x 16 x 75	**SCACL-1616F-06**	**SCACR-1616F-06**
CC..-09T3..	12 x 12 x 130	**SCACL-1212X-09**	**SCACR-1212X-09**
	12 x 12 x 90	**SCACL-1212G-09**	**SCACR-1212G-09**
	12.7 x 12.7 x 130	**SCACL-12.7-X-09**	**SCACR-12.7-X-09**
	16 x 16 x 130	**SCACL-1616X-09**	**SCACR-1616X-09**
	16 x 16 x 75	**SCACL-1616F-09**	**SCACR-1616F-09**
	20 x 20 x 120	**SCACL-2020X-09**	**SCACR-2020X-09**

Porte-outils
Halter
Holders

80°

SCL



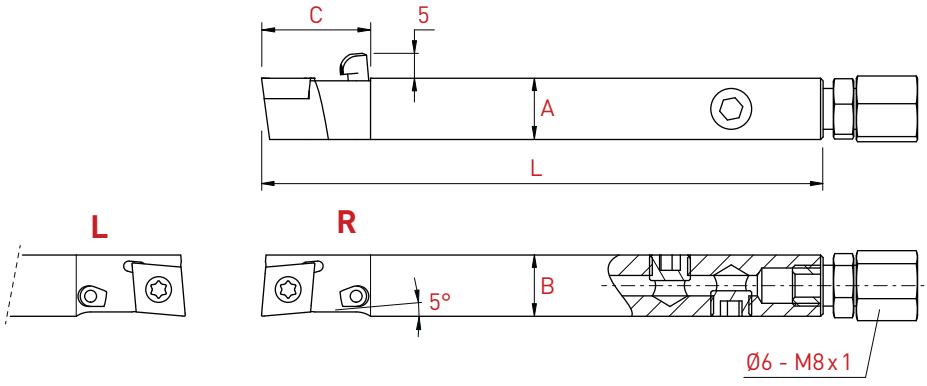


		L	R
Plaquettes WSP Inserts	A x B x L	**Art. N°**	**Art. N°**
CC..-0602..	8 x 8 x 115	**SCLCL-0808X-06**	**SCLCR-0808X-06**
	10 x 10 x 115	**SCLCL-1010X-06**	**SCLCR-1010X-06**
	12 x 12 x 130	**SCLCL-1212X-06**	**SCLCR-1212X-06**
	12 x 12 x 90	**SCLCL-1212G-06**	**SCLCR-1212G-06**
	12.7 x 12.7 x 130	**SCLCL-12.7-X-06**	**SCLCR-12.7-X-06**
	16 x 16 x 130	**SCLCL-1616X-06**	**SCLCR-1616X-06**
	16 x 16 x 75	**SCLCL-1616F-06**	**SCLCR-1616F-06**
CC..-09T3..	12 x 12 x 130	**SCLCL-1212X-09**	**SCLCR-1212X-09**
	12 x 12 x 90	**SCLCL-1212G-09**	**SCLCR-1212G-09**
	12.7 x 12.7 x 130	**SCLCL-12.7-X-09**	**SCLCR-12.7-X-09**
	16 x 16 x 130	**SCLCL-1616X-09**	**SCLCR-1616X-09**
	16 x 16 x 75	**SCLCL-1616F-09**	**SCLCR-1616F-09**
	20 x 20 x 120	**SCLCL-2020X-09**	**SCLCR-2020X-09**

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

80°

SCL-JET

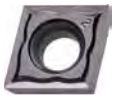


Plaquettes WSP Inserts	A x B x L	C	L	R
			Art. N°	**Art. N°**
CC..-0602..	10 x 10 x 110	21	**SCLCL-1010J-06-JET**	**SCLCR-1010J-06-JET**
	12 x 12 x 110	21	**SCLCL-1212J-06-JET**	**SCLCR-1212J-06-JET**
	12.7 x 12.7 x 110	21	**SCLCL-12.7-J-06-JET**	**SCLCR-12.7-J-06-JET**
	16 x 16 x 110	21	**SCLCL-1616J-06-JET**	**SCLCR-1616J-06-JET**
CC..-09T3..	12 x 12 x 110	21	**SCLCL-1212J-09-JET**	**SCLCR-1212J-09-JET**
	12.7 x 12.7 x 110	21	**SCLCL-12.7-J-09-JET**	**SCLCR-12.7-J-09-JET**
	16 x 16 x 110	21	**SCLCL-1616J-09-JET**	**SCLCR-1616J-09-JET**
	20 x 20 x 110	21	**SCLCL-2020J-09-JET**	**SCLCR-2020J-09-JET**

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X8



CCGT FN-X8

R	Art. N°	PVD TiAlN	PVD HTA	PVD TiN	non revêtu K10	non revêtu K20
0.05	CCGT-0602005-FN-X8	■	■	■	■	■
0.1	CCGT-060201-FN-X8	■	■	■	■	■
0.2	CCGT-060202-FN-X8	■	■	■	■	■
0.4	CCGT-060204-FN-X8	■	■	■	■	■
0.05	CCGT-09T3005-FN-X8	■	■	■	■	■
0.1	CCGT-09T301-FN-X8	■	■	■	■	■
0.2	CCGT-09T302-FN-X8	■	■	■	■	■
0.4	CCGT-09T304-FN-X8	■	■	■	■	■

CCGT ENP-X8

R	Art. N°	PVD TiAlN	PVD TiN	non revêtu K20
0.05	CCGT-0602005-ENP-X8	■	■	■
0.1	CCGT-060201-ENP-X8	■	■	■
0.2	CCGT-060202-ENP-X8	■	■	■
0.4	CCGT-060204-ENP-X8	■	■	■
0.05	CCGT-09T3005-ENP-X8	■	■	■
0.1	CCGT-09T301-ENP-X8	■	■	■
0.2	CCGT-09T302-ENP-X8	■	■	■
0.4	CCGT-09T304-ENP-X8	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X17

CCGT FN-X17

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu K10 (N S)	non revêtu K20 (N S)
0.05	CCGT-0602005-FN-X17	■	■	■	■	■
0.1	CCGT-060201-FN-X17	■	■	■	■	■
0.2	CCGT-060202-FN-X17	■	■	■	■	■
0.4	CCGT-060204-FN-X17	■	■	■	■	■
0.05	CCGT-09T3005-FN-X17	■	■	■	■	■
0.1	CCGT-09T301-FN-X17	■	■	■	■	■
0.2	CCGT-09T302-FN-X17	■	■	■	■	■
0.4	CCGT-09T304-FN-X17	■	■	■	■	■
0,8	CCGT-09T308-FN-X17	■	■	■	■	■

CCGT ENP-X17

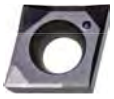
R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu K20 (N)
0.05	CCGT-0602005-ENP-X17	■	■	■
0.1	CCGT-060201-ENP-X17	■	■	■
0.2	CCGT-060202-ENP-X17	■	■	■
0.4	CCGT-060204-ENP-X17	■	■	■
0.05	CCGT-09T3005-ENP-X17	■	■	■
0.1	CCGT-09T301-ENP-X17	■	■	■
0.2	CCGT-09T302-ENP-X17	■	■	■
0.4	CCGT-09T304-ENP-X17	■	■	■
0.8	CCGT-09T308-ENP-X17	■	■	■

■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X25



CCGT FN-X25

			PVD			non revêtu unbeschichtet uncoated	
			P M N S	P M N S	P M N	N	N
	R	Art. N°	TiAlN	HTA	TiN	K10	K20
~6 R	0.05	CCGT-0602005-FN-X25	■	■	■	■	■
	0.1	CCGT-060201-FN-X25	■	■	■	■	■
	0.2	CCGT-060202-FN-X25	■	■	■	■	■
	0.4	CCGT-060204-FN-X25	■	■	■	■	■
~9 R	0.05	CCGT-09T3005-FN-X25	■	■	■	■	■
	0.1	CCGT-09T301-FN-X25	■	■	■	■	■
	0.2	CCGT-09T302-FN-X25	■	■	■	■	■
	0.4	CCGT-09T304-FN-X25	■	■	■	■	■
	0.8	CCGT-09T308-FN-X25	■	■	■	■	■

CCGT ENP-X25

			PVD		non revêtu unbeschichtet uncoated
			P M N S	P M N	N
	R	Art. N°	TiAlN	TiN	K20
~6 R	0.05	CCGT-0602005-ENP-X25	■	■	■
	0.1	CCGT-060201-ENP-X25	■	■	■
	0.2	CCGT-060202-ENP-X25	■	■	■
	0.4	CCGT-060204-ENP-X25	■	■	■
~9 R	0.05	CCGT-09T3005-ENP-X25	■	■	■
	0.1	CCGT-09T301-ENP-X25	■	■	■
	0.2	CCGT-09T302-ENP-X25	■	■	■
	0.4	CCGT-09T304-ENP-X25	■	■	■
	0.8	CCGT-09T308-ENP-X25	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X20

CCGT ENP-X20

R	Art. N°	PVD ZTA	PVD HTiX
~6 R			
0.1	CCGT-060201-ENP-X20	■	
0.2	CCGT-060202-ENP-X20	■	■
0.4	CCGT-060204-ENP-X20	■	■
~9 R			
0.1	CCGT-09T301-ENP-X20	■	
0.2	CCGT-09T302-ENP-X20	■	■
0.4	CCGT-09T304-ENP-X20	■	■
0.8	CCGT-09T308-ENP-X20	■	■

■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCMT-XF3
CCMT-XF2
CCMT-MF2

CCMT EN-XF3

R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)
~6 R			
0.2	CCMT-060202-EN-XF3	■	■
0.4	CCMT-060204-EN-XF3	■	■
~9 R			
0.2	CCMT-09T302-EN-XF3	■	■
0.4	CCMT-09T304-EN-XF3	■	■

CCMT EN-XF2

R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD HTi5 (P M)
~6 R				
0.2	CCMT-060202-EN-XF2	■	■	■
0.4	CCMT-060204-EN-XF2	■	■	■
~9 R				
0.2	CCMT-09T302-EN-XF2	■	■	■
0.4	CCMT-09T304-EN-XF2	■	■	■

CCMT EN-MF2

R	Art. N°	PVD TAC (P M N S)	PVD HTAC (P M N S)	CVD Ti5 (P M)	CVD HTi5 (P M)
~6 R					
0.2	CCMT-060202-EN-MF2	■	■	■	■
0.4	CCMT-060204-EN-MF2	■	■	■	■
~9 R					
0.2	CCMT-09T302-EN-MF2	■	■	■	■
0.4	CCMT-09T304-EN-MF2	■	■	■	■
0,8	CCMT-09T308-EN-MF2	■	■	■	■

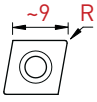
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

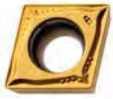
80°

CCMT-MF
CCMT-HF3
CCMT-HF

CCMT EN-MF

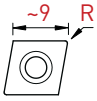
R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.2	CCMT-060202-EN-MF	■	■
0.4	CCMT-060204-EN-MF	■	■
0.2	CCMT-09T302-EN-MF	■	■
0.4	CCMT-09T304-EN-MF	■	■





CCMT EN-HF3

R	Art. N°	PVD P M TiX	PVD P M HTiX	CVD P M S Ti6
0,2	CCMT-060202-EN-HF3	■	■	■
0.4	CCMT-060204-EN-HF3	■	■	■
0,2	CCMT-09T302-EN-HF3	■	■	■
0.4	CCMT-09T304-EN-HF3	■	■	■
0.8	CCMT-09T308-EN-HF3	■	■	■



CCMT EN-HF

R	Art. N°	PVD P M Tmax	PVD P M TAC	CVD P M Ti4	CVD P M Ti5	CVD P M HTi5
0,2	CCMT-060202-EN-HF		■		■	■
0.4	CCMT-060204-EN-HF	■	■	■	■	■
0.8	CCMT-060208-EN-HF	■	■	■	■	■
0,2	CCMT-09T302-EN-HF		■		■	■
0.4	CCMT-09T304-EN-HF	■	■	■	■	■
0.8	CCMT-09T308-EN-HF	■	■	■	■	■

■ = disponible / verfügbar / available

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

80°

CCGT-X8
CCGT-KX

CCGT FN-X8

R	Art. N°	CERMET PVD CTA	CERMET non revêtu unbeschichtet uncoated CN6
~6 R			
0.05	CCGT-0602005-FN-X8	■	■
0.1	CCGT-060201-FN-X8	■	■
0.2	CCGT-060202-FN-X8	■	■
~9 R			
0.05	CCGT-09T3005-FN-X8	■	■
0.1	CCGT-09T301-FN-X8	■	■
0.2	CCGT-09T302-FN-X8	■	■
0.4	CCGT-09T304-FN-X8	■	■

CCGT ENP-KX

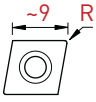
R	Art. N°	CERMET PVD CT7	CERMET PVD HCT7	CERMET non revêtu unbeschichtet uncoated CN6
~6 R				
0.1	CCGT-060201-ENP-KX	■	■	■
0.2	CCGT-060202-ENP-KX	■	■	■
0.4	CCGT-060204-ENP-KX	■	■	■
~9 R				
0.1	CCGT-09T301-ENP-KX	■	■	■
0.2	CCGT-09T302-ENP-KX	■	■	■
0.4	CCGT-09T304-ENP-KX	■	■	■

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

80°

CCMT-KM

CCMT EN-KM



R	Art. N°	CERMET PVD P M CT7	CERMET PVD P M HCT7	CERMET non revêtu unbeschichtet uncoated P CN6
0.2	CCMT-060202-EN-KM	■	■	■
0.4	CCMT-060204-EN-KM	■	■	■
0.2	CCMT-09T302-EN-KM	■	■	■
0.4	CCMT-09T304-EN-KM	■	■	■
0.8	CCMT-09T308-EN-KM	■	■	■

■ = disponible / verfügbar / available

Outils de tournage 55°
55°-Drehwerkzeuge
Turning tools 55°

55°

SDN

SDA

SDJ

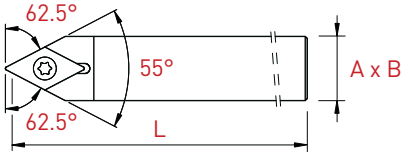
SDH

SDU

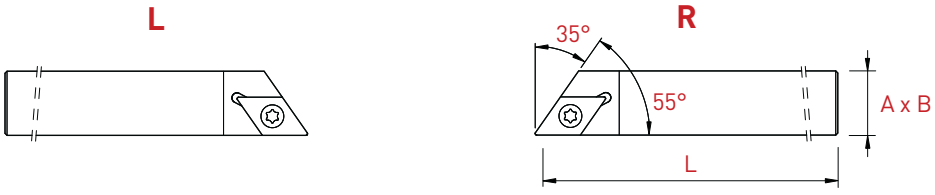
Porte-outils
Halter
Holders

55°

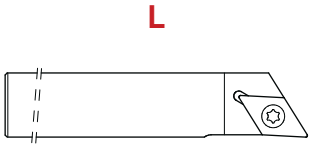
SDN

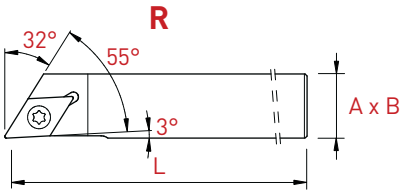


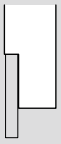
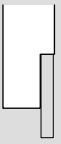
Plaquettes WSP Inserts	A x B x L	Art. N°
DC..-0702..	8 x 8 x 115	SDNCN-0808X-07
	10 x 10 x 115	SDNCN-1010X-07
	12 x 12 x 130	SDNCN-1212X-07
	12 x 12 x 90	SDNCN-1212G-07
	12.7 x 12.7 x 130	SDNCN-12.7-X-07
	16 x 16 x 130	SDNCN-1616X-07
	16 x 16 x 75	SDNCN-1616F-07
DC..-11T3..	12 x 12 x 130	SDNCN-1212X-11
	12 x 12 x 90	SDNCN-1212G-11
	12.7 x 12.7 x 130	SDNCN-12.7-X-11
	16 x 16 x 130	SDNCN-1616X-11
	16 x 16 x 75	SDNCN-1616F-11
	20 x 20 x 120	SDNCN-2020X-11



Plaquettes WSP Inserts	A x B x L	L Art. N°	R Art. N°
DC..-0702..	8 x 8 x 115	SDACL-0808X-07	SDACR-0808X-07
	10 x 10 x 115	SDACL-1010X-07	SDACR-1010X-07
	12 x 12 x 130	SDACL-1212X-07	SDACR-1212X-07
	12 x 12 x 90	SDACL-1212G-07	SDACR-1212G-07
	12.7 x 12.7 x 130	SDACL-12.7-X-07	SDACR-12.7-X-07
	16 x 16 x 130	SDACL-1616X-07	SDACR-1616X-07
	16 x 16 x 75	SDACL-1616F-07	SDACR-1616F-07
DC..-11T3..	12 x 12 x 130	SDACL-1212X-11	SDACR-1212X-11
	12 x 12 x 90	SDACL-1212G-11	SDACR-1212G-11
	12.7 x 12.7 x 130	SDACL-12.7-X-11	SDACR-12.7-X-11
	16 x 16 x 130	SDACL-1616X-11	SDACR-1616X-11
	16 x 16 x 75	SDACL-1616F-11	SDACR-1616F-11
	20 x 20 x 120	SDACL-2020X-11	SDACR-2020X-11



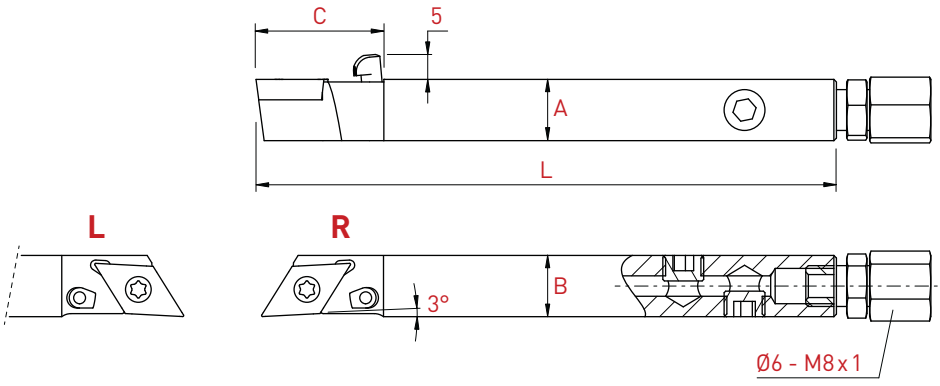


Plaquettes WSP Inserts	A x B x L	L  Art. N°	R  Art. N°
DC..-0702..	8 x 8 x 115	SDJCL-0808X-07	SDJCR-0808X-07
	10 x 10 x 115	SDJCL-1010X-07	SDJCR-1010X-07
	12 x 12 x 130	SDJCL-1212X-07	SDJCR-1212X-07
	12 x 12 x 90	SDJCL-1212G-07	SDJCR-1212G-07
	12.7 x 12.7 x 130	SDJCL-12.7-X-07	SDJCR-12.7-X-07
	16 x 16 x 130	SDJCL-1616X-07	SDJCR-1616X-07
	16 x 16 x 75	SDJCL-1616F-07	SDJCR-1616F-07
	20 x 20 x 120	SDJCL-2020X-07	SDJCR-2020X-07
DC..-11T3..	12 x 12 x 130	SDJCL-1212X-11	SDJCR-1212X-11
	12 x 12 x 90	SDJCL-1212G-11	SDJCR-1212G-11
	12.7 x 12.7 x 130	SDJCL-12.7-X-11	SDJCR-12.7-X-11
	16 x 16 x 130	SDJCL-1616X-11	SDJCR-1616X-11
	16 x 16 x 75	SDJCL-1616F-11	SDJCR-1616F-11
	20 x 20 x 120	SDJCL-2020X-11	SDJCR-2020X-11

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

55°

SDJ-JET

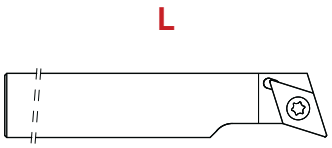


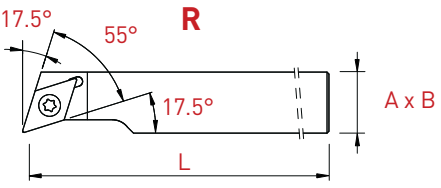
			L	R
Plaquettes WSP Inserts	A x B x L	C	Art. N°	Art. N°
DC..-0702..	10 x 10 x 110	20	SDJCL-1010J-07-JET	SDJCR-1010J-07-JET
	12 x 12 x 110	20	SDJCL-1212J-07-JET	SDJCR-1212J-07-JET
	12.7 x 12.7 x 110	20	SDJCL-12.7-J-07-JET	SDJCR-12.7-J-07-JET
	16 x 16 x 110	20	SDJCL-1616J-07-JET	SDJCR-1616J-07-JET
	20 x 20 x 110	20	SDJCL-2020J-07-JET	SDJCR-2020J-07-JET
DC..-11T3..	12 x 12 x 110	23	SDJCL-1212J-11-JET	SDJCR-1212J-11-JET
	12.7 x 12.7 x 110	23	SDJCL-12.7-J-11-JET	SDJCR-12.7-J-11-JET
	16 x 16 x 110	23	SDJCL-1616J-11-JET	SDJCR-1616J-11-JET
	20 x 20 x 110	23	SDJCL-2020J-11-JET	SDJCR-2020J-11-JET

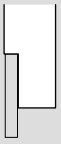
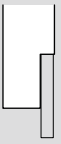
Porte-outils
Halter
Holders

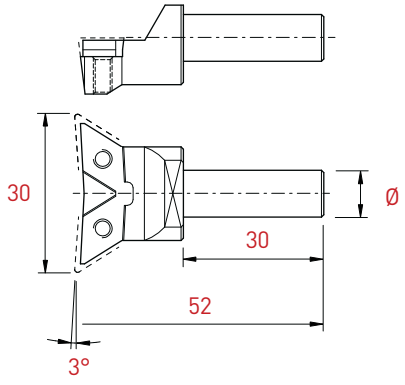
55°

SDH

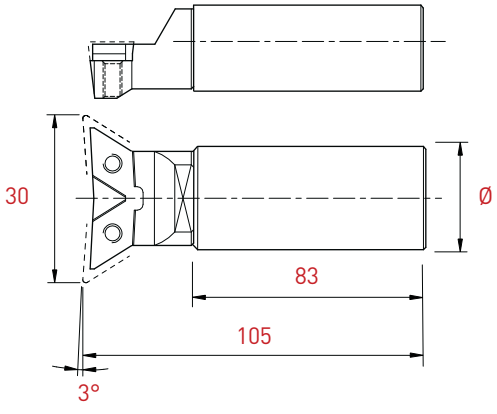




Plaquettes WSP Inserts	A x B x L	L  Art. N°	R  Art. N°
DC..-0702..	10 x 10 x 115	**SDHCL-1010X-07**	**SDHCR-1010X-07**
	12 x 12 x 130	**SDHCL-1212X-07**	**SDHCR-1212X-07**
	12 x 12 x 90	**SDHCL-1212G-07**	**SDHCR-1212G-07**
	12.7 x 12.7 x 130	**SDHCL-12.7-X-07**	**SDHCR-12.7-X-07**
	16 x 16 x 130	**SDHCL-1616X-07**	**SDHCR-1616X-07**
	16 x 16 x 75	**SDHCL-1616F-07**	**SDHCR-1616F-07**
DC..-11T3..	16 x 16 x 130	**SDHCL-1616X-11**	**SDHCR-1616X-11**
	16 x 16 x 75	**SDHCL-1616F-11**	**SDHCR-1616F-11**
	20 x 20 x 120	**SDHCL-2020X-11**	**SDHCR-2020X-11**



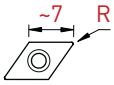
Plaquettes WSP Inserts	Ø	Art. N°
DC..-11T3..	10	**SDUC-D10X-11**

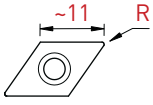


Plaquettes WSP Inserts	Ø	Art. N°
DC..-11T3..	20	**SDUC-D20X-11**
	25.4	**SDUC-D25.4X-11**

DCGT FN-X8

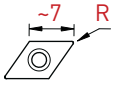
R	Art. N°	PVD P M N S TiAlN	PVD P M N S HTA	PVD P M N TiN	non revêtu unbeschichtet uncoated N S K10	non revêtu unbeschichtet uncoated N S K20
0.05	DCGT-0702005-FN-X8	■	■	■	■	■
0,08	DCGT-0702008-FN-X8	■	■		■	■
0.1	DCGT-070201-FN-X8	■	■	■	■	■
0,15	DCGT-0702015-FN-X8	■	■		■	■
0.2	DCGT-070202-FN-X8	■	■	■	■	■
0.4	DCGT-070204-FN-X8	■	■	■	■	■
0.05	DCGT-11T3005-FN-X8	■	■	■	■	■
0,08	DCGT-11T3008-FN-X8	■	■		■	■
0.1	DCGT-11T301-FN-X8	■	■	■	■	■
0,15	DCGT-11T3015-FN-X8	■	■		■	■
0.2	DCGT-11T302-FN-X8	■	■	■	■	■
0.4	DCGT-11T304-FN-X8	■	■	■	■	■

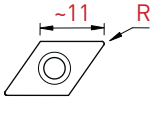




DCGT ENP-X8

R	Art. N°	PVD P M N S TiAlN	PVD P M N TiN	non revêtu unbeschichtet uncoated N K20
0.05	DCGT-0702005-ENP-X8	■	■	■
0,08	DCGT-0702008-ENP-X8	■		■
0.1	DCGT-070201-ENP-X8	■	■	■
0,15	DCGT-0702015-ENP-X8	■		■
0.2	DCGT-070202-ENP-X8	■	■	■
0.4	DCGT-070204-ENP-X8	■	■	■
0.05	DCGT-11T3005-ENP-X8	■	■	■
0,08	DCGT-11T3008-ENP-X8	■		■
0.1	DCGT-11T301-ENP-X8	■	■	■
0,15	DCGT-11T3015-ENP-X8	■		■
0.2	DCGT-11T302-ENP-X8	■	■	■
0.4	DCGT-11T304-ENP-X8	■	■	■





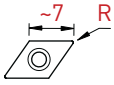
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

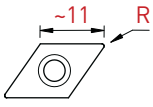
55°

DCGT-X17

DCGT FN-X17

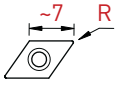
R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu K10 (N S)	non revêtu K20 (N S)
0.05	DCGT-0702005-FN-X17	■	■	■	■	■
0,08	DCGT-0702008-FN-X17	■	■		■	■
0.1	DCGT-070201-FN-X17	■	■	■	■	■
0,15	DCGT-0702015-FN-X17	■	■		■	■
0.2	DCGT-070202-FN-X17	■	■	■	■	■
0.4	DCGT-070204-FN-X17	■	■	■	■	■
0.05	DCGT-11T3005-FN-X17	■	■	■	■	■
0,08	DCGT-11T3008-FN-X17	■	■		■	■
0.1	DCGT-11T301-FN-X17	■	■	■	■	■
0,15	DCGT-11T3015-FN-X17	■	■		■	■
0.2	DCGT-11T302-FN-X17	■	■	■	■	■
0.4	DCGT-11T304-FN-X17	■	■	■	■	■
0.8	DCGT-11T308-FN-X17	■	■	■	■	■

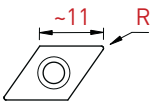




DCGT ENP-X17

R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu K20 (N)
0.05	DCGT-0702005-ENP-X17	■	■	■
0,08	DCGT-0702008-ENP-X17	■		■
0.1	DCGT-070201-ENP-X17	■	■	■
0,15	DCGT-0702015-ENP-X17	■		■
0.2	DCGT-070202-ENP-X17	■	■	■
0.4	DCGT-070204-ENP-X17	■	■	■
0.05	DCGT-11T3005-ENP-X17	■	■	■
0,08	DCGT-11T3008-ENP-X17	■		■
0.1	DCGT-11T301-ENP-X17	■	■	■
0,15	DCGT-11T3015-ENP-X17	■		■
0.2	DCGT-11T302-ENP-X17	■	■	■
0.4	DCGT-11T304-ENP-X17	■	■	■
0.8	DCGT-11T308-ENP-X17	■	■	■





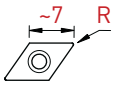
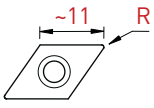
■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

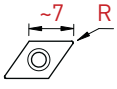
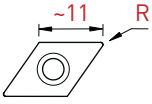
55°

DCGT-X25

DCGT FN-X25

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu K10 (N)	non revêtu K20 (N)
						
0.05	DCGT-0702005-FN-X25	■	■	■	■	■
0.1	DCGT-070201-FN-X25	■	■	■	■	■
0.2	DCGT-070202-FN-X25	■	■	■	■	■
0.4	DCGT-070204-FN-X25	■	■	■	■	■
						
0.05	DCGT-11T3005-FN-X25	■	■	■	■	■
0.1	DCGT-11T301-FN-X25	■	■	■	■	■
0.2	DCGT-11T302-FN-X25	■	■	■	■	■
0.4	DCGT-11T304-FN-X25	■	■	■	■	■
0.8	DCGT-11T308-FN-X25	■	■	■	■	■

DCGT ENP-X25

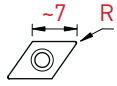
R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu K20 (N)
				
0.05	DCGT-0702005-ENP-X25	■	■	■
0.1	DCGT-070201-ENP-X25	■	■	■
0.2	DCGT-070202-ENP-X25	■	■	■
0.4	DCGT-070204-ENP-X25	■	■	■
				
0.05	DCGT-11T3005-ENP-X25	■	■	■
0.1	DCGT-11T301-ENP-X25	■	■	■
0.2	DCGT-11T302-ENP-X25	■	■	■
0.4	DCGT-11T304-ENP-X25	■	■	■
0.8	DCGT-11T308-ENP-X25	■	■	■

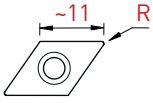
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

55°

DCGT-X20

DCGT ENP-X20





R	Art. N°	PVD ZTA	PVD HTiX
0.1	DCGT-070201-ENP-X20	■	
0.2	DCGT-070202-ENP-X20	■	■
0.4	DCGT-070204-ENP-X20	■	■
0.1	DCGT-11T301-ENP-X20	■	
0.2	DCGT-11T302-ENP-X20	■	■
0.4	DCGT-11T304-ENP-X20	■	■
0.8	DCGT-11T308-ENP-X20	■	■

■ = disponible / verfügbar / available

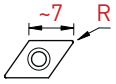
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

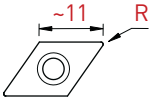
55°

DCMT-XF3
DCMT-XF2
DCMT-MF2

DCMT EN-XF3

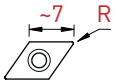
R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC
0.2	DCMT-070202-EN-XF3	■	■
0.4	DCMT-070204-EN-XF3	■	■
0.2	DCMT-11T302-EN-XF3	■	■
0.4	DCMT-11T304-EN-XF3	■	■

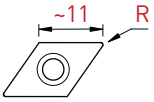




DCMT EN-XF2

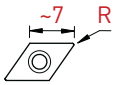
R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M HTi5
0.2	DCMT-070202-EN-XF2	■	■	■
0.4	DCMT-070204-EN-XF2	■	■	■
0.2	DCMT-11T302-EN-XF2	■	■	■
0.4	DCMT-11T304-EN-XF2	■	■	■

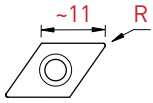




DCMT EN-MF2

R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M Ti5	CVD P M HTi5
0.2	DCMT-070202-EN-MF2	■	■	■	■
0.4	DCMT-070204-EN-MF2	■	■	■	■
0.2	DCMT-11T302-EN-MF2	■	■	■	■
0.4	DCMT-11T304-EN-MF2	■	■	■	■
0,8	DCMT-11T308-EN-MF2	■	■	■	■





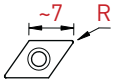
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

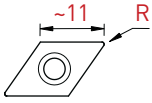
55°

DCMT-MF
DCMT-HF3
DCMT-HF

DCMT EN-MF

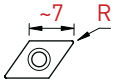
R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.2	DCMT-070202-EN-MF	■	■
0.4	DCMT-070204-EN-MF	■	■
0.2	DCMT-11T302-EN-MF	■	■
0.4	DCMT-11T304-EN-MF	■	■

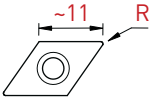




DCMT EN-HF3

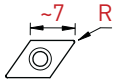
R	Art. N°	PVD P M TiX	PVD P M HTiX	CVD P M Ti6
0,2	DCMT-070202-EN-HF3	■	■	■
0.4	DCMT-070204-EN-HF3	■	■	■
0,2	DCMT-11T302-EN-HF3	■	■	■
0.4	DCMT-11T304-EN-HF3	■	■	■
0.8	DCMT-11T308-EN-HF3	■	■	■

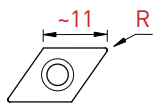




DCMT EN-HF

R	Art. N°	PVD P M Tmax	PVD P M TAC	CVD P M Ti4	CVD P M Ti5	CVD P M HTi5
0,2	DCMT-070202-EN-HF		■		■	■
0.4	DCMT-070204-EN-HF	■	■	■	■	■
0.8	DCMT-070208-EN-HF	■	■	■	■	■
0,2	DCMT-11T302-EN-HF		■		■	■
0.4	DCMT-11T304-EN-HF	■	■	■	■	■
0.8	DCMT-11T308-EN-HF	■	■	■	■	■





■ = disponible / verfügbar / available

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

55°

DCGT-X8
DCGT-KX

DCGT FN-X8

R	Art. N°	CERMET PVD CTA	CERMET non revêtu unbeschichtet uncoated CN6
~7 R			
0.05	DCGT-0702005-FN-X8	■	■
0.1	DCGT-070201-FN-X8	■	■
0.2	DCGT-070202-FN-X8	■	■
~11 R			
0.05	DCGT-11T3005-FN-X8	■	■
0.1	DCGT-11T301-FN-X8	■	■
0.2	DCGT-11T302-FN-X8	■	■
0.4	DCGT-11T304-FN-X8	■	■

DCGT ENP-KX

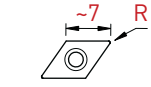
R	Art. N°	CERMET PVD CT7	CERMET PVD HCT7	CERMET non revêtu unbeschichtet uncoated CN6
~7 R				
0.1	DCGT-070201-ENP-KX	■	■	■
0.2	DCGT-070202-ENP-KX	■	■	■
0.4	DCGT-070204-ENP-KX	■	■	■
~11 R				
0.1	DCGT-11T301-ENP-KX	■	■	■
0.2	DCGT-11T302-ENP-KX	■	■	■
0.4	DCGT-11T304-ENP-KX	■	■	■

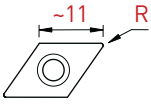
Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

55°

DCMT-KM

DCMT EN-KM



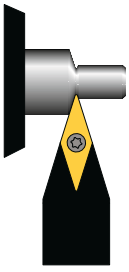


R	Art. N°	CERMET PVD CT7	CERMET PVD HCT7	CERMET non revêtu unbeschichtet uncoated CN6
		P M	P M	P
0.2	DCMT-070202-EN-KM	■	■	■
0.4	DCMT-070204-EN-KM	■	■	■
0.2	DCMT-11T302-EN-KM	■	■	■
0.4	DCMT-11T304-EN-KM	■	■	■
0.8	DCMT-11T308-EN-KM	■	■	■

■ = disponible / verfügbar / available

Outils de tournage 35°
35°-Drehwerkzeuge
Turning tools 35°

35°



SVV

SVA

SVJ

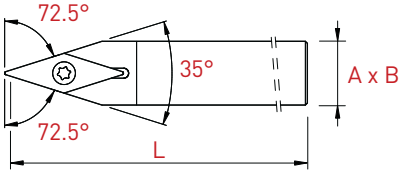
SVX

SV-CL/R

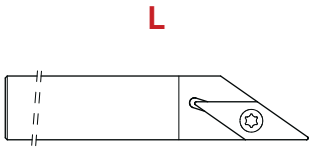
Porte-outils
Halter
Holders

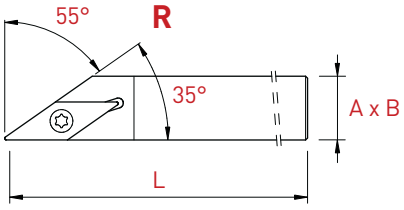
35°

SVV



Plaquettes WSP Inserts	A x B x L	Art. N°
VC..-1103..	8 x 8 x 115	SVVCN-08108X-11
	10 x 10 x 115	SVVCN-1010X-11
	12 x 12 x 130	SVVCN-1212X-11
	12 x 12 x 90	SVVCN-1212G-11
	12.7 x 12.7 x 130	SVVCN-12.7-X-11
	16 x 16 x 130	SVVCN-1616X-11
	16 x 16 x 75	SVVCN-1616F-11
	20 x 20 x 120	SVVCN-2020X-11
VC..-1303..	8 x 10 x 115	SVVCN-0810X-13
	10 x 10 x 115	SVVCN-1010X-13
	12 x 12 x 130	SVVCN-1212X-13
	12 x 12 x 90	SVVCN-1212G-13
	12.7 x 12.7 x 130	SVVCN-12.7-X-13
	16 x 16 x 130	SVVCN-1616X-13
	16 x 16 x 75	SVVCN-1616F-13
	20 x 20 x 120	SVVCN-2020X-13
VC..-1604..	12 x 12 x 130	SVVCN-1212X-16
	12 x 12 x 90	SVVCN-1212G-16
	12.7 x 12.7 x 130	SVVCN-12.7-X-16
	16 x 16 x 130	SVVCN-1616X-16
	16 x 16 x 75	SVVCN-1616F-16
	20 x 20 x 120	SVVCN-2020X-16



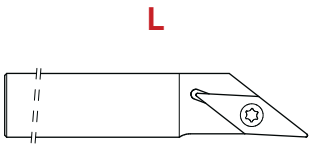


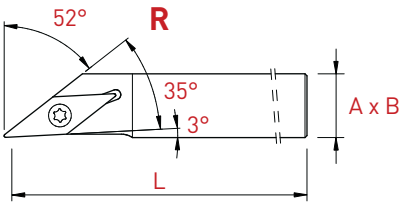
		L	R
Plaquettes WSP Inserts	A x B x L	Art. N°	Art. N°
VC..-1103..	8 x 8 x 115	SVACL-0808X-11	SVACR-0808X-11
	10 x 10 x 115	SVACL-1010X-11	SVACR-1010X-11
	12 x 12 x 130	SVACL-1212X-11	SVACR-1212X-11
	12 x 12 x 90	SVACL-1212G-11	SVACR-1212G-11
	12.7 x 12.7 x 130	SVACL-12.7-X-11	SVACR-12.7-X-11
	16 x 16 x 130	SVACL-1616X-11	SVACR-1616X-11
	16 x 16 x 75	SVACL-1616F-11	SVACR-1616F-11
	20 x 20 x 120	SVACL-2020X-11	SVACR-2020X-11
VC..-1604..	12 x 12 x 130	SVACL-1212X-16	SVACR-1212X-16
	12 x 12 x 90	SVACL-1212G-16	SVACR-1212G-16
	12.7 x 12.7 x 130	SVACL-12.7-X-16	SVACR-12.7-X-16
	16 x 16 x 130	SVACL-1616X-16	SVACR-1616X-16
	16 x 16 x 75	SVACL-1616F-16	SVACR-1616F-16
	20 x 20 x 120	SVACL-2020X-16	SVACR-2020X-16

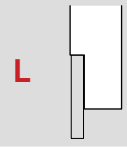
Porte-outils
Halter
Holders

35°

SVJ





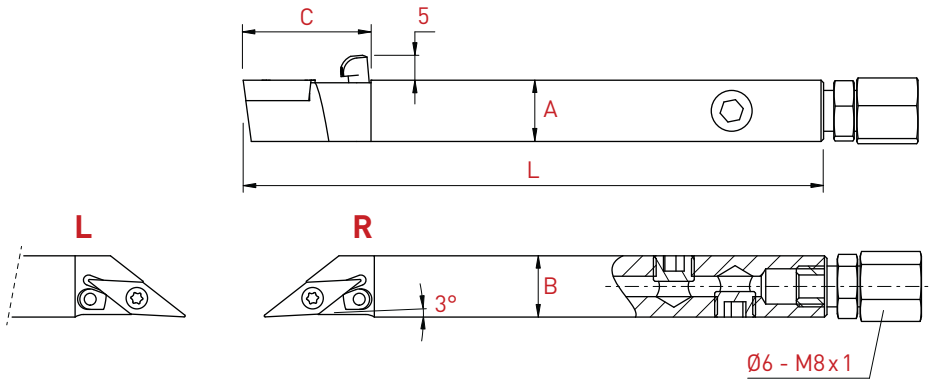


Plaquettes WSP Inserts	A x B x L	Art. N°	Art. N°
VC..-1103..	8 x 8 x 115	**SVJCL-0808X-11**	**SVJCR-0808X-11**
	10 x 10 x 115	**SVJCL-1010X-11**	**SVJCR-1010X-11**
	12 x 12 x 130	**SVJCL-1212X-11**	**SVJCR-1212X-11**
	12 x 12 x 90	**SVJCL-1212G-11**	**SVJCR-1212G-11**
	12.7 x 12.7 x 130	**SVJCL-12.7-X-11**	**SVJCR-12.7-X-11**
	16 x 16 x 130	**SVJCL-1616X-11**	**SVJCR-1616X-11**
	16 x 16 x 75	**SVJCL-1616F-11**	**SVJCR-1616F-11**
	20 x 20 x 120	**SVJCL-2020X-11**	**SVJCR-2020X-11**
VC..-1303..	8 x 10 x 115	**SVJCL-0810X-13**	**SVJCR-0810X-13**
	10 x 10 x 115	**SVJCL-1010X-13**	**SVJCR-1010X-13**
	12 x 12 x 130	**SVJCL-1212X-13**	**SVJCR-1212X-13**
	12 x 12 x 90	**SVJCL-1212G-13**	**SVJCR-1212G-13**
	12.7 x 12.7 x 130	**SVJCL-12.7-X-13**	**SVJCR-12.7-X-13**
	16 x 16 x 130	**SVJCL-1616X-13**	**SVJCR-1616X-13**
	16 x 16 x 75	**SVJCL-1616F-13**	**SVJCR-1616F-13**
	20 x 20 x 120	**SVJCL-2020X-13**	**SVJCR-2020X-13**
VC..-1604..	12 x 12 x 130	**SVJCL-1212X-16**	**SVJCR-1212X-16**
	12 x 12 x 90	**SVJCL-1212G-16**	**SVJCR-1212G-16**
	12.7 x 12.7 x 130	**SVJCL-12.7-X-16**	**SVJCR-12.7-X-16**
	16 x 16 x 130	**SVJCL-1616X-16**	**SVJCR-1616X-16**
	16 x 16 x 75	**SVJCL-1616F-16**	**SVJCR-1616F-16**
	20 x 20 x 120	**SVJCL-2020X-16**	**SVJCR-2020X-16**

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

35°

SVJ-JET

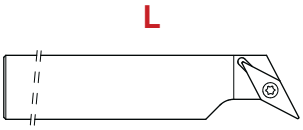


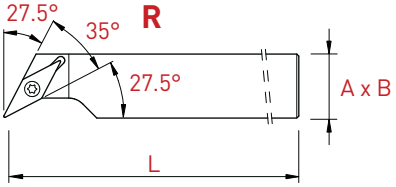
Plaquettes WSP Inserts	A x B x L	C	L Art. N°	R Art. N°
VC..-1103..	10 x 10 x 110	21	SVJCL-1010J-11-JET	SVJCR-1010J-11-JET
	12 x 12 x 110	21	SVJCL-1212J-11-JET	SVJCR-1212J-11-JET
	12.7 x 12.7 x 110	21	SVJCL-12.7-J-11-JET	SVJCR-12.7-J-11-JET
	16 x 16 x 110	21	SVJCL-1616J-11-JET	SVJCR-1616J-11-JET
	20 x 20 x 120	21	SVJCL-2020J-11-JET	SVJCR-2020J-11-JET
VC..-1303..	10 x 10 x 110	26	SVJCL-1010J-13-JET	SVJCR-1010J-13-JET
	12 x 12 x 110	26	SVJCL-1212J-13-JET	SVJCR-1212J-13-JET
	12.7 x 12.7 x 110	26	SVJCL-12.7-J-13-JET	SVJCR-12.7-J-13-JET
	16 x 16 x 110	26	SVJCL-1616J-13-JET	SVJCR-1616J-13-JET
	20 x 20 x 110	26	SVJCL-2020J-13-JET	SVJCR-2020J-13-JET
VC..-1604..	12 x 12 x 130	30	SVJCL-1212J-16-JET	SVJCR-1212J-16-JET
	12.7 x 12.7 x 130	30	SVJCL-12.7-J-16-JET	SVJCR-12.7-J-16-JET
	16 x 16 x 130	30	SVJCL-1616J-16-JET	SVJCR-1616J-16-JET
	20 x 20 x 120	30	SVJCL-2020J-16-JET	SVJCR-2020J-16-JET

Porte-outils
Halter
Holders

35°

SVX



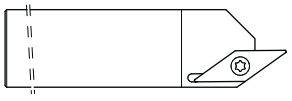


Plaquettes WSP Inserts	A x B x L	Art. N°	Art. N°
VC..-1103..	16 x 16 x 130	**SVXCL-1616X-11**	**SVXCR-1616X-11**
	16 x 16 x 75	**SVXCL-1616F-11**	**SVXCR-1616F-11**
	20 x 20 x 120	**SVXCL-2020X-11**	**SVXCR-2020X-11**

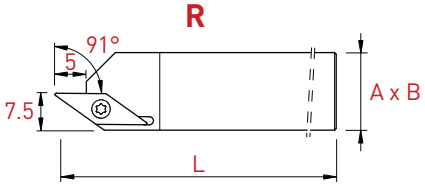
Porte-outils
Halter
Holders

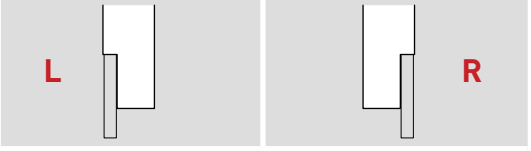
35°

SV-CL/R



tournage arrière
rückwärts drehen
back turning

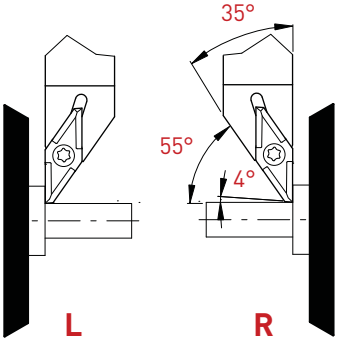




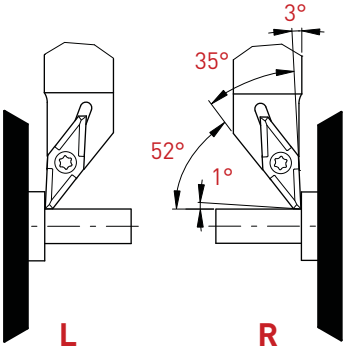
Plaquettes WSP Inserts	A x B x L	Art. N°	Art. N°
VC**G**..-1103..	12 x 12 x 130	**SV-CL-1212X-11**	**SV-CR-1212X-11**
	12 x 12 x 90	**SV-CL-1212G-11**	**SV-CR-1212G-11**
	12.7 x 12.7 x 130	**SV-CL-12.7-X-11**	**SV-CR-12.7-X-11**
	16 x 16 x 130	**SV-CL-1616X-11**	**SV-CR-1616X-11**
	16 x 16 x 75	**SV-CL-1616F-11**	**SV-CR-1616F-11**
	20 x 20 x 120	**SV-CL-2020X-11**	**SV-CR-2020X-11**

Porte-outils compatibles avec plaquettes VCGT FL/FR-X10°
Passende Halter zu den Wendeplatten VCGT FL/FR-X10°
Holders compatible with inserts VCGT FL/FR-X10°

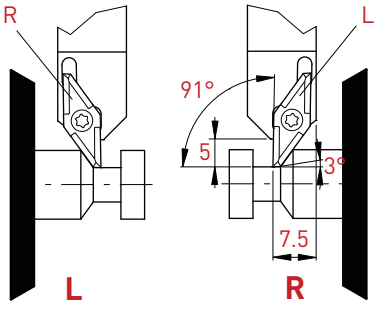
35°



	Art. N°
R	SVACR-...-11
L	SVACL-...-11

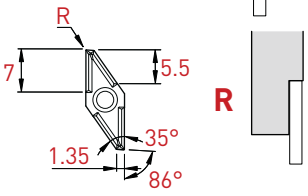


	Art. N°
R	SVJCR-...-11
L	SVJCL-...-11



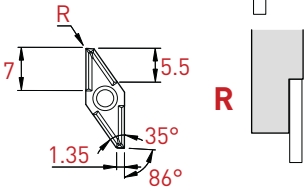
	Art. N°
R	SV-CR-...-11
L	SV-CL-...-11

VCGT FL / FR-X10



R	Art. N°	PVD TiAlN	PVD HTA	PVD TiAlX	PVD HTAX	PVD TiN	non revêtu K10	non revêtu K20
0.03	VCGT-1103003-FL-X10	■	■			■	■	■
0.08	VCGT-1103008-FL-X10	■	■			■	■	■
0.1	VCGT-110301-FL-X10	■	■			■	■	■
0.2	VCGT-110302-FL-X10	■	■			■	■	■
0.03	VCGT-1103003-FR-X10	■	■	■	■	■	■	■
0.08	VCGT-1103008-FR-X10	■	■	■	■	■	■	■
0.1	VCGT-110301-FR-X10	■	■	■	■	■	■	■
0.2	VCGT-110302-FR-X10	■	■	■	■	■	■	■

VCGT ELP/ERP-X10



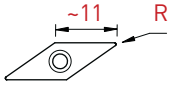
R	Art. N°	PVD TiAlN	PVD HTA	PVD TiAlX	PVD HTAX	PVD TiN	non revêtu K10	non revêtu K20
0.03	VCGT-1103003-ELP-X10	■	■			■	■	■
0.08	VCGT-1103008-ELP-X10	■	■			■	■	■
0.1	VCGT-110301-ELP-X10	■	■			■	■	■
0.2	VCGT-110302-ELP-X10	■	■			■	■	■
0.03	VCGT-1103003-ERP-X10	■	■	■	■	■	■	■
0.08	VCGT-1103008-ERP-X10	■	■	■	■	■	■	■
0.1	VCGT-110301-ERP-X10	■	■	■	■	■	■	■
0.2	VCGT-110302-ERP-X10	■	■	■	■	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

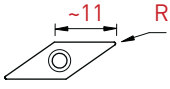
VCGT-K18
VCGW-0

VCGT FN-K18



R	Art. N°	PVD P M N S HTA	PVD P M N HTiN	non revêtu unbeschichtet uncoated N S K10
0.05	VCGT-1103005-FN-K18	■	■	■
0.1	VCGT-110301-FN-K18	■	■	■
0.2	VCGT-110302-FN-K18	■	■	■
0.4	VCGT-110304-FN-K18	■	■	■

VCGW FN-0



R	Art. N°	PVD P N HTA	PVD P N HTiN	non revêtu unbeschichtet uncoated N K10
0.05	VCGW-1103005-FN-0	■	■	■
0.1	VCGW-110301-FN-0	■	■	■
0.2	VCGW-110302-FN-0	■	■	■
0.4	VCGW-110304-FN-0	■	■	■

■ = disponible / verfügbar / available

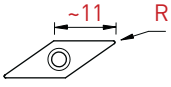
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

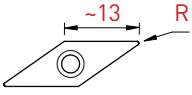
35°

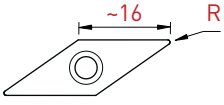
VCGT-X8

VCGT FN-X8

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M N)	non revêtu K10 (N S)	non revêtu K20 (N S)
0.05	VCGT-1103005-FN-X8	■	■	■	■	■
0.08	VCGT-1103008-FN-X8	■	■		■	■
0.1	VCGT-110301-FN-X8	■	■	■	■	■
0,15	VCGT-1103015-FN-X8	■	■		■	■
0.2	VCGT-110302-FN-X8	■	■	■	■	■
0.4	VCGT-110304-FN-X8	■	■	■	■	■
0.05	VCGT-1303005-FN-X8	■	■	■	■	■
0.1	VCGT-130301-FN-X8	■	■	■	■	■
0.2	VCGT-130302-FN-X8	■	■	■	■	■
0.4	VCGT-130304-FN-X8	■	■	■	■	■
0.05	VCGT-1604005-FN-X8	■	■	■	■	■
0.1	VCGT-160401-FN-X8	■	■	■	■	■
0.2	VCGT-160402-FN-X8	■	■	■	■	■
0.4	VCGT-160404-FN-X8	■	■	■	■	■

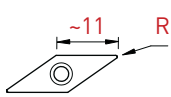


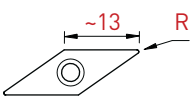


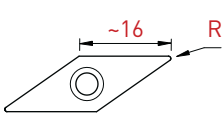


VCGT ENP-X8

R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M N)	non revêtu K20 (N)
0.05	VCGT-1103005-ENP-X8	■	■	■
0,08	VCGT-1103008-ENP-X8	■		■
0.1	VCGT-110301-ENP-X8	■	■	■
0,15	VCGT-1103015-ENP-X8	■		■
0.2	VCGT-110302-ENP-X8	■	■	■
0.4	VCGT-110304-ENP-X8	■	■	■
0.05	VCGT-1303005-ENP-X8	■		■
0.1	VCGT-130301-ENP-X8	■		■
0.2	VCGT-130302-ENP-X8	■		■
0.4	VCGT-130304-ENP-X8	■		■
0.05	VCGT-1604005-ENP-X8	■	■	■
0.1	VCGT-160401-ENP-X8	■	■	■
0.2	VCGT-160402-ENP-X8	■	■	■
0.4	VCGT-160404-ENP-X8	■	■	■





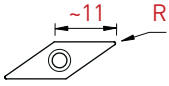
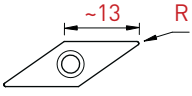
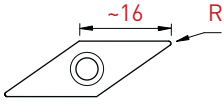


Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

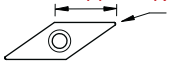
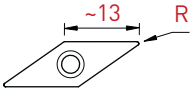
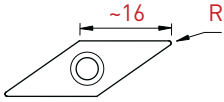
35°

VCGT-X17

VCGT FN-X17

		R	Art. N°	PVD TiAlN	PVD HTA	PVD TiN	non revêtu K10	non revêtu K20
		0.05	VCGT-1103005-FN-X17	■	■	■	■	■
~11 R		0,08	VCGT-1103008-FN-X17	■	■		■	■
		0.1	VCGT-110301-FN-X17	■	■	■	■	■
		0,15	VCGT-1103015-FN-X17	■	■		■	■
		0.2	VCGT-110302-FN-X17	■	■	■	■	■
		0.4	VCGT-110304-FN-X17	■	■	■	■	■
~13 R		0.05	VCGT-1303005-FN-X17	■	■	■	■	■
		0.1	VCGT-130301-FN-X17	■	■	■	■	■
		0.2	VCGT-130302-FN-X17	■	■	■	■	■
		0.4	VCGT-130304-FN-X17	■	■	■	■	■
~16 R		0.05	VCGT-1604005-FN-X17	■	■	■	■	■
		0.1	VCGT-160401-FN-X17	■	■	■	■	■
		0.2	VCGT-160402-FN-X17	■	■	■	■	■
		0.4	VCGT-160404-FN-X17	■	■	■	■	■
		0.8	VCGT-160408-FN-X17	■	■	■	■	■

VCGT ENP-X17

		R	Art. N°	PVD TiAlN	PVD TiN	non revêtu K20
		0.05	VCGT-1103005-ENP-X17	■	■	■
~11 R		0,08	VCGT-1103008-ENP-X17	■		■
		0.1	VCGT-110301-ENP-X17	■	■	■
		0,15	VCGT-1103015-ENP-X17	■		■
		0.2	VCGT-110302-ENP-X17	■	■	■
		0.4	VCGT-110304-ENP-X17	■	■	■
~13 R		0.05	VCGT-1303005-ENP-X17	■		■
		0.1	VCGT-130301-ENP-X17	■		■
		0.2	VCGT-130302-ENP-X17	■		■
		0.4	VCGT-130304-ENP-X17	■		■
~16 R		0.05	VCGT-1604005-ENP-X17	■	■	■
		0.1	VCGT-160401-ENP-X17	■	■	■
		0.2	VCGT-160402-ENP-X17	■	■	■
		0.4	VCGT-160404-ENP-X17	■	■	■
		0.8	VCGT-160408-ENP-X17	■	■	■

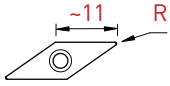
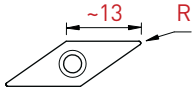
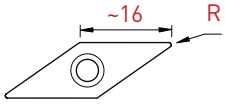
■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

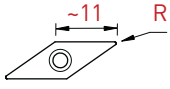
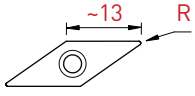
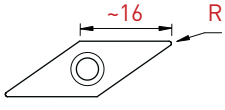
35°

VCGT-X25

VCGT FN-X25

R	Art. N°	PVD TiAlN (P M N S)	PVD HTA (P M N S)	PVD TiN (P M)	non revêtu K10 (N)	non revêtu K20 (N)
						
0.05	VCGT-1103005-FN-X25	■	■	■	■	■
0.1	VCGT-110301-FN-X25	■	■	■	■	■
0.2	VCGT-110302-FN-X25	■	■	■	■	■
0.4	VCGT-110304-FN-X25	■	■	■	■	■
						
0.05	VCGT-1303005-FN-X25	■	■	■	■	■
0.1	VCGT-130301-FN-X25	■	■	■	■	■
0.2	VCGT-130302-FN-X25	■	■	■	■	■
0.4	VCGT-130304-FN-X25	■	■	■	■	■
0.8	VCGT-130308-FN-X25	■	■	■	■	■
						
0.05	VCGT-1604005-FN-X25	■	■	■	■	■
0.1	VCGT-160401-FN-X25	■	■	■	■	■
0.2	VCGT-160402-FN-X25	■	■	■	■	■
0.4	VCGT-160404-FN-X25	■	■	■	■	■
0.8	VCGT-160408-FN-X25	■	■	■	■	■

VCGT ENP-X25

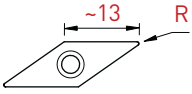
R	Art. N°	PVD TiAlN (P M N S)	PVD TiN (P M)	non revêtu K20 (N)
				
0.05	VCGT-1103005-ENP-X25	■	■	■
0.1	VCGT-110301-ENP-X25	■	■	■
0.2	VCGT-110302-ENP-X25	■	■	■
0.4	VCGT-110304-ENP-X25	■	■	■
				
0.05	VCGT-1303005-ENP-X25	■		■
0.1	VCGT-130301-ENP-X25	■		■
0.2	VCGT-130302-ENP-X25	■		■
0.4	VCGT-130304-ENP-X25	■		■
0.8	VCGT-130308-ENP-X25	■		■
				
0.05	VCGT-1604005-ENP-X25	■	■	■
0.1	VCGT-160401-ENP-X25	■	■	■
0.2	VCGT-160402-ENP-X25	■	■	■
0.4	VCGT-160404-ENP-X25	■	■	■
0.8	VCGT-160408-ENP-X25	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

VCGT-X20

VCGT ENP-X20



R	Art. N°	PVD ZTA	PVD HTiX
		M N S	M N S
0.2	VCGT-130302-ENP-X20	■	■
0.4	VCGT-130304-ENP-X20	■	■
0.8	VCGT-130308-ENP-X20	■	■

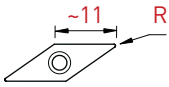
■ = disponible / verfügbar / available

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

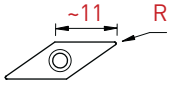
VCMT-XF3
VCMT-XF2

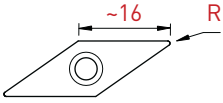
VCMT EN-XF3



R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC
0.2	VCMT-110302-EN-XF3	■	■
0.4	VCMT-110304-EN-XF3	■	■

VCMT EN-XF2





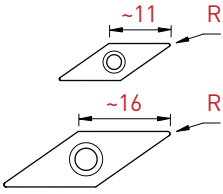
R	Art. N°	PVD P M N S TAC	PVD P M N S HTAC	CVD P M HTi5
0.2	VCMT-110302-EN-XF2	■	■	■
0.4	VCMT-110304-EN-XF2	■	■	■
0.4	VCMT-160404-EN-XF2	■	■	■

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

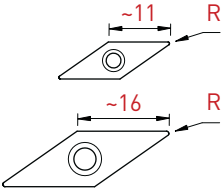
VCMT-MF
VCMT-HF

VCMT EN-MF



R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.2	VCMT-110302-EN-MF	■	■
0.4	VCMT-110304-EN-MF	■	■
0.4	VCMT-160404-EN-MF	■	■

VCMT EN-HF



R	Art. N°	PVD P M Tmax	CVD P M Ti4
0.4	VCMT-110304-EN-HF	■	■
0.8	VCMT-110308-EN-HF	■	■
0.4	VCMT-160404-EN-HF	■	■
0.8	VCMT-160408-EN-HF	■	■

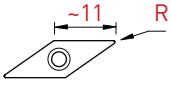
■ = disponible / verfügbar / available

Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

35°

VCGT-X8

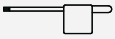
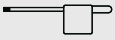
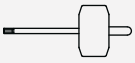
VCGT
FN-X8

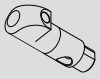


R	Art. N°	CERMET PVD CTA	CERMET non revêtu uncoated CN6
		P M	P
0.05	**VCGT-1103005-FN-X8**	■	■
0.1	**VCGT-110301-FN-X8**	■	■
0.2	**VCGT-110302-FN-X8**	■	■
0.4	**VCGT-110304-FN-X8**	■	■

■ = disponible / verfügbar / available

Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories

	Porte-outils Halter Holders	Vis Schrauben Screw	Clé Schlüssel Key	Option	Serrage Drehmoment Torque
Vis et clés de rechange **Ersatzschrauben und Schlüsseln** **Spare screws and keys**	Series SC...-06 Series SD...-07 Series SV...-11	**V-M2.5X7.8-T8** 	**C-T8** 	**SET-NM-TX8**	1.3 Nm
	Series SV...-13	**V-M3X7.3-T8-ISO** 	**C-T8** 	**SET-NM-TX8**	2.0 Nm
	Series SC...-09 Series SD...-11 Series SV...-16	**V-M4X9-T15-ISO** 	**C-T15** 	**SET-NM-TX15**	3.0 Nm

	L Pour réf. For ref. Für Ref	 *	 *	 *
		Art. N°	**Art. N°**	**Art. N°**
Pièces de rechange JET **Ersatzteile JET** **Spare parts JET**	S...L-10...-JET	**JJL-4X12-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...L-12...-JET S...L-12.7...-JET	**JJL-4X14-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...L-16...-JET S...L-20...-JET	**JJL-4X17-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	R Pour réf. For ref. Für Ref	 *	 *	 *
		Art. N°	**Art. N°**	**Art. N°**
	S...R-10...-JET	**JJR-4X12-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...R-12...-JET S...R-12.7...-JET	**JJR-4X14-D1.5**	**J-M8X1-D6**	**JB-M8X1**
	S...R-16...-JET S...R-20...-JET	**JJR-4X17-D1.5**	**J-M8X1-D6**	**JB-M8X1**

* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

ISO-Line G tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	P Acier / Stahl / Steel						M Inox / Rostfreistahl / Stainless steel			
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Hochlegierter Stahl High alloyed steel		Austénitique Austenitisch Austenitic		Martensitique Martensitisch Martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
FN-X8	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	N	HN										
ENP-X8	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	N	HN										
FN-X17	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10			60-140	0.01-0.15	60-140	0.01-0.15
	TiN		80-170	0.01-0.12					60-120	0.01-0.15	60-120	0.01-0.15
	N	HN										
ENP-X17	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.15	60-140	0.03-0.18
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.01-0.15	60-120	0.03-0.18
	N	HN										
FN-X25	TiAlN	HTA							60-140	0.01-0.12		
	TiN								60-120	0.01-0.12		
	N	HN										
ENP-X25	TiAlN	HTA							60-140	0.03-0.12	60-140	0.03-0.15
	TiN								60-120	0.03-0.12	60-120	0.03-0.15
	N	HN										
ENP-X20	ZTA								60-140	0.03-0.18	60-140	0.03-0.18
		HTiX							60-140	0.03-0.18	60-140	0.03-0.18
G tolerance class Special 35° VC..-11												
FL / FR-X10	TiAlN	HTA	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX	80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN		80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	N	HN										
ELP/ERP-X10	TiAlN	HTA	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX	HTAX	80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiN		80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	N	HN										
FN-K18		HTA	80-180	0.01-0.10	60-150	0.01-0.10			60-140	0.01-0.10	60-140	0.01-0.10
		HTiN	80-170	0.01-0.10	60-140	0.01-0.10			60-120	0.01-0.10	60-120	0.01-0.10
		HN										
FN-0		HTA	80-150	0.01-0.10								
		HTiN	80-140	0.01-0.10								
		HN										

★★★★★ ★★★★ ★★★

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys									S Titane et superalliages Titan und Superlegierungen Titanium and superalloys					
Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
		150-1600	0.01-0.15	80-300	0.01-0.12	100-400	0.01-0.15			30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.18	150-1600	0.01-0.15	80-300	0.01-0.12	100-400	0.01-0.15						
120-2000	0.01-0.18	150-1500	0.01-0.15	80-250	0.01-0.12	100-300	0.01-0.15	30-70	0.01-0.12				
		150-800	0.03-0.18	80-300	0.03-0.15					30-60	0.03-0.12	40-70	0.03-0.10
		150-800	0.03-0.18	80-300	0.03-0.15								
		150-800	0.03-0.18	80-250	0.03-0.15								
		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-70	0.01-0.15	40-80	0.01-0.12
120-2200	0.01-0.25	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18						
120-2000	0.01-0.25	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	40-80	0.01-0.15				
		150-800	0.03-0.20	80-300	0.03-0.18					30-70	0.03-0.15	40-80	0.03-0.12
		150-800	0.03-0.20	80-300	0.03-0.18								
		150-800	0.03-0.20	80-250	0.03-0.18								
		150-1600	0.01-0.22	80-300	0.01-0.18					30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.30	150-1600	0.01-0.22	80-300	0.01-0.18								
120-2000	0.01-0.30	150-1500	0.01-0.22	80-250	0.01-0.18			30-70	0.01-0.12				
		150-800	0.03-0.25	80-300	0.03-0.20					30-60	0.03-0.12	40-70	0.03-0.10
		150-800	0.03-0.25	80-300	0.03-0.20								
		150-800	0.03-0.25	80-250	0.03-0.20								
		150-800	0.03-0.25	80-300	0.03-0.20					40-90	0.03-0.15	40-100	0.03-0.15
		150-800	0.03-0.25	80-300	0.03-0.20					40-80	0.03-0.15	40-90	0.03-0.15

		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-60	0.01-0.12	40-70	0.01-0.10
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10
120-2200	0.01-0.20	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18						
120-2000	0.01-0.20	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	30-70	0.01-0.12				
		150-1600	0.03-0.20	80-300	0.03-0.18					30-60	0.03-0.12	40-70	0.03-0.10
										30-60	0.03-0.12	40-70	0.03-0.10
		150-1600	0.03-0.20	80-300	0.01-0.18								
		150-1500	0.03-0.20	80-250	0.01-0.18								
		150-1600	0.01-0.12	80-300	0.01-0.10					30-70	0.01-0.10	40-80	0.01-0.10
120-2200	0.01-0.15	150-1600	0.01-0.12	80-300	0.01-0.10								
120-2000	0.01-0.15	150-1500	0.01-0.12	80-250	0.01-0.10			40-80	0.01-0.10				
						100-400	0.01-0.18						
						100-400	0.01-0.18						
						100-300	0.01-0.18						

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data

ISO-Line M tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	P Acier Stahl Steel						M Inox Rostfreistahl Stainless steel			
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Hochlegierter Stahl High alloyed steel		Austénitique Austenitisch Austenitic		Martensitique Martensitisch Martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
EN-XF3	TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
EN-XF2	TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
		HTi5	100-250	0.03-0.15	80-220	0.03-0.12	50-180	0.03-0.10	80-200	0.03-0.12	80-200	0.03-0.15
EN-MF2	TAC	HTAC	100-200	0.04-0.15	80-160	0.04-0.12	50-120	0.04-0.10	60-140	0.04-0.12	60-140	0.04-0.15
	Ti5	HTi5	100-250	0.04-0.15	80-220	0.04-0.12	50-180	0.04-0.10	80-200	0.04-0.12	80-200	0.04-0.15
EN-MF	Tmax		100-220	0.04-0.30	80-180	0.04-0.25	50-150	0.04-0.20	60-150	0.04-0.25	60-150	0.04-0.25
	Ti4		100-250	0.05-0.30	80-220	0.05-0.25	50-180	0.05-0.20	80-200	0.05-0.25	80-200	0.05-0.25
EN-HF3	TiX	HTiX	100-220	0.06-0.35	80-180	0.06-0.30	50-150	0.06-0.25	60-150	0.06-0.25	60-150	0.06-0.25
	Ti6		100-250	0.06-0.35	80-220	0.06-0.30	50-180	0.06-0.25	80-200	0.06-0.25	80-200	0.06-0.25
EN-HF	Tmax		100-220	0.08-0.40	80-180	0.08-0.35	50-150	0.08-0.30	60-150	0.08-0.30	60-150	0.08-0.30
	TAC		100-200	0.08-0.40	80-160	0.08-0.35	50-140	0.08-0.30	60-140	0.08-0.30	60-140	0.08-0.30
	Ti4		100-250	0.08-0.40	80-220	0.08-0.35	50-180	0.08-0.30	80-200	0.08-0.30	80-200	0.08-0.30
	Ti5	HTi5	100-280	0.08-0.40	80-250	0.08-0.35	50-200	0.08-0.30	80-220	0.08-0.30	80-220	0.08-0.30
ISO-Line CERMET												
FN-X8 CERMET	CTA		100-350	0.01-0.12	80-300	0.01-0.10	70-250	0.01-0.08	80-250	0.01-0.12	80-250	0.01-0.12
	CN6		100-300	0.01-0.12	80-250	0.01-0.10	70-200	0.01-0.08				
ENP-KX CERMET	CT7	HCT7	100-350	0.03-0.20	80-300	0.03-0.18	70-250	0.03-0.15	80-250	0.03-0.18	80-250	0.03-0.18
	CN6		100-300	0.03-0.20	80-250	0.03-0.18	70-200	0.03-0.15				
EN-KM CERMET	CT7	HCT7	100-350	0.03-0.25	80-300	0.03-0.20	70-250	0.03-0.18	80-250	0.03-0.20	80-250	0.03-0.20
	CN6		100-300	0.03-0.25	80-250	0.03-0.20	70-200	0.03-0.18				

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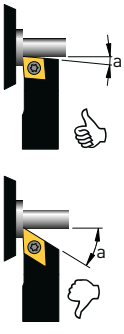
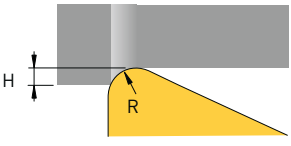
N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys									S Titane et superalliages Titan und Superlegierungen Titanium and superalloys					
Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
		120-1500	0.03-0.20	80-300	0.03-0.15	100-400	0.03-0.18			30-70	0.03-0.15	40-80	0.03-0.12
						100-400	0.03-0.18			30-70	0.03-0.15	40-80	0.03-0.12
		120-1500	0.04-0.20	80-300	0.04-0.15	100-400	0.04-0.18			30-70	0.04-0.15	40-80	0.04-0.12
										30-70	0.06-0.20	40-80	0.06-0.20

Conseils d'utilisation
Anwendungsempfehlungen
Application recommendations



- pour un meilleur état de surface et une meilleure stabilité d'usinage, choisir une géométrie d'outil permettant un angle "a" le plus petit possible
- für bessere Oberflächegüte und Bearbeitungsstabilität, muss die Werkzeuggeometrie mit kleinstmöglichem Winkel "a" ausgewählt werden
- for a better surface finish and better machining stability, choose a tool geometry with angle "a" as small as possible

rapport hauteur de passe / rayon d'outil
Verhältnis zwischen Spantiefe und Werkzeugradius
machining depth / tool radius ratio



H min = 0.7 X R
R max = 1.4 X H