EN
2025

Tools and inserts for milling

Metric

ELMEC is a engineering and manufacturing company of high performance cutting tools.

More than 50 years Mastering Precision

elmec.com.mx

elmec

ELMEC

For over 50 years, Elmec has been a pioneer in developing specialized cutting tool solutions for the automotive, aerospace, construction and agriculture, oil and gas, energy generation and general manufacturing industries.

Our mission is to exceed our customers expectations on service, quality and performance in the manufacturing of tailored rotary cutting tools, made with the clear objective of increasing the productivity in the operation of your plants and making work more more efficient, reliable and accurate.

Industrial sectors

ELMEC is the Manufacturing Line First Responder

As the frontline personnel for manufacturing lines, ELMEC offers: experience, quick response an effective solutions.
Highly trained personnel and high technology equipment guarantee the quiality and precision in each of our products.
We are commited to continuing positioning ourselves as the #1 solution provider in solving our customers' needs.

Product lines:

- **Solid carbide cutting tools, for materials:**

- Forged steel - Titanium - Alloy steels
- Cast iron - Inconel - Stainless steels
- Nodular iron - Aluminum - Hardened steels

- **PCD cutting tools, for materials:**

- High "Si" content aluminu - Plastics
- Composites - GFRP (Fiberglass)
- Non-ferrous materials - CFRP (Carbon fiber)

- **Indexable Inserts.**

ELMEC is a privately owned mexican company located in Hidalgo, México. ELMEC has always differentiate as a supplier that excels in innovation, quality, service and support, values that serve as guidelines on our daily work.

Our values

Our product portfolio of Indexable Inserts

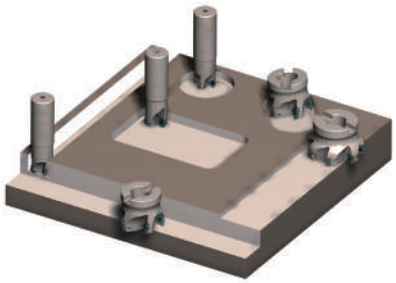
Milling

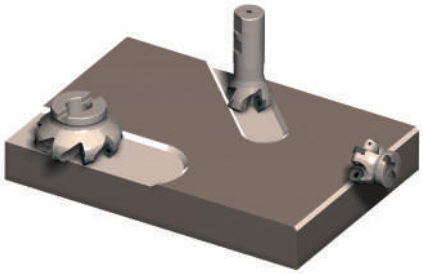
Drilling

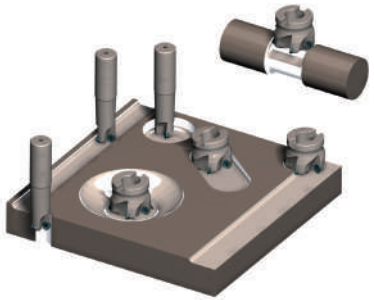
Multicut

Turning

Grooving

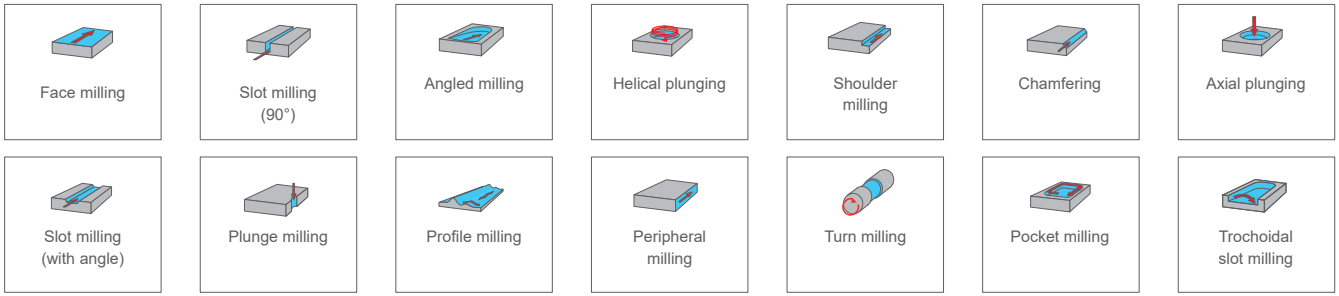


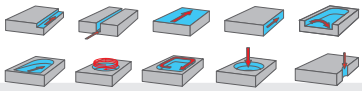
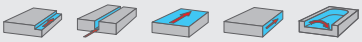
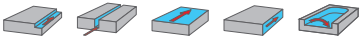
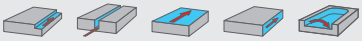
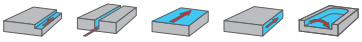
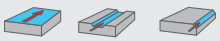
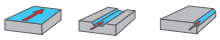
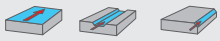




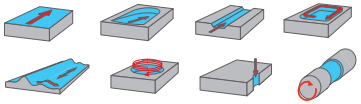
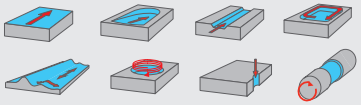
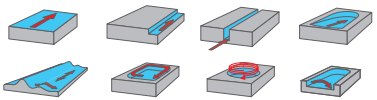
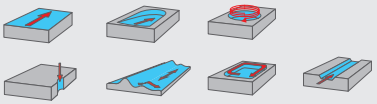
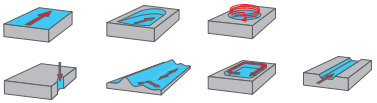
Shouldering / Face milling

Possible applications

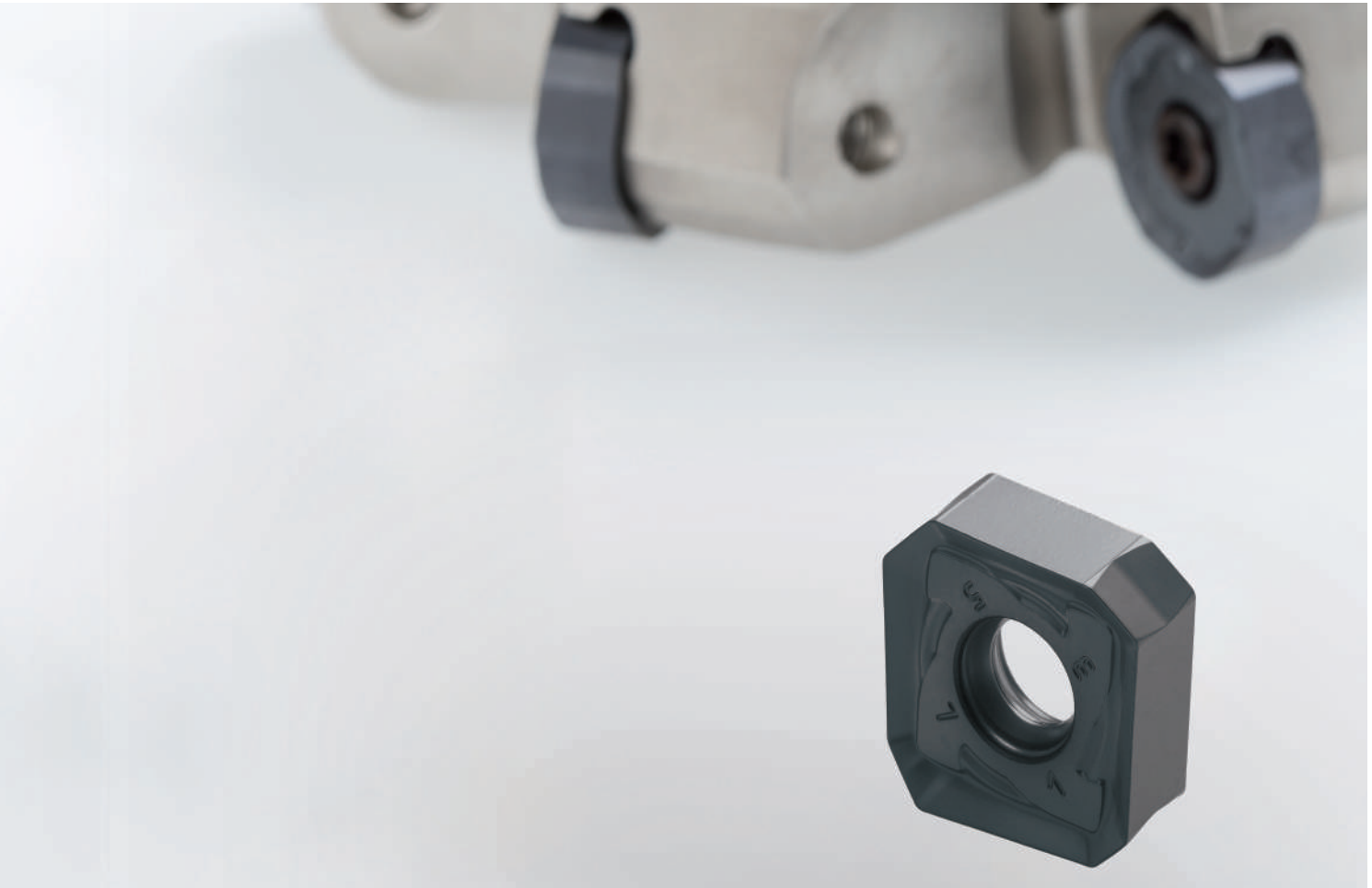


Application		Machining operations	Range	Page
Shouldering 2 x 90°			SSM-UA	P 10 – P 17
Shouldering 3 x 90°			SSM-T	P 18 – P 23
Shouldering 4 x 90°			SSM-S	P 24 – P 29
Shouldering 4 x 90°			DSM-L	P 30 – P 33
Shouldering 4 x 90° NEW			DSM-T-L	P 34 – P 37
Face milling 6 x 45°			SSM-H	P 38 – P 45
Face milling 8 x 45°			DSM-S	P 46 – P 51
Face milling 12 x 45°			DSM-H	P 52 – P 57

Form milling / High feed cutting

Application		Machining operations	Range	Page
Form milling			SSM-R	P 58 – P 67
Form milling Cool NEW			SSM-R	P 68 – P 71
High feed cutting			SSM-E	P 72 – P 75
High feed cutting			SSM-HFC	P 76 – P 85
High feed Cool NEW			SSM-HFC	P 86 – P 87

Products



Overview APKT... APHT...

Application

1) Shoulder milling

2) Slot milling (90°)

3) Face milling

4) Peripheral milling

5) Trochoidal slot milling

6) Angled milling

7) Helical milling

8) Pocket plunging

9) Axial plunging

10) Plunge milling

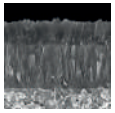
Chipbreaker

HCM: Steel
SCM: Stainless Steel
CCM: Cast iron
LMM: Aluminium
RCM: Specific radius

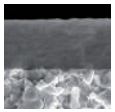
Grade

Standard grades

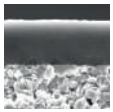
CTCP230 ■



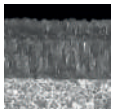
CTPP235 ■



CTPM240 ■

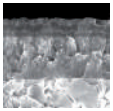


CTCK215 ■

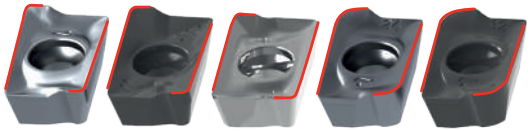


CTWN715 ■

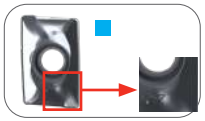
CTC5235 ■



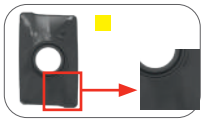
2 effective cutting edges



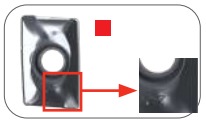
Which chipbreaker to use?



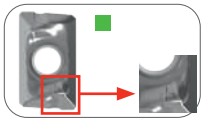
HCM
Strong cutting edge for general steel applications and hard conditions milling.



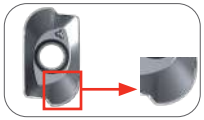
SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.



CCM
Strong cutting edge for cast iron applications.



LMM
Extremely sharp cutting edge for aluminium and non-ferrous metals.



RCM
Specific radius.

Available range APKT10

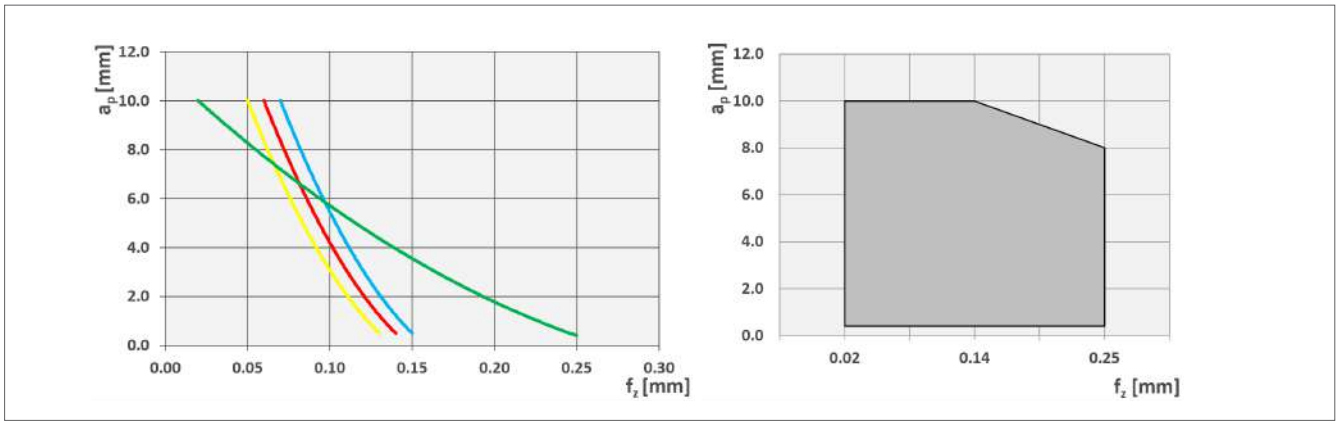
Insert	Designation	Chipbreaker	Material number	Available
	APKT 1003PDER-HCM CTCP230	…-HCM	12384796	•
	APKT 1003PDER-HCM CTPP235	…-HCM	14534961	•
	APKT 1003PDER-SCM CTPM240	…-SCM	14534962	•
	APKT 1003PDER-SCM CTC5235	…-SCM	11582506	•
	APKT 1003PDER-CCM CTCK215	…-CCM	14641285	•
	APHT 100302FR-LMM CTWN715	…-LMM	14617035	•
	APHT 100304FR-LMM CTWN715	…-LMM	14617031	•
	APHT 100308FR-LMM CTWN715	…-LMM	11348849	•
	APKT 100308ER-RCM CTPP235	…-RCM	12234997	○
	APKT 100308ER-RCM CTPM240	…-RCM	14641330	•
	APKT 100308ER-RCM CTCK215	…-RCM		○
	APKT 100312ER-RCM CTPP235	…-RCM	14652659	•
	APKT 100312ER-RCM CTPM240	…-RCM	14652660	•
	APKT 100312ER-RCM CTCK215	…-RCM		○
	APKT 100316ER-RCM CTPP235	…-RCM	14641303	•
	APKT 100316ER-RCM CTPM240	…-RCM	14641333	•
	APKT 100316ER-RCM CTCK215	…-RCM		○
	APKT 100330ER-RCM CTPP235	…-RCM	14641320	○
	APKT 100330ER-RCM CTPM240	…-RCM	14641335	○
	APKT 100330ER-RCM CTCK215	…-RCM		○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-UA10-12.R.01-B16-24-79	12	1	14655180	•
	C-SSM-UA10-16.R.02-B-25-80	16	2	12411773	•
	C-SSM-UA10-20.R.03-B-25-85	20	3	12411768	•
	C-SSM-UA10-25.R.04-B-32-95	25	4	12411777	•
	C-SSM-UA10-32.R.05-B-40-105	32	5	12411783	•
	G-SSM-UA10-16.R.02	16	2	14655181	•
	G-SSM-UA10-20.R.03	20	3	12411792	•
	G-SSM-UA10-25.R.04	25	4	12411797	•
	G-SSM-UA10-32.R.05	32	5	12411799	•
	A-SSM-UA10-40.R.04	40	4	14655178	•
	A-SSM-UA10-40.R.06	40	6	12630624	•
	A-SSM-UA10-50.R.05	50	5	14654216	•
	A-SSM-UA10-50.R.08	50	8	12630633	•
	A-SSM-UA10-63.R.06	63	6	14654218	•
	A-SSM-UA10-63.R.09	63	9	12630637	•
	A-SSM-UA10-80.R.07	80	7	14655179	•
	A-SSM-UA10-80.R.10	80	10	12630638	•
	A-SSM-UA10-100.R.12	100	12	12630640	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M2.5 x 5.6 – T08+ (only for C- + G-)	1.6	11114238	•
	M2.5 x 7.3 – T08+ (only for A-)	1.6	11114242	•

Cutting data APKT10

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230	220 – 60	0.07 – 0.15	10 – 0.5
		RCM	CTPP235			10 – 1.6
M	Stainless steel	SCM	CTPM240	200 – 60	0.05 – 0.13	10 – 0.5
		RCM	CTC5235		0.07 – 0.15	10 – 1.6
K	Cast iron	CCM	CTCK215	320 – 100	0.06 – 0.14	10 – 0.5
		RCM			0.07 – 0.15	10 – 1.6
N	Non-ferrous	LMM	CTWN715	< 2000	0.02 – 0.25	10 – 0.2

Available range APKT16

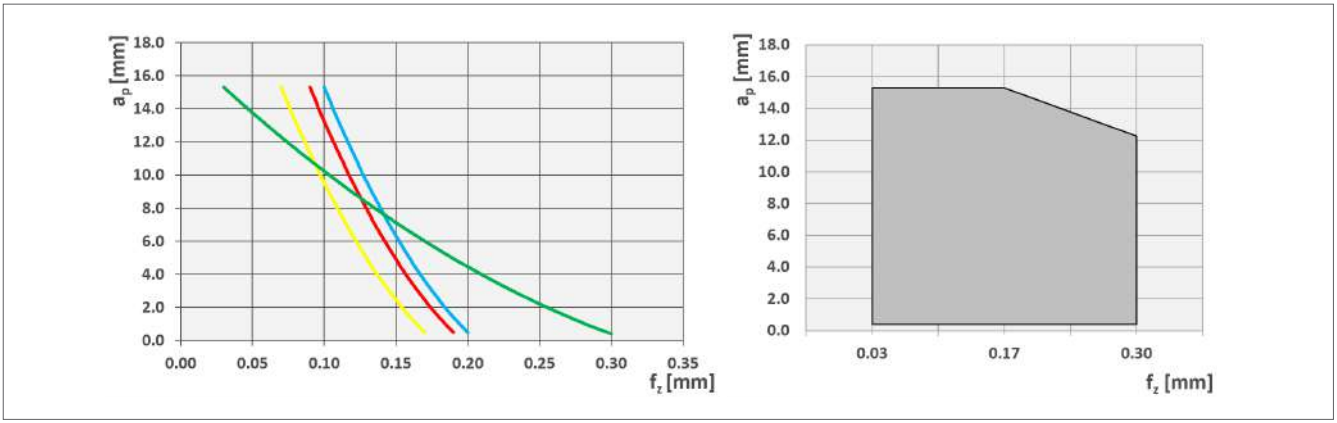
Insert	Designation	Chipbreaker	Material number	Available
	APKT 1604PDER-HCM CTCP230	…-HCM	14641339	•
	APKT 1604PDER-HCM CTPP235	…-HCM	14534966	•
	APKT 1604PDER-SCM CTPM240	…-SCM	14534968	•
	APKT 1604PDER-SCM CTC5235	…-SCM	11582503	•
	APKT 1604PDER-CCM CTCK215	…-CCM	14641345	•
	APHT 1604PDFR-LMM CTWN715	…-LMM	11348852	•
	APKT 160416ER-RCM CTPP235	…-RCM	12067441	•
	APKT 160416ER-RCM CTPM240	…-RCM	14641347	•
	APKT 160416ER-RCM CTCK215	…-RCM	14652661	•
	APKT 160424ER-RCM CTPP235	…-RCM	12067437	○
	APKT 160424ER-RCM CTPM240	…-RCM	14641349	•
	APKT 160424ER-RCM CTCK215	…-RCM		○
	APKT 160432ER-RCM CTPP235	…-RCM	12067435	○
	APKT 160432ER-RCM CTPM240	…-RCM	14641353	•
	APKT 160432ER-RCM CTCK215	…-RCM		○
	APKT 160440ER-RCM CTPP235	…-RCM		○
	APKT 160440ER-RCM CTPM240	…-RCM	14677925	•
	APKT 160440ER-RCM CTCK215	…-RCM	14828072	•
	APKT 160448ER-RCM CTPP235	…-RCM	12314049	○
	APKT 160448ER-RCM CTPM240	…-RCM	14641361	•
	APKT 160448ER-RCM CTCK215	…-RCM		○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-UA16-25.R.02-B-40-95	25	2	14655187	•
	C-SSM-UA16-32.R.03-B-40-105	32	3	12630641	•
	C-SSM-UA16-40.R.04-B-50-125	40	4	12630643	•
	G-SSM-UA16-25.R.02	25	2	14655190	•
	G-SSM-UA16-32.R.03	32	3	14655192	•
	G-SSM-UA16-40.R.04	40	4	14655184	•
	A-SSM-UA16-40.R.04	40	4	12630644	•
	A-SSM-UA16-50.R.05	50	5	12630646	•
	A-SSM-UA16-63.R.06	63	6	12630647	•
	A-SSM-UA16-80.R.07	80	7	14655176	•
	A-SSM-UA16-80.R.08	80	8	12630648	•
	A-SSM-UA16-100.R.09	100	9	12630649	•
	A-SSM-UA16-125.R.09	125	9	14655183	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 8.5 – T15 (only for Ø25 + Ø32)	5	11037484	•
	M4.0 x 11.0 – T15+	5	1345432	•
	Power screw M8.0 x 30.0 (only for A-SSM-UA16-40.R.04)	15	11036880	•

Cutting data APKT16

Starting parameters:



Grades and materials:

				Cutting data		
Material group		**Chipbreaker**	**Grade**	**v_c [m/min]**	**f_z [mm]**	**a_p [mm]**
P	Steel	HCM	CTCP230	220 – 60	0.1 – 0.2	15.3 – 0.5
		RCM	CTPP235			15.3 – 1.6
M	Stainless steel	SCM	CTPM240	200 – 60	0.07 – 0.17	15.3 – 0.5
		RCM	CTC5235		0.1 – 0.2	15.3 – 1.6
K	Cast iron	CCM	CTCK215	320 – 100	0.09 – 0.19	15.3 – 0.5
		RCM			0.1 – 0.2	15.3 – 1.6
N	Non-ferrous	LMM	CTWN715	< 2000	0.03 – 0.30	15.3 – 0.4

Overview TOKX

Application

1) Shoulder milling

2) Slot milling (90°)

3) Face milling

4) Peripheral milling

5) Trochoidal slot milling

Chipbreaker

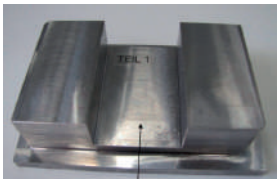
HCM: Steel – Cast iron*
SCM: Stainless Steel – Exotic* – Titanium*

3 effective cutting edges

* secondary application

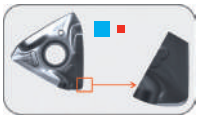
Customer benefits

- High precision 90° milling
- Low power consumption. maximum chip removal rate
- Chipbreaker optimised by FEM
- Soft cutting providing quiet machining and maximum spindle protection

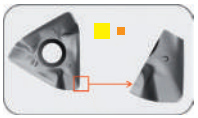


Result: Workpieces with clean surface. close tolerances and reduced formation of burrs, maximum service life of tool and insert.

Which chipbreaker to use?

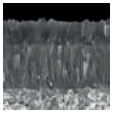


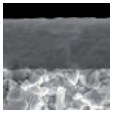
HCM
Strong cutting edge for general steel applications and hard conditions milling.

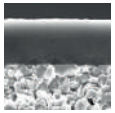


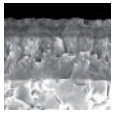
SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

Grades

CTCP230 

CTPP235 

CTPM240 

CTC5235 

Available range TOKX07

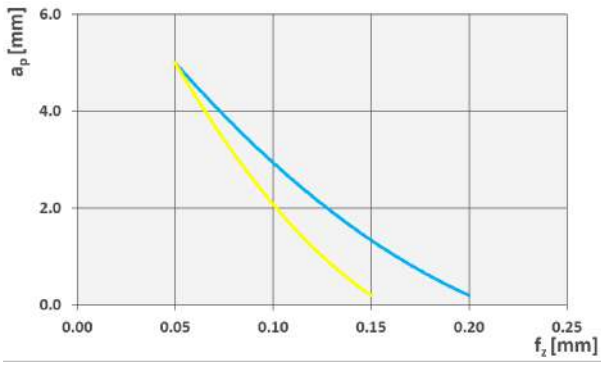
Insert	Designation	Chipbreaker	Material number	Available
	TOKX 070305PDER-HCM CTCP230	…-HCM	12193325	○
	TOKX 070305PDER-HCM CTPP235	…-HCM	12069063	•
	TOKX 070305PDER-SCM CTPM240	…-SCM	12120017	○
	TOKX 070305PDER-SCM CTC5235	…-SCM	12069061	•
	TOKX 070308PDER-HCM CTCP230	…-HCM	12307051	○
	TOKX 070308PDER-HCM CTPP235	…-HCM	12143629	•
	TOKX 070308PDER-SCM CTPM240	…-SCM	12143626	○
	TOKX 070308PDER-SCM CTC5235	…-SCM	12143628	○

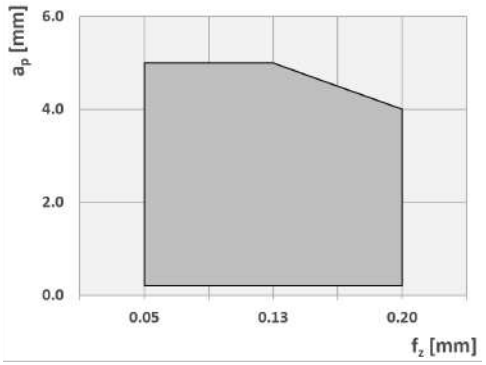
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-T07-20.R.03-B-25-77	20	3	12074285	•
	C-SSM-T07-25.R.04-B-34-90	25	4	11998760	•
	C-SSM-T07-32.R.05-B-40-102	32	5	12074282	•
	G-SSM-T07-20.R.03	20	3	12152218	•
	G-SSM-T07-25.R.04	25	4	12152220	•
	G-SSM-T07-32.R.05	32	5	12152223	•
	A-SSM-T07-40.R.05	40	5	12152214	•
	A-SSM-T07-50.R.06	50	6	12152215	○

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M2.5x6.0 – T08	1.2	24645	•

Cutting data TOKX07

Starting parameters:





Grades and materials:

				Cutting data		
Material group		**Chipbreaker**	**Grade**	**v_c [m/min]**	**f_z [mm]**	**a_p [mm]**
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.05 – 0.2	5 – 0.2
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.05 – 0.15	5 – 0.2

Available range TOKX09

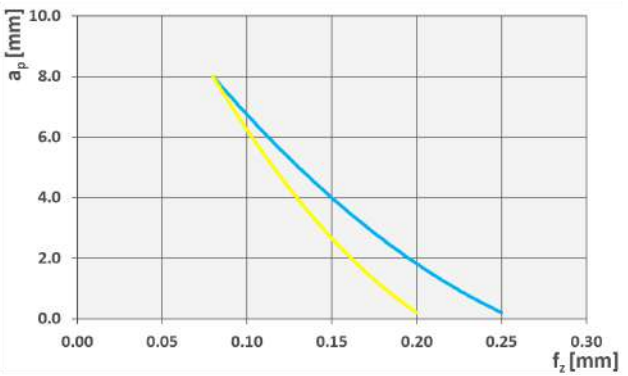
Insert	Designation	Chipbreaker	Material number	Available
	TOKX 09T308PDER-HCM CTCP230	…-HCM	12324207	•
	TOKX 09T308PDER-HCM CTPP235	…-HCM	12262506	•
	TOKX 09T308PDER-SCM CTPM240	…-SCM	12119996	○
	TOKX 09T308PDER-SCM CTC5235	…-SCM	12066590	○
	TOKX 09T312PDER-HCM CTCP230	…-HCM	12378662	○
	TOKX 09T312PDER-HCM CTPP235	…-HCM	12376480	○
	TOKX 09T312PDER-SCM CTPM240	…-SCM	12143645	○
	TOKX 09T312PDER-SCM CTC5235	…-SCM	12143648	○
	TOKX 09T316PDER-HCM CTCP230	…-HCM	12378664	○
	TOKX 09T316PDER-HCM CTPP235	…-HCM	12376489	○
	TOKX 09T316PDER-SCM CTPM240	…-SCM	12143637	○
	TOKX 09T316PDER-SCM CTC5235	…-SCM	12143639	•

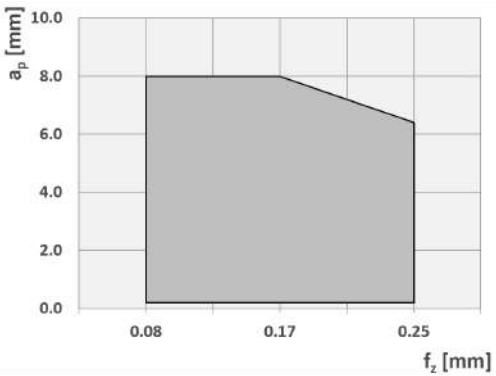
Body	Designation	ø Milling cutter	z	Material number	Available
	C-SSM-T09-32.R.03-B-40-102	32	3	11869624	•
	A-SSM-T09-40.R.04	40	4	11987902	•
	A-SSM-T09-50.R.05	50	5	11987903	•
	A-SSM-T09-63.R.06	63	6	11987904	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M3.0 x 7.3 – T08	1.2	77613	•
	Power screw M8.0 x 30.0 (only for A-SSM-T09-40.R.04)	15	11036880	•

Cutting data TOKX09

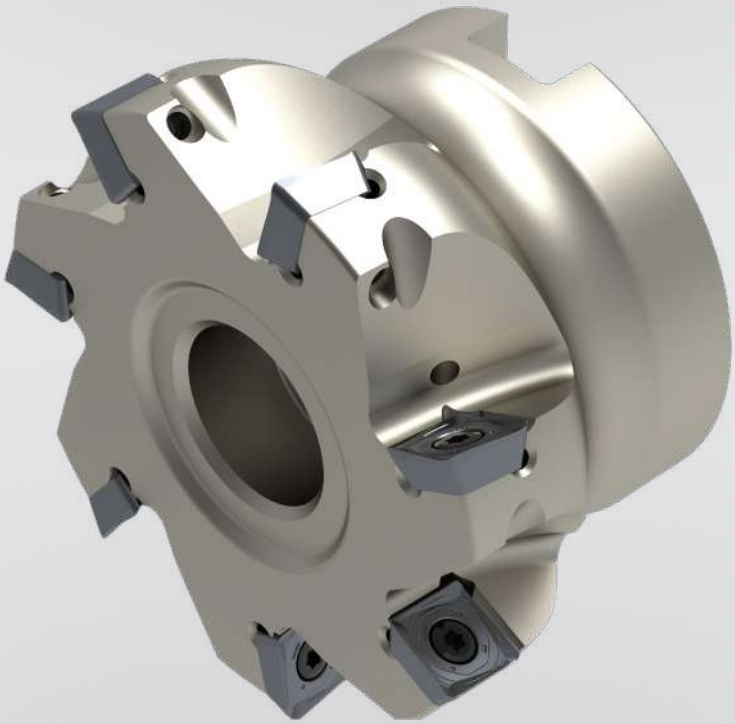
Starting parameters:





Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.08 – 0.25	8 – 0.2
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.2	8 – 0.2



Overview SDKT

Application

1) Shoulder milling

2) Slot milling (90°)

3) Face milling

4) Peripheral milling

5) Trochoidal slot milling

Chipbreaker

HCM: Steel
SCM: Stainless Steel – Exotic* – Titanium*
CCM: Cast iron
LMM: Aluminium

4 effective cutting edges

Customer benefits

- High precision 90° milling
- Economic solution:
  High chip volume on low power machines
  Reduced cost per cutting edge compared to current insert solutions. (APKT and ADKT)
- Reduced machining costs:
  Compared to APKT10: +20 % to +30 % in price
  Advantage: up to 35 % cost reduction per cutting edge!

Which chipbreaker to use?

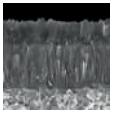
HCM
Strong cutting edge for general steel applications and hard conditions milling.

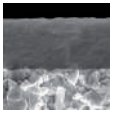
SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

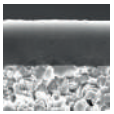
CCM
Strong cutting edge for cast iron applications.

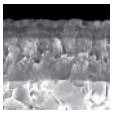
LMM
Extremely sharp cutting edge for aluminum and non-ferrous metals.

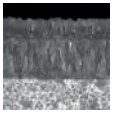
Grades

CTCP230 ■


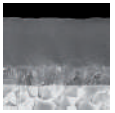
CTPP235 ■


CTPM240 ■


CTC5235 ■


CTCK215 ■


CTWN715 ■


CTC5240 ■


* secondary application

Available range SDKT09

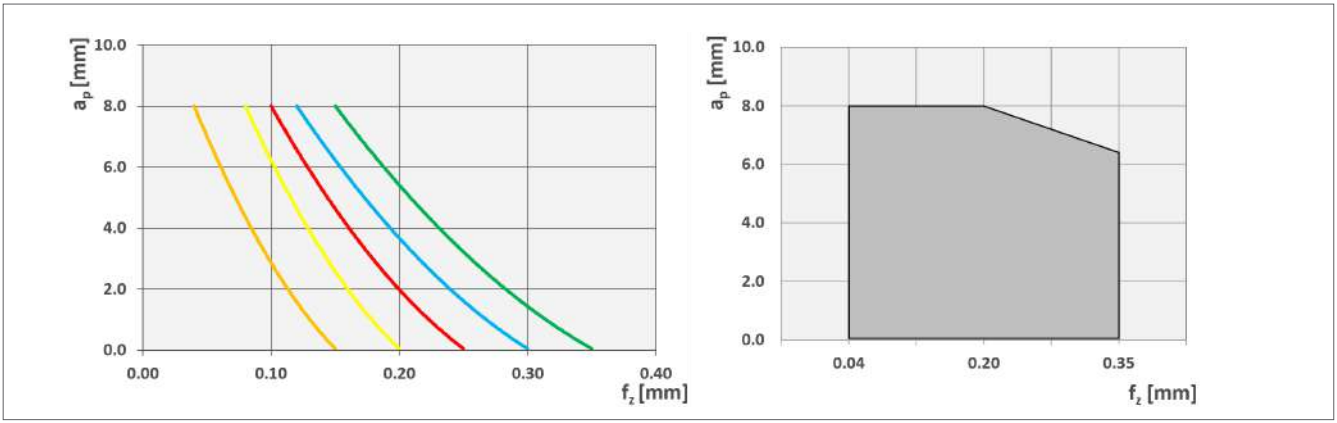
Insert	Designation	Chipbreaker	Material number	Available
	SDKT 09T308SR-HCM CTCP230	…-HCM	11979028	•
	SDKT 09T308SR-HCM CTPP235	…-HCM	11979030	•
	SDKT 09T308SR-SCM CTPM240	…-SCM	11979032	•
	SDKT 09T308SR-SCM CTC5235	…-SCM	11584645	•
	SDKT 09T308SR-SCM CTC5240	…-SCM	11710895	•
	SDKT 09T308SR-CCM CTCK215	…-CCM	12193340	○
	SDHT 09T308FR-LMM CTWN715	…-LMM	14652621	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-S09-25.R.03-B-32-88	25	3	11596014	•
	C-SSM-S09-32.R.04-B-40-100	32	4	11596009	•
	G-SSM-S09-25.R.03	25	3	12272435	○
	G-SSM-S09-32.R.04	32	4	12272436	○
	A-SSM-S09-40.R.05	40	5	11596010	•
	A-SSM-S09-50.R.06	50	6	11584233	•
	A-SSM-S09-63.R.07	63	7	11596011	•
	A-SSM-S09-80.R.09	80	9	11596013	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M3.0 x 7.3 – T08	1.2	77613	•
	Power screw M8.0 x 30.0 (only for A-SSM-S09-40.R.04)	15	1036880	•

Cutting data SDKT09

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.12 – 0.3	8 – 0.05
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.2	8 – 0.05
K	Cast iron	CCM	CTCK215	320 – 100	0.1 – 0.25	8 – 0.05
N	Non-ferrous	LMM	CTWN715	< 2000	0.15 – 0.35	8 – 0.05
S	Heat resistant alloys	SCM	CTC5235	75 – 25	0.04 – 0.15	8 – 0.05
S	Titanium	SCM	CTC5240			

Available range SDKT12

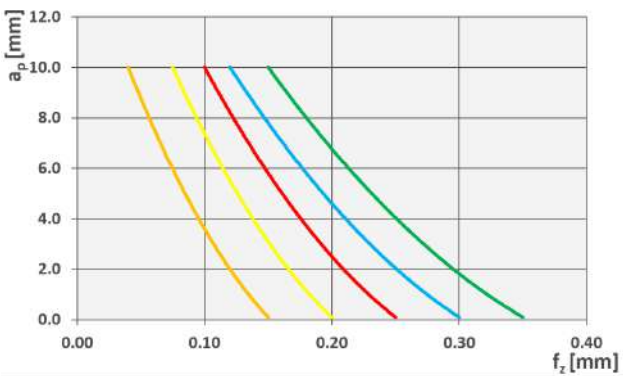
Insert	Designation	Chipbreaker	Material number	Available
	SDKT 120508SR-HCM CTCP230	…-HCM	12154549	•
	SDKT 120508SR-HCM CTPP235	…-HCM	12062538	•
	SDKT 120508SR-SCM CTPM240	…-SCM	12074525	•
	SDKT 120508SR-SCM CTC5235	…-SCM	12067263	•
	SDKT 120508SR-SCM CTC5240	…-SCM	12071921	•
	SDKT 120508SR-CCM CTCK215	…-CCM	12154553	•
	SDHT 120508FR-LMM CTWN715	…-LMM	14652623	•

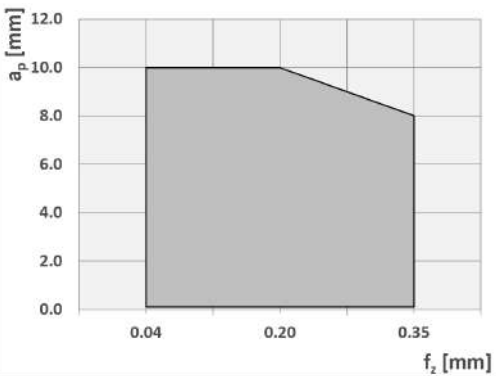
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-S12-32.R.03-B-40-100	32	3	12138258	•
	A-SSM-S12-40.R.04	40	4	11965069	•
	A-SSM-S12-50.R.05	50	5	11981629	•
	A-SSM-S12-63.R.06	63	6	12060728	•
	A-SSM-S12-80.R.07	80	7	12060727	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 8.5 – T15 (only for Ø32)	5	11037484	•
	M4.0 x 11 – T15+	5	1345432	•
	Power screw M8.0 x 30.0 (only for A-SSM-S12-40.R.04)	15	11036880	•

Cutting data SDKT12

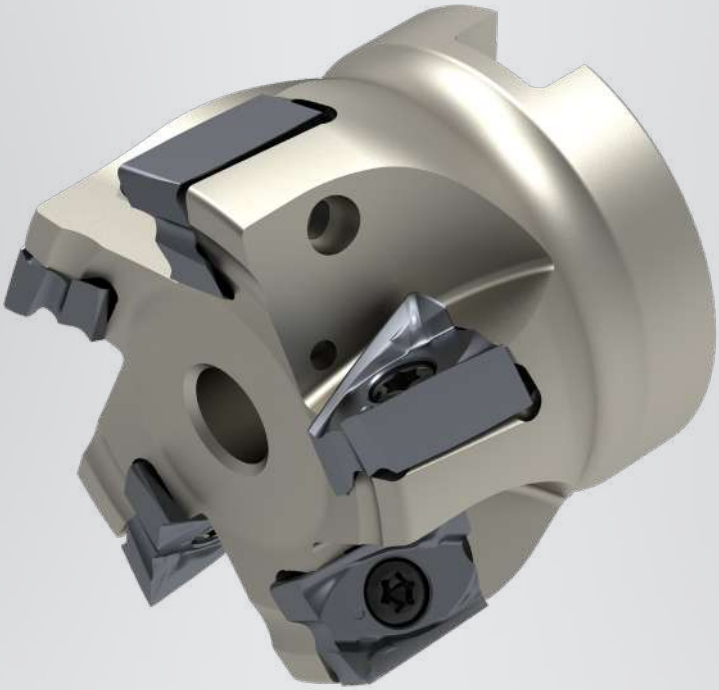
Starting parameters:





Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.12 – 0.3	10 – 0.1
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.2	10 – 0.1
K	Cast iron	CCM	CTCK215	320 – 100	0.1 – 0.25	10 – 0.1
N	Non-ferrous	LMM	CTWN715	< 2000	0.15 – 0.35	10 – 0.1
S	Heat resistant alloys	SCM	CTC5235	75 – 25	0.04 – 0.15	10 – 0.1
S	Titanium	SCM	CTC5240			



Overview LNKU / LOKU

Application

1) Shoulder milling

2) Slot milling (90°)

3) Face milling

4) Peripheral milling

5) Trochoidal slot milling

Chipbreaker

HCM: Steel – Cast iron*
SCM: Stainless Steel – Exotic* – Titanium*
CCM: Cast iron

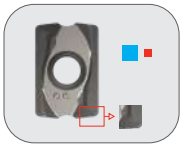
4 effective cutting edges

* secondary application

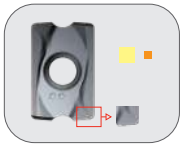
Customer benefits

- High precision 90° milling
- Low power consumption, maximum chip removal rate
- Chipbreaker optimised by FEM
- Soft cutting providing quiet machining and maximum spindle protection

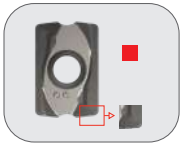
Which chipbreaker to use?



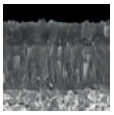
HCM
Strong cutting edge for general steel applications and hard conditions milling.

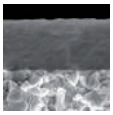


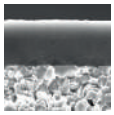
SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

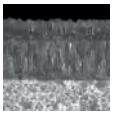


CCM
Strong cutting edge for cast iron applications.

CTCP230 

CTPP235 

CTPM240 

CTCK215 

Available range LNKU12 / LOKU 12

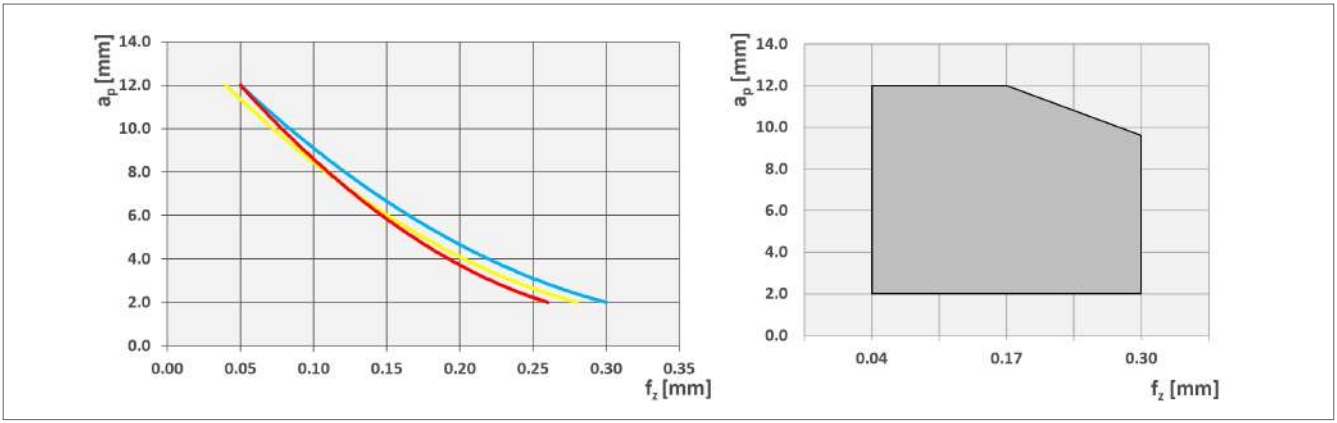
Insert	Designation	Chipbreaker	Material number	Available
	LNKU 120608ER-HCM CTCP230	…-HCM	12434604	•
	LNKU 120608ER-HCM CTPP235	…-HCM	12158008	•
	LNKU 120608ER-SCM CTPM240	…-SCM	12373789	•
	LNKU 120608ER-CCM CTCK215	…-CCM	14659156	•
	LOKU 120608ER-SCM CTPM240	…-SCM	12373779	•
	LOKU 120608ER-XCM CTC5235	…-XCM		○
	LOKU 120608ER-XCM CTC5240	…-XCM		○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-LO/LN12-40.R.04	40	4	14549248	•
	A-DSM-LO/LN12-50.R.05	50	5	12367555	•
	A-DSM-LO/LN12-63.R.06	63	6	12645968	•
	A-DSM-LO/LN12-80.R.07	80	7	12645971	•
	A-DSM-LO/LN12-100.R.08	100	8	14684049	○
	A-DSM-LO/LN12-125.R.09	125	9	14684046	○
	A-DSM-LO/LN12-160.R.11	160	11	14685069	○

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11 – T15	5	11042274	•
	Power screw M8.0 x 30.0 (only for Ø 40)	15	11036880	•
	Power screw M10.0 x 31.0 (only for Ø 50)	20	11040298	•

Cutting data LNKU12 / LOKU 12

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.05 – 0.30	12 – 2.0
M	Stainless steel	SCM	CTPM240	200 – 60	0.04 – 0.28	12 – 2.0
K	Cast iron	CCM	CTCK215	320 – 100	0.05 – 0.26	12 – 2.0

Overview LNHU

Application

1) Shoulder milling

2) Slot milling (90°)

3) Face milling

4) Peripheral milling

5) Trochoidal slot milling

Chipbreaker

HCM: Steel
SCM: Stainless Steel
CCM: Cast iron
XCM: Exotic – Titanium

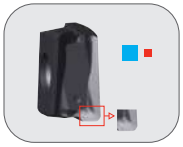
4 effective cutting edges

Customer benefits

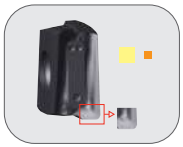
NEW

- High level of cost efficiency
- Low cutting material costs due to four cutting edges per indexable insert
- High precision 90° milling
- High process reliability
- Stable, tangential indexable inserts (thanks a special axial support)

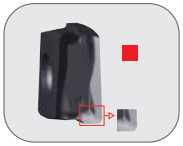
Which chipbreaker to use?



HCM
Strong cutting edge for general steel applications and hard conditions milling.

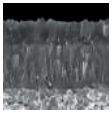


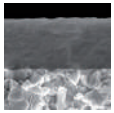
SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

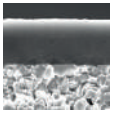


CCM
Strong cutting edge for cast iron applications.

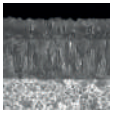
XCM
Stable cutting edge for dedicated exotic materials and titanium.

CTCP230 

CTPP235 

CTPM240 

CTC5235 

CTCK215 

CTC5240 

Available range LNHU12

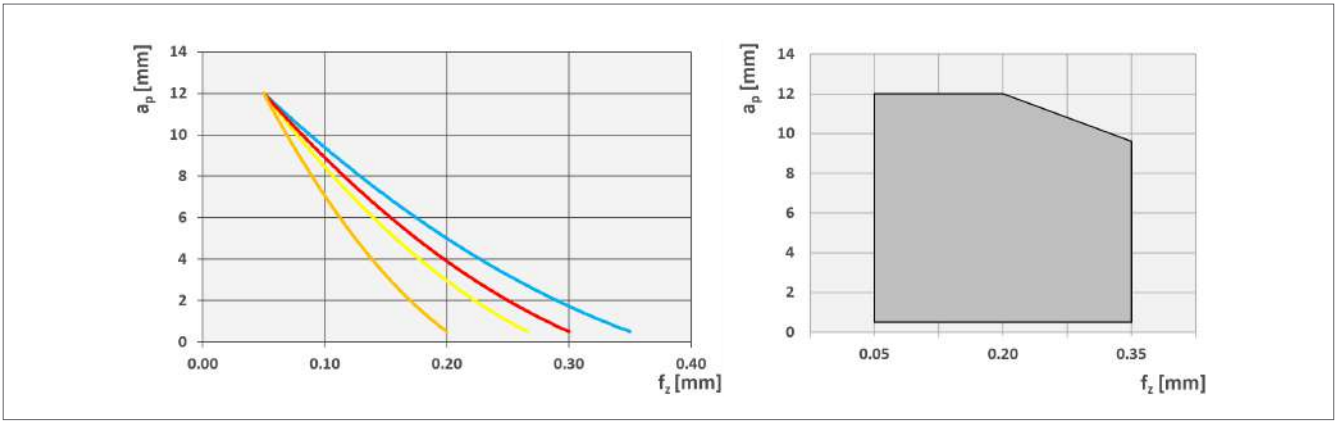
Insert	Designation	Chipbreaker	Material number	Available
	LNHU 120608-HCM CTCP230	…-HCM	14442228	•
	LNHU 120608-HCM CTPP235	…-HCM	12431735	•
	LNHU 120608-SCM CTPM240	…-SCM	14894889	•
	LNHU 120608-SCM CTC5235	…-SCM	14894892	•
	LOHU 120608-CCM CTCK215	…-CCM	14536051	•
	LOHU 120608-XCM CTC5240	…-XCM	14894894	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-T-LN12-40.R.04	40	4	14891262	•
	A-DSM-T-LN12-50.R.05	50	5	14796872	•
	A-DSM-T-LN12-63.R.06	63	6	14891263	•
	A-DSM-T-LN12-80.R.07	80	7	14891264	•
	A-DSM-T-LN12-100.R.09	100	9	14891266	•
	A-DSM-T-LN12-125.R.11	125	11	14891267	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11 – T15+	5	1345432	•

Cutting data LNHU12

Starting parameters:



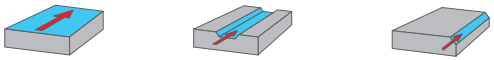
Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.05 – 0.35	12 – 0.5
M	Stainless steel	SCM	CTPM240	200 – 60	0.05 – 0.27	12 – 0.5
K	Cast iron	CCM	CTCK215	320 – 100	0.05 – 0.3	12 – 0.5
S	Heat resistant alloys	XCM	CTC5235	75 – 25	0.05 – 0.2	12 – 0.5
S	Titanium		CTC5240			

Overview HPKT... HPCT...

Application

1) Face milling 2) Slot milling 3) Chamfering



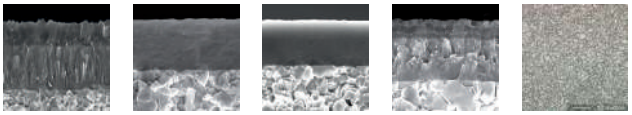
Chipbreaker

HCM: Steel – Cast iron*
SCM: Stainless Steel – Exotic* – Titanium*
LMM: Aluminium and non-ferrous metals

6 effective cutting edges

Grades

CTCP230 ■ CTPP235 ■ CTPM240 ■ CTC5235 ■ CTWN715 ■



* secondary application

Masterfinish

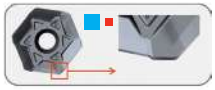
Extremely soft, spindle-friendly cut. The very positive cutting edge chipbreaker paired with the new chipbreaker designs revolutionizes milling on small to medium sized milling machines.

“Masterfinish technology”

Indexing 6 times

- Indexing of the insert without complete removal of the clamping screw is possible!
- Direct insert indexing saves valuable machine time.

Which chipbreaker to use?



HCM
Strong cutting edge for general steel applications and hard conditions milling.

SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

LMM
Extremely sharp cutting edge for aluminum and non-ferrous metals.

Available range HPKT... HPCT...

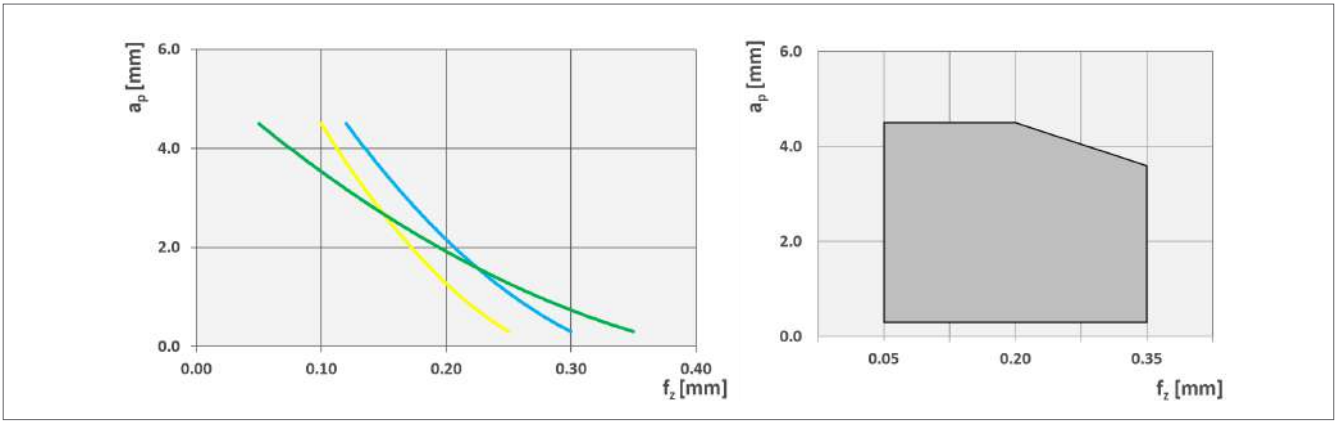
Insert	Designation	Chipbreaker	Material number	Available
	HPKT 0604AZER-HCM CTCP230	…-HCM	12193366	○
	HPKT 0604AZER-HCM CTPP235	…-HCM	12193369	•
	HPKT 0604AZER-SCM CTC5235	…-SCM	11526389	•
	HPCT 0604AZFR-LMM CTWN715	…-LMM	14652610	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-H06-40.R.04-B32-50-110	40	4	11520454	•
	A-SSM-H06-40.R.04	40	4	11520455	•
	A-SSM-H06-50.R.05	50	5	11520456	•
	A-SSM-H06-63.R.06	63	6	11520457	•
	A-SSM-H06-80.R.07	80	7	11520458	•
	A-SSM-H06-100.R.09	100	9	11520459	•
	A-SSM-H06-125.R.10	125	10	11520460	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11 – T15+	5	1345432	•
	Power screw M8.0 x 30.0 (only for A-SSM-H06-40.R.04)	15	11036880	•

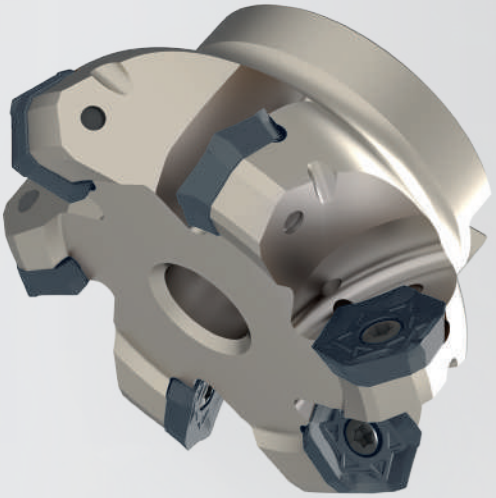
Cutting data HPKT... HPCT...

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.12 – 0.3	4.5 – 0.3
M	Stainless steel	SCM	CTC5235	200 – 60	0.1 – 0.25	4.5 – 0.3
N	Non-ferrous	LMM	CTWN715	< 2000	0.05 – 0.35	4.5 – 0.3



Overview HOKT... HOCT...

Application

1) Face milling

2) Slot milling

3) Chamfering

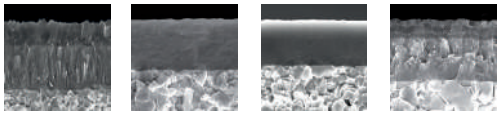
Chipbreaker

HCM: Steel – Cast iron*
SCM: Stainless Steel – Exotic* – Titanium*

6 effective cutting edges

Grades

CTCP230 ■ CTPP235 ■ CTPM240 ■ CTC5235 ■



* secondary application

Masterfinish

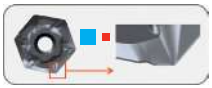
- Extremely soft, spindle-friendly cut. The very positive cutting edge chipbreaker paired with the new chipbreaker designs revolutionizes milling on small to medium sized milling machines.

“Masterfinish technology”

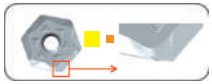
Indexing 6 times

- Indexing of the insert without complete removal of the clamping screw is possible!
- Direct insert indexing saves valuable machine time.

Which chipbreaker to use?



HCM
Strong cutting edge for general steel applications and hard conditions milling.



SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

Available range HOKT... HOCT...

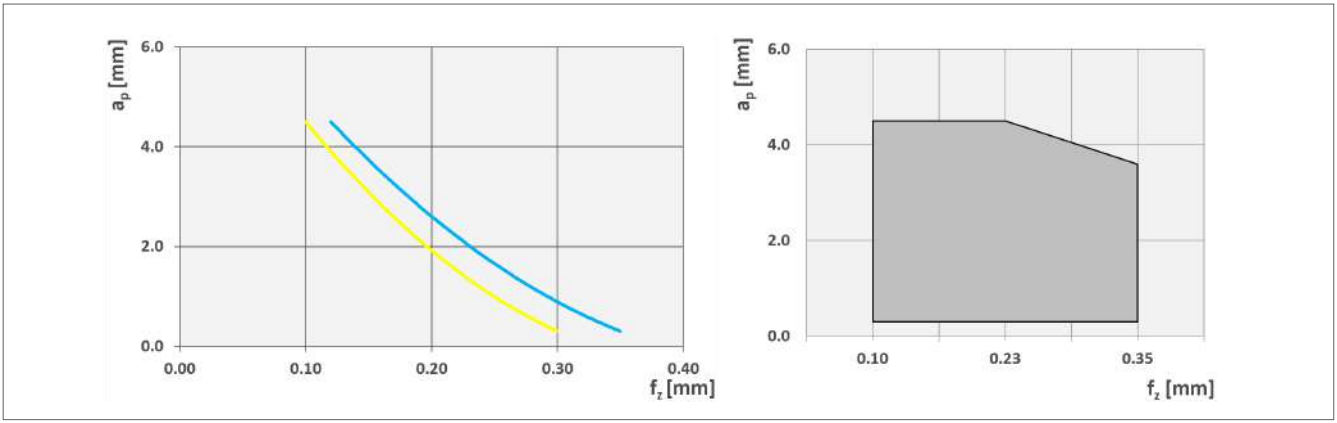
Insert	Designation	Chipbreaker	Material number	Available
	HOKT 0604AZER-HCM CTCP230	…-HCM	11950674	○
	HOKT 0604AZER-HCM CTPP235	…-HCM	11943817	•
	HOCT 0604AZER-SCM CTPM240	…-SCM	14652624	○
	HOCT 0604AZER-SCM CTC5235	…-SCM	12212264	○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-H06-40.R.04-B32-50-110	40	4	11520454	•
	A-SSM-H06-40.R.04	40	4	11520455	•
	A-SSM-H06-50.R.05	50	5	11520456	•
	A-SSM-H06-63.R.06	63	6	11520457	•
	A-SSM-H06-80.R.07	80	7	11520458	•
	A-SSM-H06-100.R.09	100	9	11520459	•
	A-SSM-H06-125.R.10	125	10	11520460	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11 – T15+	5	1345432	•
	Power screw M8.0 x 30.0 (only for A-SSM-H06-40.R.04)	15	11036880	•

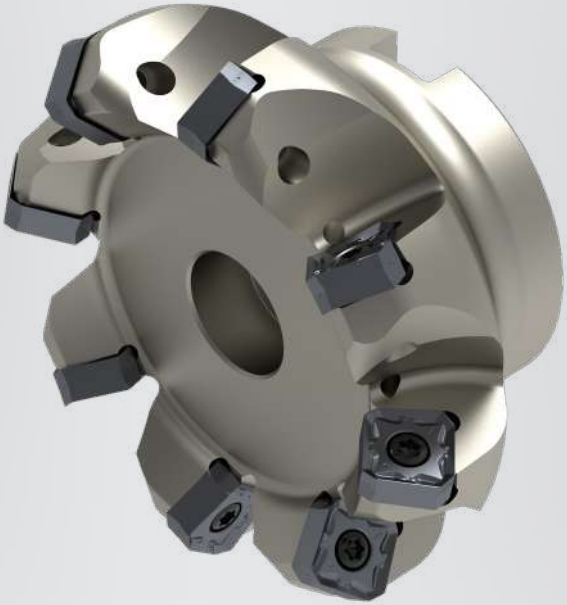
Cutting data HOKT... HOCT...

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.12 – 0.35	4 – 0.3
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.1 – 0.3	4 – 0.3



Overview SOKU

Application

1) Face milling

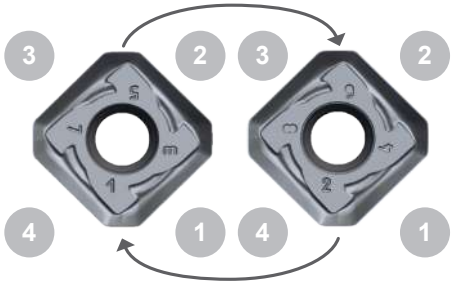
2) Slot milling

3) Chamfering

Chipbreaker

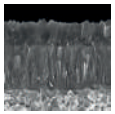
HCM: Steel / Medium & roughing operations
SCM: Steel – Stainless Steel / Finishing
CCM: Cast iron

Indexing 4 times and reversible

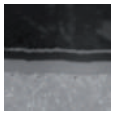


Grades

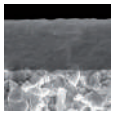
CTCP230 ■



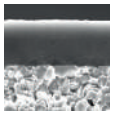
CTCP235 ■



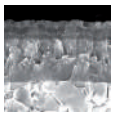
CTPP235 ■



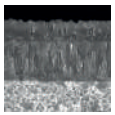
CTPM240 ■



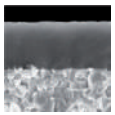
CTC5235 ■



CTCK215 ■



CTPK220 ■



Customer benefits

- Masterfinish" technology
- Double sided positive (positive rake angle)

Positive Rake angle

Square double-sided insert!

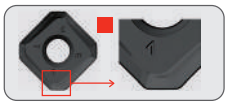
Available in 2 dimensions

IC 12 IC 15

Which chipbreaker to use?

HCM
Strong cutting edge for general steel applications and hard conditions milling.

SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.



CCM
Strong cutting edge for cast iron applications.

Available range SOKU12

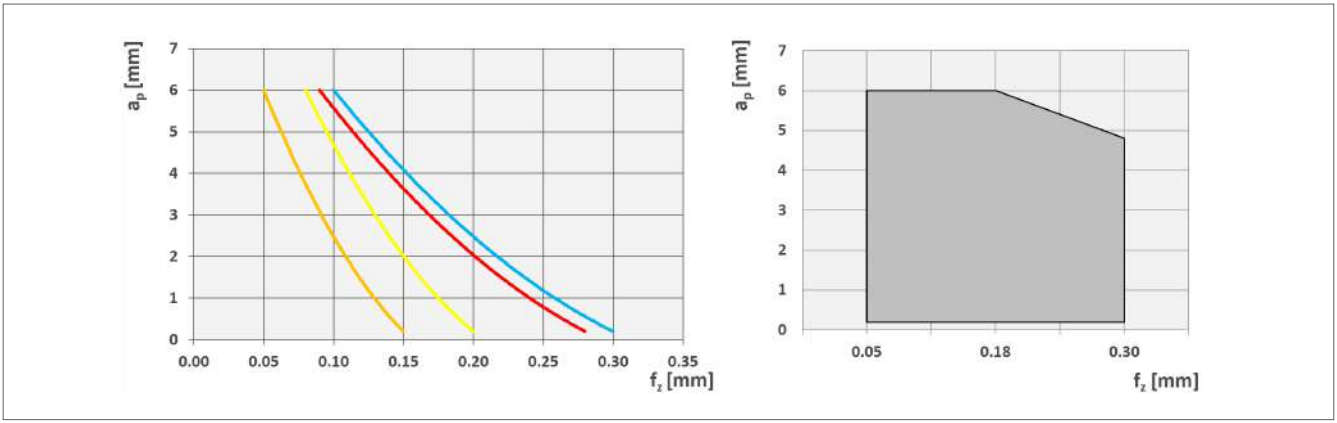
Insert	Designation	Chipbreaker	Material number	Available
	SOKU 1205AZER-HCM CTCP230	…-HCM	12193374	•
	SOKU 1205AZER-HCM CTCP235	…-HCM	12219854	•
	SOKU 1205AZER-HCM CTPP235	…-HCM	12193377	•
	SOKU 1205AZER-SCM CTPM240	…-SCM	11988963	•
	SOKU 1205AZER-SCM CTC5235	…-SCM	11906808	•
	SOKU 1205AZER-SCM CTC5240	…-SCM	14764281	•
	SOKU 1205AZER-CCM CTCK215	…-CCM		○
	SOKU 1205AZER-CCM CTPK220	…-CCM		○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-S12-40.R.04	40	4	11939775	•
	A-DSM-S12-50.R.05	50	5	11909357	•
	A-DSM-S12-63.R.06	63	6	11939774	•
	A-DSM-S12-80.R.08	80	8	11939772	•
	A-DSM-S12-100.R.10	100	10	11939771	•
	A-DSM-S12-125.R.12	125	12	11939769	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11.0 – T15	5	11042274	•

Cutting data SOKU12

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTCP235 CTPP235	220 – 60	0.1 – 0.3	6 – 0.2
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.2	6 – 0.2
K	Cast iron	CCM	CTCK215 CTPK220	320 – 100	0.09 - 0.28	6 – 0.2
S	Heat resistant alloys Titanium	SCM	CTC5240	75 – 25	0.05 – 0.15	6 – 0.2

Available range SOKU15

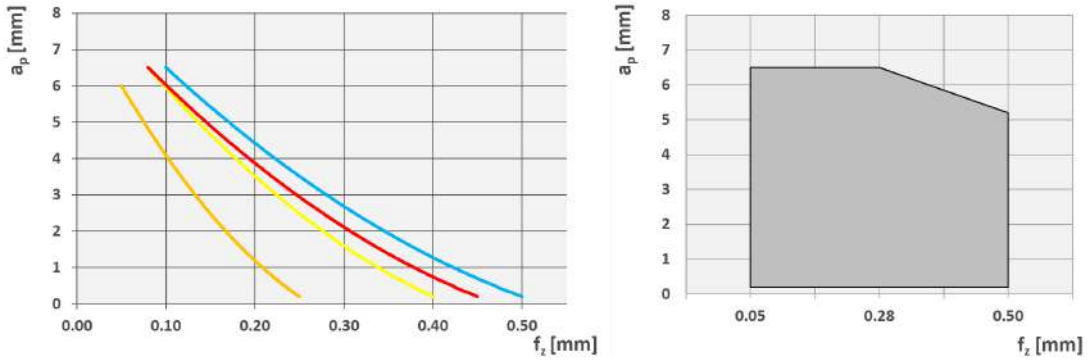
Insert	Designation	Chipbreaker	Material number	Available
	SOKU 1505AZER-HCM CTCP230	…-HCM	12237265	•
	SOKU 1505AZER-HCM CTPP235	…-HCM	12193379	•
	SOKU 1505AZER-HCM CTCP235	…-HCM	12219850	•
	SOKU 1505AZER-SCM CTPM240	…-SCM	11979060	•
	SOKU 1505AZER-SCM CTC5235	…-SCM	11526409	•
	SOKU 1505AZER-SCM CTC5240	…-SCM	11968808	•
	SOKU 1505AZER-CCM CTCK215	…-CCM	12299379	•
	SOKU 1505AZER-CCM CTPK220	…-CCM	12145626	○

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-S15-40.R.04	40	4	11520461	•
	A-DSM-S15-50.R.04	50	4	11520462	•
	A-DSM-S15-63.R.05	63	5	11520463	•
	A-DSM-S15-80.R.06	80	6	11520464	•
	A-DSM-S15-100.R.07	100	7	11520465	•
	A-DSM-S15-125.R.08	125	8	11520466	•
	A-DSM-S15-160.R.10	160	10	11567193	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.5 x 13.0 – T20+	5	1345431	•
	Power screw M8.0 x 30.0 (only for A-DSM-S15.40.R.04)	15	11036880	•

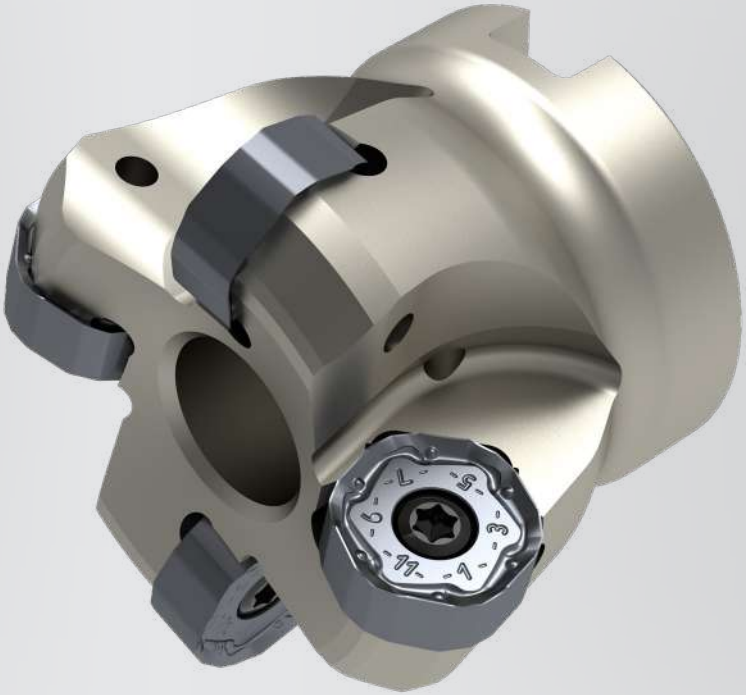
Cutting data SOKU15

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTCP235 CTPP235	220 – 60	0.1 – 0.5	6.5 – 0.2
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.4	6.5 – 0.2
K	Cast iron	CCM	CTCK215 CTPK220	320 – 100	0.08 – 0.45	6.5 – 0.2
S	Heat resistant alloys Titanium	SCM	CTC5240	75 – 25	0.05 – 0.25	6.5 – 0.2

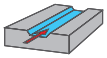


Overview HNKU / HOKU

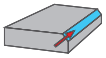
Application

1) Face milling

2) Slot milling



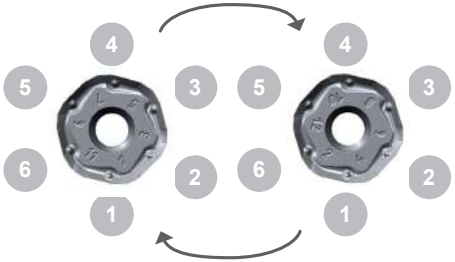
3) Chamfering



Chipbreaker

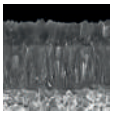
HCM: Steel – Cast iron*
SCM: Stainless Steel – Exotic* – Titanium*

Indexing 6 times and reversible

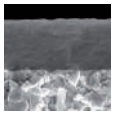


Grades

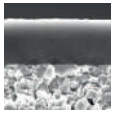
CTCP230 ■



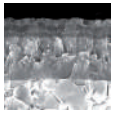
CTPP235 ■



CTPM240 ■



CTC5235 ■

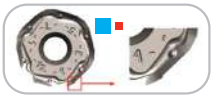


* secondary application

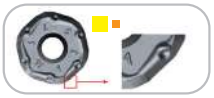
Customer benefits

- Masterfinish geometry
- Maximised economy thanks to 12 cutting edges.

Which chipbreaker to use?



HCM
Strong cutting edge for general steel applications and hard conditions milling.



SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

Available range HNKU

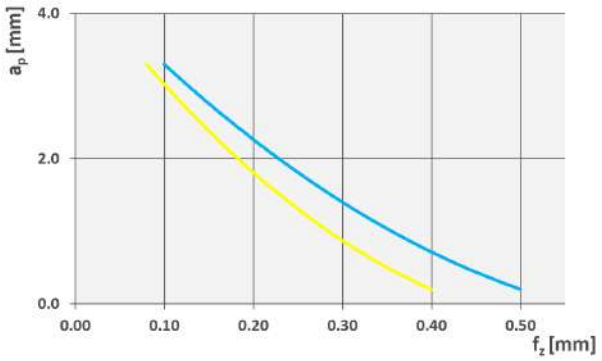
Insert	Designation	Chipbreaker	Material number	Available
	HNKU 0806AZER-HCM CTCP230	…-HCM	12193383	•
	HNKU 0806AZER-HCM CTPP235	…-HCM	12193384	•
	HNKU 0806AZER-SCM CTPM240	…-SCM		○
	HNKU 0806AZER-SCM CTC5235	…-SCM	11887368	•

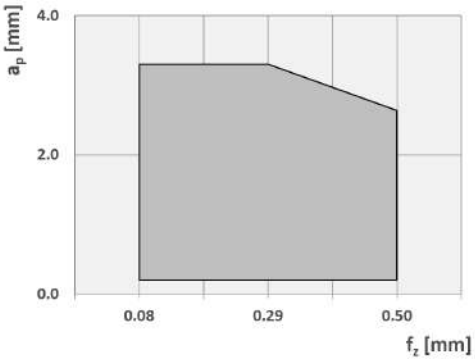
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-H08-40.R.04	40	4	11590448	•
	A-DSM-H08-50.R.04	50	4	11561804	•
	A-DSM-H08-63.R.05	63	5	11561802	•
	A-DSM-H08-80.R.06	80	6	11561800	•
	A-DSM-H08-100.R.08	100	8	12152205	•
	A-DSM-H08-125.R.09	125	9	12152207	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11.0 – T15+	5	1345432	•

Cutting data HNKU

Starting parameters:





Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.1 – 0.5	3.3 – 0.2
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.4	3.3 – 0.2

Available range HOKU

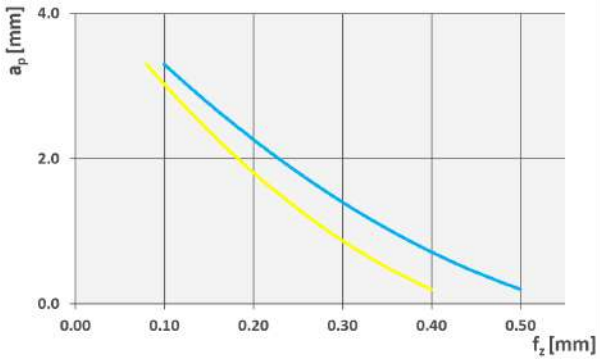
Insert	Designation	Chipbreaker	Material number	Available
	HOKU 0806AZER-HCM CTCP230	…-HCM	12623510	•
	HOKU 0806AZER-HCM CTPP235	…-HCM	12623511	•
	HOKU 0806AZER-SCM CTPM240	…-SCM	12630187	•
	HOKU 0806AZER-SCM CTC5235	…-SCM	12623507	•

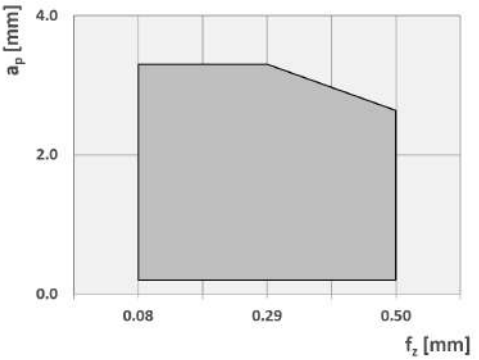
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-H08-40.R.04	40	4	11590448	•
	A-DSM-H08-50.R.04	50	4	11561804	•
	A-DSM-H08-63.R.05	63	5	11561802	•
	A-DSM-H08-80.R.06	80	6	11561800	•
	A-DSM-H08-100.R.08	100	8	12152205	•
	A-DSM-H08-125.R.09	125	9	12152207	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 11.0 – T15+	5	1345432	•

Cutting data HOKU

Starting parameters:





Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.1 – 0.5	3.3 – 0.2
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.08 – 0.4	3.3 – 0.2


NEW

Overview RPMX... RDHX... RPHX... RDHW...

Application

1) Face milling


2) Angled milling


3) Slot milling


4) Pocket milling


5) Profile milling


6) Helical plunging


7) Plunge milling

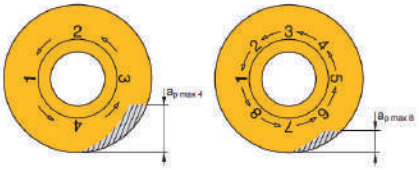

8) Turn milling


Chipbreaker

HCM: Steel – Cast iron*
SCM: Stainless Steel
XCM: Exotic – Titanium*
LMM: Aluminium and non-ferous metals
MOSN: Reinforced for hard materials

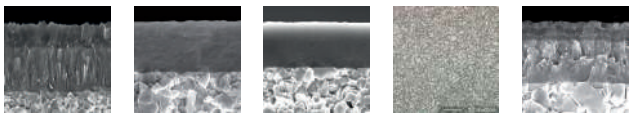
Indexing 4 or 8 times

8 facets for 4 or 8 indexing according to your d.o.c.

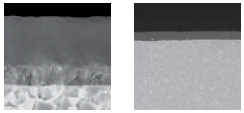


Grades

CTCP230 ■ CTPP235 ■ CTPM240 ■ CTWN715 ■ CTC5235 ■



CTC5240 ■ CTP6215 □



* secondary application

Customer benefits

- Indexing of the insert without complete removal of the clamping screw is possible!
- Direct insert indexing saves valuable machine time.
- Longer tool life with cool-chip system

Available in 3 dimensions

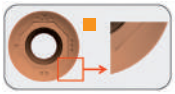
Now available: NEW
New Cool Chip System for better productivity thanks to a longer tool life.

Which chipbreaker to use?

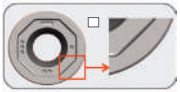
HCM
Strong cutting edge for general steel applications and hard conditions milling.

SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

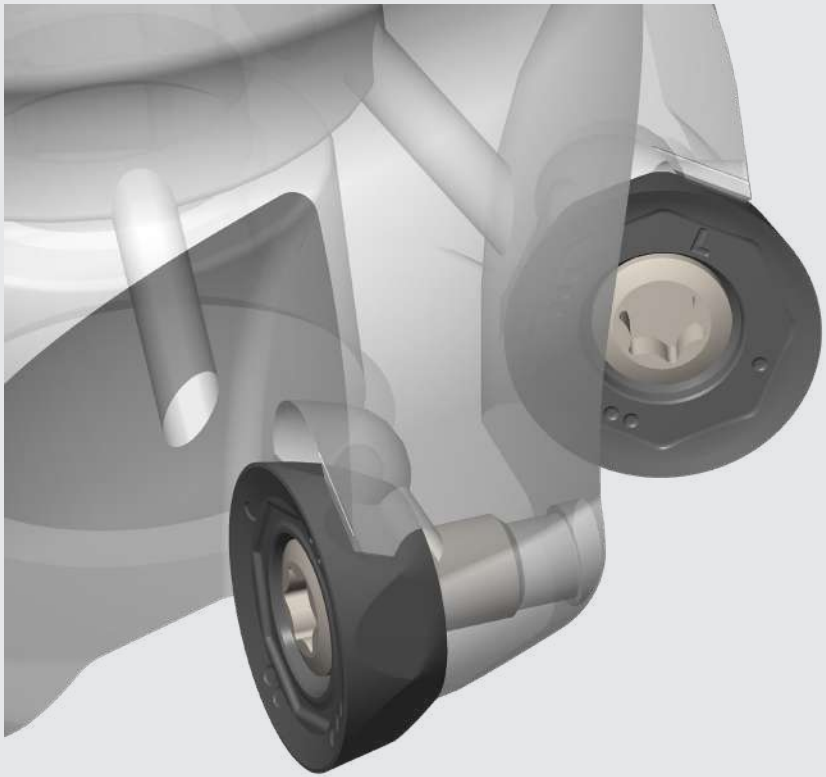
LMM
Extremely sharp cutting edge for aluminum and non-ferrous metals.

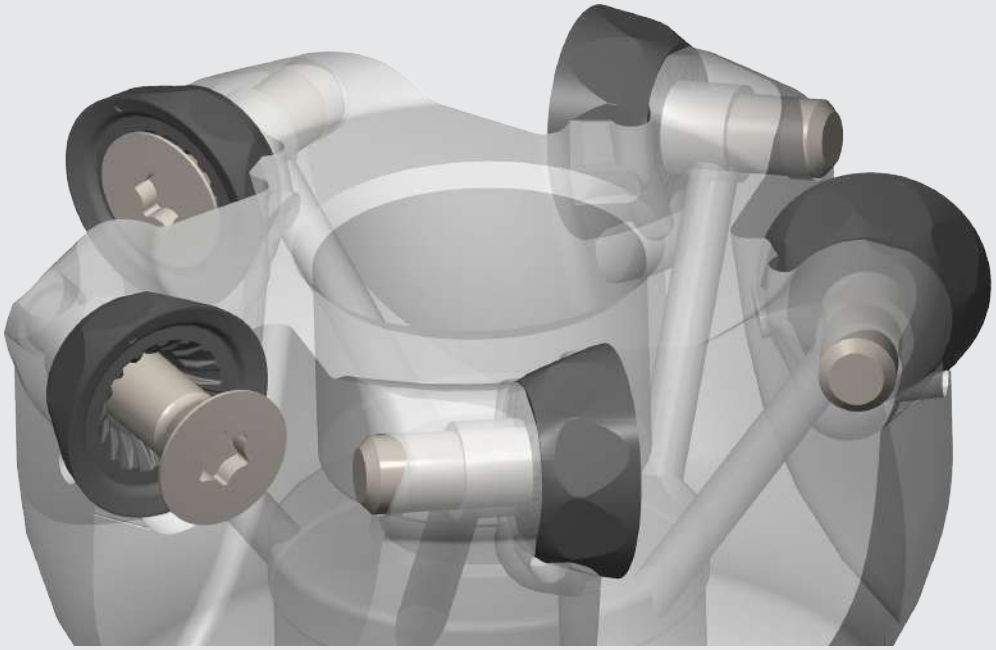


XCM
Stable cutting edge for dedicated exotic materials and titanium.



MOSN
Strong reinforced cutting edge for hard material.





Overview RPMX... RDHX... RPHX... RDHW...

Flexibility – One tool for several round inserts

Optimised clearance angles for high performance milling operations.

11° (RP...): for Steel. Stainless steel. Cast iron and Exotic materials

15° (RD...): for Hard materials and non-ferrous metals.

RP...

RD...

NEW! Two different clearances and only ONE milling tool

OPTION: Adapted clearance angles are also available on request

ROMX 1204 (1° to 16°)

NEW

Optimised coolant control increasing your productivity thanks to longer tool life.

The Cool Chip System is developed for titanium, superalloys like Inconel 718, stainless steel and other applications.

Available range R10

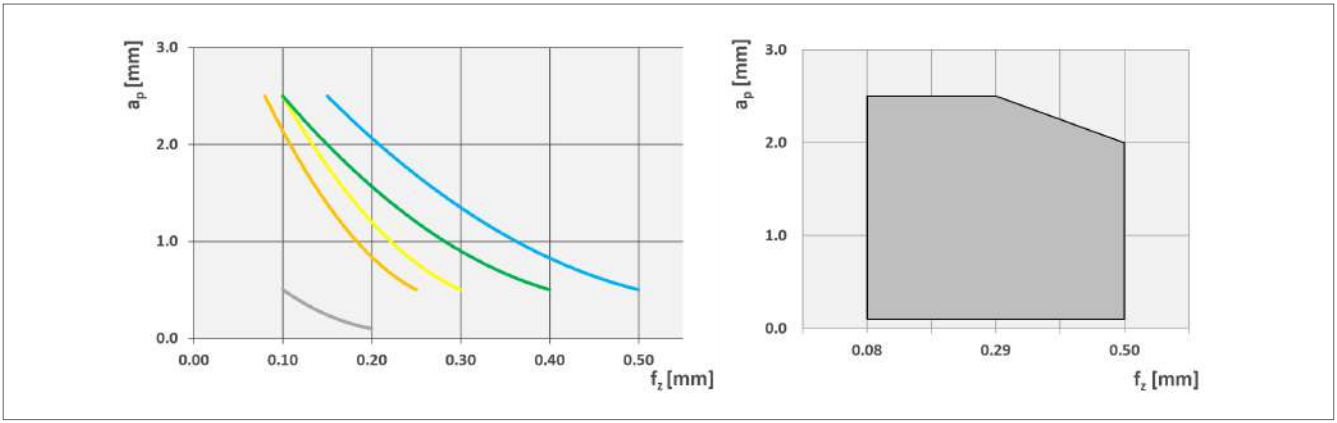
Insert	Designation	Chipbreaker	Material number	Available
	RPMX 10T3MO-HCM CTCP230	…-HCM	11978869	•
	RPMX 10T3MO-HCM CTPP235	…-HCM	11978872	•
	RPMX 10T3MO-SCM CTPM240	…-SCM	11978876	•
	RPMX 10T3MO-SCM CTC5235	…-SCM	12193387	•
	RDHX 10T3MO-LMM CTWN715	…-LMM	14652613	•
	RPHX 10T3MO-XCM CTC5235	…-XCM	11678477	•
	RPHX 10T3MO-XCM CTC5240	…-XCM	11678481	•
	RDHW 10T3MOSN CTP6215	-	11716131	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-R10-20.R.02-A-50-102	20	2	11720312	•
	C-SSM-R10-20.R.02-A-50-165	20	2	11720313	•
	C-SSM-R10-25.R.03-A-60-116	25	3	11720314	•
	C-SSM-R10-25.R.03-A-60-165	25	3	11720315	•
	C-SSM-R10-32.R.04-A-70-130	32	4	11720318	•
	C-SSM-R10-32.R.04-A-70-165	32	4	11720321	•
	G-SSM-R10-20.R.02	20	2	11879525	○
	G-SSM-R10-25.R.03	25	3	11879526	○
	G-SSM-R10-32.R.04	32	4	11879532	•
	G-SSM-R10-35.R.04	35	4	14653979	•
	A-SSM-R10-40.R.04	40	4	11718403	•
	A-SSM-R10-42.R.05	42	5	14653976	•
	A-SSM-R10-50.R.05	50	5	11720322	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M3.0 x 7.5 – T10+	2	11689894	•
	Power screw M8.0 x 30.0 (for A-SSM-R10-40.R.04 and for A-SSM-R10-42.R.04)	15	11036880	•

Cutting data R10

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.15 – 0.5	2.5 – 0.5
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.1 – 0.3	2.5 – 0.5
N	Non-ferrous	LMM	CTWN715	< 2000	0.1 – 0.4	2.5 – 0.5
S	Heat-resistant alloys	XCM	CTC5235	75 – 25	0.08 – 0.25	2.5 – 0.5
S	Titanium	XCM	CTC5240			
H	Hard materials	–	CTP6215	180 – 100	0.1 – 0.2	0.5 – 0.1

Recommended!

ø [mm]	4 times a_p [mm]	4 times $a_{p\,max}$ [mm]	8 times $a_{p\,max}$ [mm]
10	2.5	4.5	1.4
12	3.0	5.5	1.7
16	4.0	7.5	2.3

Available range R12

Insert	Designation	Chipbreaker	Material number	Available
	RPMX 1204MO-HCM CTCP230	…-HCM	11979003	•
	RPMX 1204MO-HCM CTPP235	…-HCM	11979006	•
	RPMX 1204MO-SCM CTPM240	…-SCM	11979015	•
	RPMX 1204MO-SCM CTC5235	…-SCM	12193389	•
	RDHX 1204MO-LMM CTWN715	…-LMM	14652616	•
	RPHX 1204MO-XCM CTC5235	…-XCM	11666768	•
	RPHX 1204MO-XCM CTC5240	…-XCM	11666769	•
	RDHW 1204MOSN CTP6215	-	11716128	•

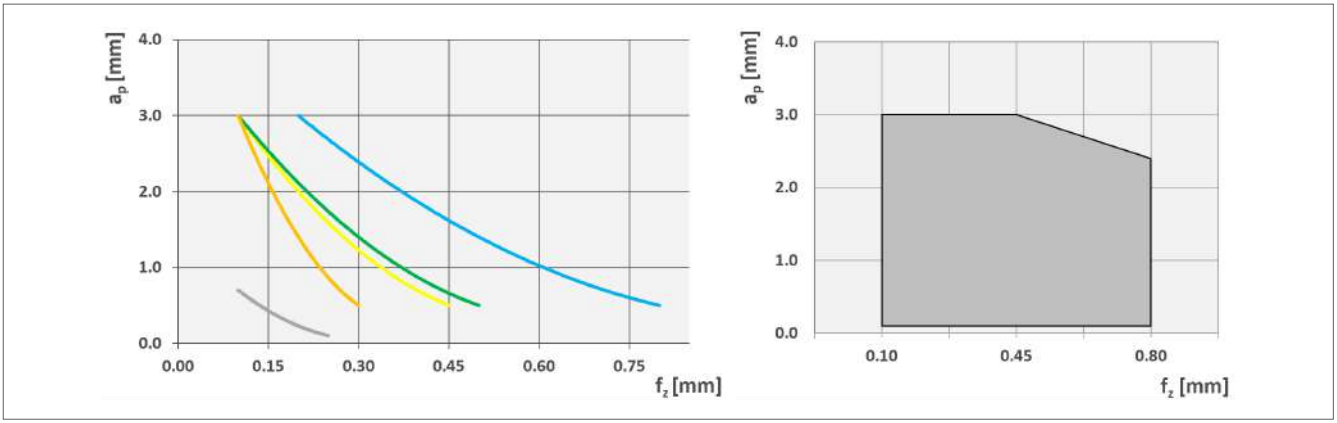
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-R12-25.R.02-A-30-86	25	2	11720305	•
	C-SSM-R12-25.R.02-A-60-116	25	2	11720307	•
	C-SSM-R12-32.R.03-A-40-100	32	3	11720308	•
	C-SSM-R12-32.R.03-A-70-130	32	3	11720310	•
	G-SSM-R12-25.R.02	25	2	12156946	•
	G-SSM-R12-32.R.03-35	32	3	14879965	○
	G-SSM-R12-35.R.03	35	3	14653989	•
	A-SSM-R12-40.R.04	40	4	11596003	•
	A-SSM-R12-42.R.04	42	4	14653984	•
	A-SSM-R12-50.R.05	50	5	11667287	•
	A-SSM-R12-52.R.05	52	5	14427687	•
	A-SSM-R12-63.R.06	63	6	11667291	•
	A-SSM-R12-66.R.06	66	6	14653987	•
	A-SSM-R12-80.R.08	80	8	11707446	•
	A-SSM-R12-100.R.10	100	10	11707445	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 8.5 – T15 (only for C- and G-)	5	11037484	•
	M4.0 x 11.0 – T15+ (only for A-)	5	1345432	•
	Power screw M8.0 x 30.0 (for A-SSM-R12-40.R.04 and for A-SSM-R12-42.R.04)	15	11036880	•

• available from stock, ○ available upon request

Cutting data R12

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.2 – 0.8	3 – 0.5
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.1 – 0.45	3 – 0.5
N	Non-ferrous	LMM	CTWN715	< 2000	0.1 – 0.5	3 – 0.5
S	Heat-resistant alloys	XCM	CTC5235	75 – 25	0.1 – 0.3	3 – 0.5
S	Titanium	XCM	CTC5240			
H	Hard materials	–	CTP6215	180 – 100	0.1 – 0.25	0.7 – 0.1

Recommended!

ø [mm]	4 times a_p [mm]	4 times $a_{p\,max}$ [mm]	8 times $a_{p\,max}$ [mm]
10	2.5	4.5	1.4
12	3.0	5.5	1.7
16	4.0	7.5	2.3

Available range R16

Insert	Designation	Chipbreaker	Material number	Available
	RPMX 1605MO-HCM CTCP230	…-HCM	11979017	•
	RPMX 1605MO-HCM CTPP235	…-HCM	11979021	•
	RPMX 1605MO-SCM CTPM240	…-SCM	11979026	•
	RPMX 1605MO-SCM CTC5235	…-SCM	12193449	•
	RDHX 1605MO-LMM CTWN715	…-LMM		○
	RPHX 1605MO-XCM CTC5235	…-XCM	11670391	•
	RPHX 1605MO-XCM CTC5240	…-XCM	11670392	•
	RDHW 1605MOSN CTP6215	-		○

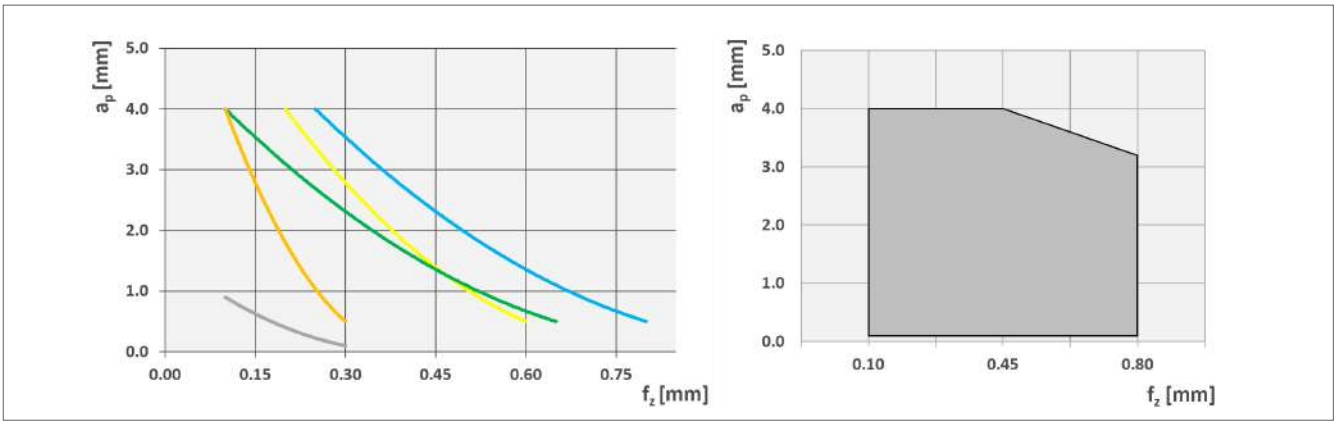
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-SSM-R16-50.R.03	50	3	11739864	•
	A-SSM-R16-52.R.04	52	4	14653992	•
	A-SSM-R16-63.R.05	63	5	11739862	•
	A-SSM-R16-66.R.05	66	5	14653995	•
	A-SSM-R16-80.R.06	80	6	11739860	•
	A-SSM-R16-100.R.07	100	7	11739857	•
	A-SSM-R16-125.R.08	125	8	11739853	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.5 x 13.0 – T20+	5	1345431	•
	Power screw M10.0 x 31.0 (for A-SSM-R16-50.R.03 and for A-SSM-R16-52.R.04)	20	11040298	•

• available from stock, ○ available upon request

Cutting data R16

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.25 – 0.8	4 – 0.5
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.2 – 0.6	4 – 0.5
N	Non-ferrous	LMM	CTWN715	< 2000	0.1 – 0.65	4 – 0.5
S	Heat-resistant alloys	XCM	CTC5235	75 – 25	0.1 – 0.3	4 – 0.5
S	Titanium	XCM	CTC5240			
H	Hard materials	–	CTP6215	180 – 100	0.1 – 0.3	0.9 – 0.1

Recommended!

ø [mm]	4 times a_p [mm]	4 times $a_{p\,max}$ [mm]	8 times $a_{p\,max}$ [mm]
10	2.5	4.5	1.4
12	3.0	5.5	1.7
16	4.0	7.5	2.3

Available range R12 - Cool

Insert	NEW	Designation	Chipbreaker	Material number	Available
		RPMX 1204MO-COOL-XCM CTC5240	…-XCM	14874676	•
		RPMX 1204MO-COOL-XCM CTC5235	…-XCM	14960071	•
		RPMX 1204MO-COOL-XCM CTPM240	…-XCM	14960073	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-R12-32.R.03-A-70-130-LF	32	3	14942567	•
	C-SSM-R12-40.R.04-LF	40	4	14938110	•
	A-SSM-R12-40.R.04-LF	40	4	14937970	•
	A-SSM-R12-50.R.05-LF	50	5	14551158	•
	A-SSM-R12-63.R.06-LF	63	6	14896829	•
	A-SSM-R12-80.R.08-LF	80	8	14933406	•
	A-SSM-R12-100.R.10-LF	100	10	14938327	•

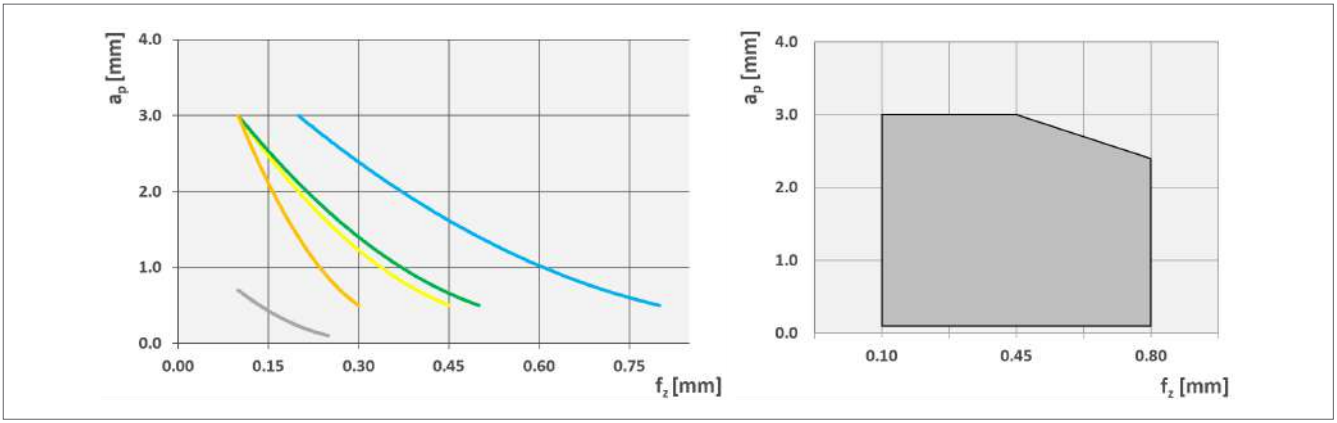
Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 13.0 - T15 Head7 (110810)	5	14960856	•
	Power screw M8.0 x 30.0 (for A-SSM-R12-40.R.04)	15	11036880	•

Note: Be carefull both system are not interchangeable!

● available from stock, o available upon request

Cutting data R12 - Cool

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.2 – 0.8	3 – 0.5
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.1 – 0.45	3 – 0.5
N	Non-ferrous	LMM	CTWN715	< 2000	0.1 – 0.5	3 – 0.5
S	Heat-resistant alloys	XCM	CTC5235	75 – 25	0.1 – 0.3	3 – 0.5
S	Titanium	XCM	CTC5240			
H	Hard materials	–	CTP6215	180 – 100	0.1 – 0.25	0.7 – 0.1

Recommended!

ø [mm]	4 times a_p [mm]	4 times $a_{p\,max}$ [mm]	8 times $a_{p\,max}$ [mm]
12	3.0	5.5	1.7
16	4.0	7.5	2.3

Available range R16 - Cool

Insert	Designation	Chipbreaker	Material number	Available
	RPHX 1605MO-COOL-HCM CTC5240	…-XCM	14818563	•
	RPHX 1605MO-COOL-HCM CTC5235	…-XCM	14818564	•
	RPHX 1605MO-COOL-HCM CTPM240	…-XCM	14818565	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-SSM-R16-50.R.03-LF	50	3	14551120	•
	A-SSM-R16-63.R.05-LF	63	5	14551112	•
	A-SSM-R16-80.R.06-LF	80	6	14551124	•
	A-SSM-R16-100.R.07-LF	100	7	14551126	•
	A-SSM-R16-125.R.08-LF	125	8	14551148	•

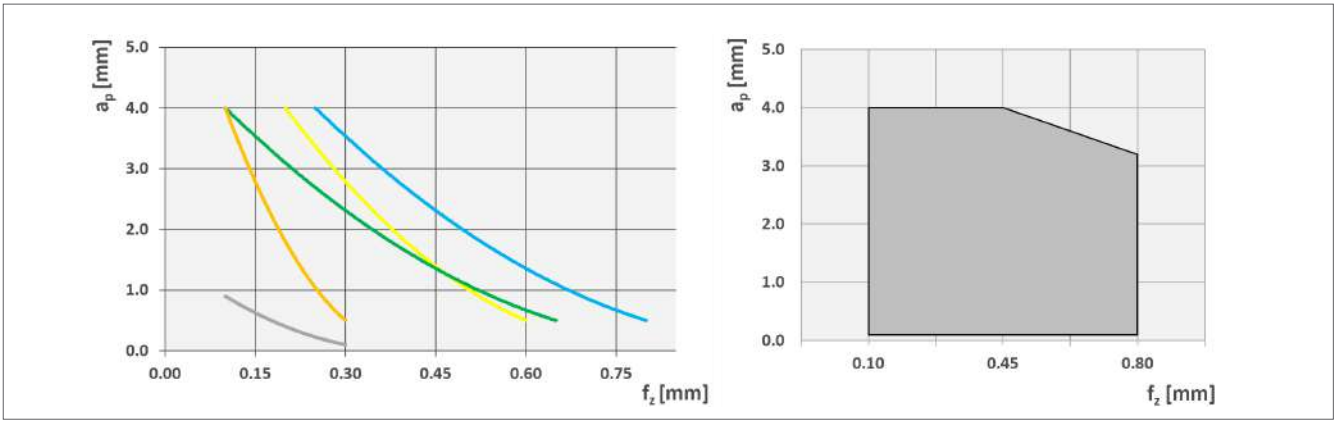
Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.5 x 15 T20 Head8.6 (110809)	5	14960854	•
	Power screw M10.0 x 31.0 (for A-SSM-R16-50.R.03)	20	11040298	•

Note: Be carefull both system are not interchangeable!

• available from stock, o available upon request

Cutting data R16

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.25 – 0.8	4 – 0.5
M	Stainless steel	SCM	CTPM240 CTC5235	200 – 60	0.2 – 0.6	4 – 0.5
N	Non-ferrous	LMM	CTWN715	< 2000	0.1 – 0.65	4 – 0.5
S	Heat-resistant alloys	XCM	CTC5235	75 – 25	0.1 – 0.3	4 – 0.5
S	Titanium	XCM	CTC5240			
H	Hard materials	–	CTP6215	180 – 100	0.1 – 0.3	0.9 – 0.1

Recommended!

ø [mm]	4 times a_p [mm]	4 times $a_{p\,max}$ [mm]	8 times $a_{p\,max}$ [mm]
12	3.0	5.5	1.7
16	4.0	7.5	2.3

Overview EPHT...

Application

1) Face milling

2) Shoulder milling

3) Slot milling

4) Angled milling

5) Profile milling

6) Pocket milling

7) Helical plunging

8) Trochoidal slot milling

Customer benefits

NEW

- Low power consumption, maximum chip removal rate
- Soft cutting and reduced vibration for maximum spindle protection
- Maximum rigidity thanks to the large material cross-section in the tool holder
- Wide range of tool holders (from Diameter 16)

The result:
Rough milling of faces in minimum time combined with maximum tool life.

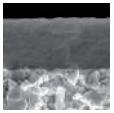
2 effectives cutting edges

Light cutting geometries

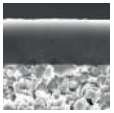
Positive cutting angle:
Soft cutting and reduced cutting noise! The cutting forces are mainly in the axial direction.
Even with long overhang lengths there is almost no vibration, and little stress on the machine spindle.

Grades

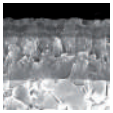
CTPP235 ■



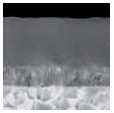
CTPM240 ■



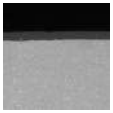
CTC5235 ■



CTC5240 ■



CTP6215 □



Available range EPHT07... EPHW07...

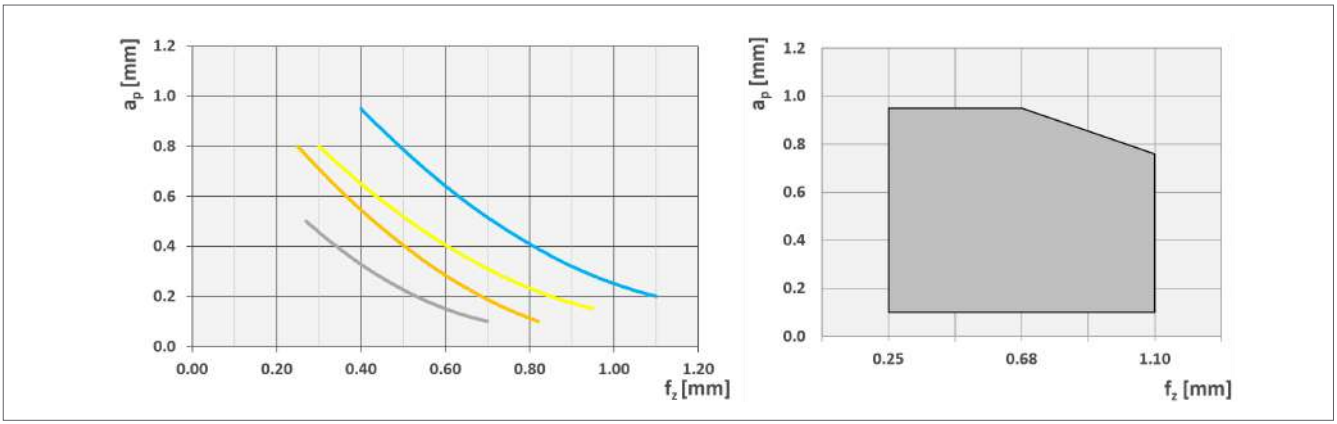
Insert	Designation	Chipbreaker	Material number	Available
	EPHT 070315-12HP CTPP235	…-12HP	12139712	•
	EPHT 070315-12HP CTPM240	…-12HP	12139716	•
	EPHT 070315-12HP CTC5235	…-12HP	12139723	•
	EPHT 070315-12HP CTC5240	…-12HP	12139720	•
	EPHW 070315-12HP CTP6215	…-12HP	12139730	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-E07HP12-16.R.02-A-30-160	16	2	12143899	•
	C-SSM-E07HP12-20.R.03-A-32-200	20	3	12143904	•
	C-SSM-E07HP12-25.R.04-A-40-225	25	4	12143905	•
	C-SSM-E07HP12-32.R.05-A-51-250	32	5	12143907	•
	G-SSM-E07HP12-16.R.02	16	2	12143869	○
	G-SSM-E07HP12-20.R.03	20	3	12143870	•
	G-SSM-E07HP12-25.R.04	25	4	12143872	•
	G-SSM-E07HP12-32.R.05	32	5	12143873	•
	A-SSM-E07HP12-35.R.06	35	6	12608251	•
	A-SSM-E07HP12-40.R.06	40	6	12143878	•
	A-SSM-E07HP12-50.R.07	50	7	14917341	•
	A-SSM-E07HP12-63.R.08	63	8	12143884	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M3.0 x 5.75 – T08+	1.2	1348352	•

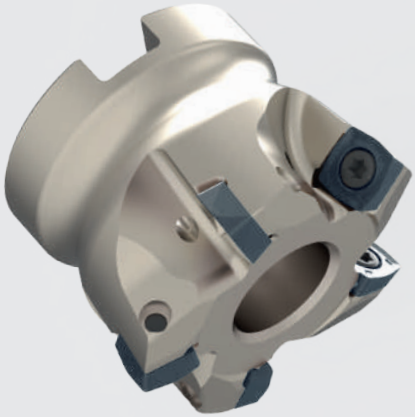
Cutting data EPHT07

Starting parameters:

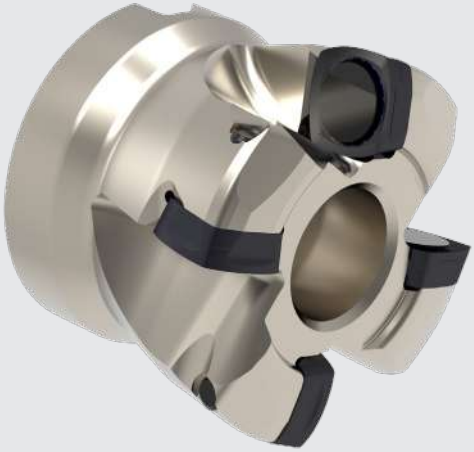


Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel		CTCP235	300 – 80	0.4 – 1.1	0.95 – 0.2
M	Stainless steel	12HP	CTPP240 CTC5235	300 – 60	0.3 – 0.95	0.8 – 0.15
S	Heat-resistant alloys		CTC5235	80 – 20	0.25 – 0.82	0.8 – 0.1
S	Titanium		CTC5240			
H	Hard materials	–	CTP6215	150 – 60	0.27 – 0.7	0.5 – 0.1



NEW



Overview XPLT... XDLT... XDLX... XOLT...

Application

1) Face milling 

2) Angled milling 

3) Helical plunging 

4) Plunge milling 

5) Profile milling 

6) Pocket milling 

7) Slot milling 

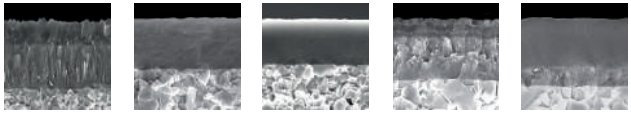
Chipbreaker

HCM: Steel – Cast iron*
SCM: Stainless Steel – Titanium*

4 effective cutting edges

Grades

CTCP230 ■ CTPP235 ■ CTPM240 ■ CTC5235 ■ CTC5240 ■



Customer benefits

- With feed rates up to 3 mm / tooth and closely pitched tools. very high chip removal rates are achieved.
- Maximal tool life thanks to HyperCoat coating.
- Maximised economy thanks to 4 cutting edges.
- Reduced machining noise and vibration. light cutting geometries.
- Flexibility thanks to coolant holes with minimum quantity lubrication design.#
- Longer tool life with cool-chip system.

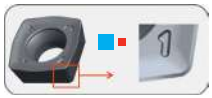
Available in 3 dimensions

IC 07 IC 10 IC 13

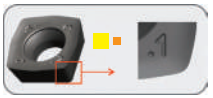
Now available: NEW
New Cool Chip System for better productivity thanks to a longer tool life.

IC3

Which chipbreaker to use?



HCM
Strong cutting edge for general steel applications and hard conditions milling.



SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

Available range HFC07

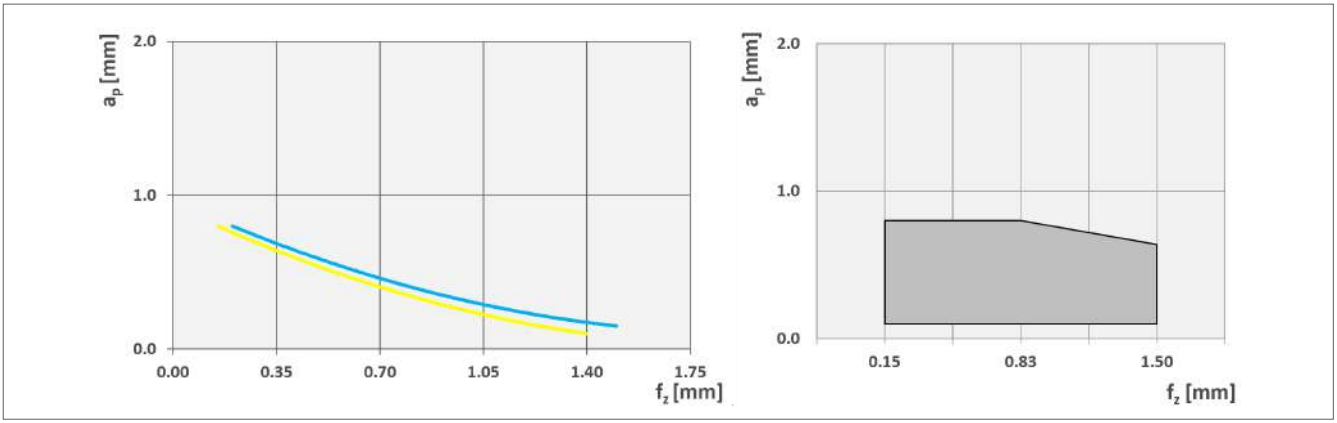
Insert	Designation	Chipbreaker	Material number	Available
	XPLT 070305SR-HCM CTCP230	…-HCM	12193481	•
	XPLT 070305SR-HCM CTPP235	…-HCM	12193482	•
	XPLT 070305ER-SCM CTPM240	…-SCM	14652649	•
	XPLT 070305ER-SCM CTC5235	…-SCM	11869773	•
	XPLT 070305ER-SCM CTC5240	…-SCM	11869775	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-HFC07-16.R.02-A-50-200	16	2	11919179	•
	C-SSM-HFC07-20.R.03-A-50-200	20	3	11919180	•
	C-SSM-HFC07-25.R.04-A-50-200	25	4	11919182	•
	G-SSM-HFC07-16.R.02	16	2	11919183	•
	G-SSM-HFC07-20.R.03	20	3	11919184	•
	G-SSM-HFC07-25.R.04	25	4	11919185	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M2.5x5.0 – T08	1.2	76913	•

Cutting data HFC07

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.2 – 1.5	0.8 – 0.15
M	Stainless steel	SCM	CTPM240 CTC5235 CTC5240	200 – 60	0.15 – 1.4	0.8 – 0.1

Available range HFC10 – XDLT

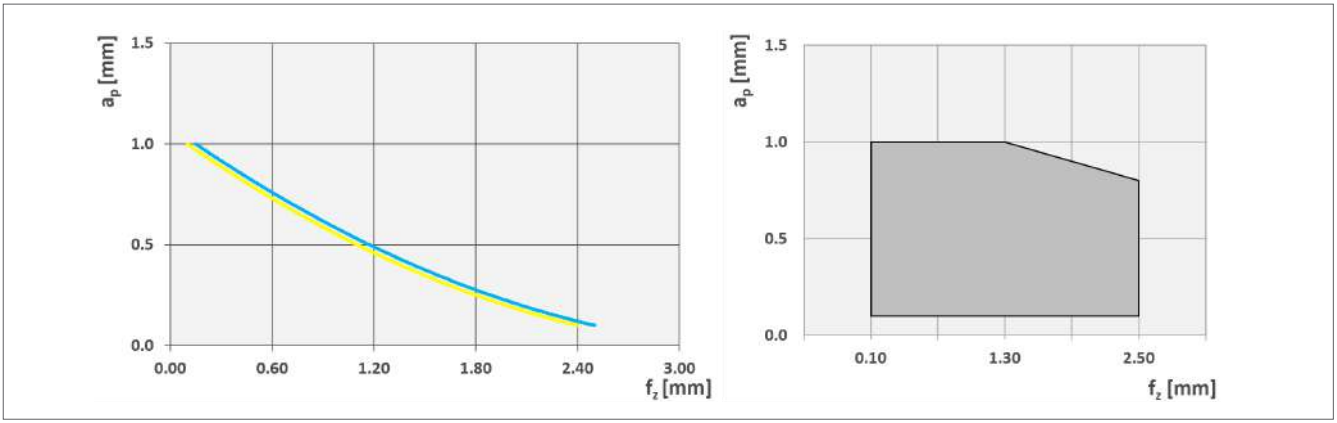
Insert	Designation	Chipbreaker	Material number	Available
	XDLT 10T308SR-HCM CTCP230	…-HCM	12193485	•
	XDLT 10T308SR-HCM CTPP235	…-HCM	12193487	•
	XDLT 10T308ER-SCM CTPM240	…-SCM	14652626	•
	XDLT 10T308ER-SCM CTC5235	…-SCM	11940752	•
	XDLT 10T308ER-SCM CTC5240	…-SCM	11940753	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-HFC10-25.R.03-A-50-125	25	3	14781080	○
	C-SSM-HFC10-25.R.03-A-50-225	25	3	11536252	•
	A-SSM-HFC10-40.R.04	40	4	11536253	•
	A-SSM-HFC10-50.R.05	50	5	11536255	•
	A-SSM-HFC10-63.R.06	63	6	11536256	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M3.5 x 7.2 – T15 (only for C-)	3.2	54976	•
	M3.5 x 8.6 – T15 (only for A-)	3.2	165795	•
	Power screw M8.0 x 30.0 (only for A-SSM-HFC-40.R.04)	15	11036880	•

Cutting data HFC10 – XDLT

Starting parameters:



Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.15 – 2.5	1 – 0.1
M	Stainless steel	SCM	CTPM240 CTC5235 CTC5240	200 – 60	0.1 – 2.4	1 – 0.1

Available range HFC10 – XDLX

Your advantages / benefits

- Reduced machining noise and vibration, light cutting geometry
- Maximized economy thanks to 4 cutting edges
- Same milling body as previous range
- Increased productivity
- Tool life increased

-HCM

-SCM

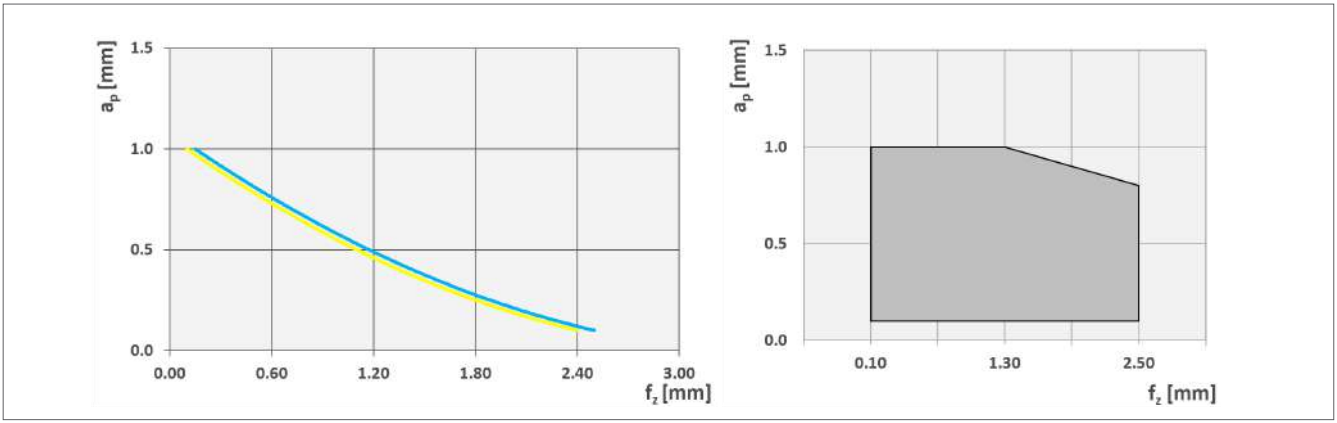
Insert	Designation	Chipbreaker	Material number	Available
	XDLX 10T308SR-HCM CTCP230	…-HCM	12308829	•
	XDLX 10T308SR-HCM CTPP235	…-HCM	12248334	•
	XDLX 10T308SR-SCM CTPM240	…-SCM	14652628	•
	XDLX 10T308SR-SCM CTC5235	…-SCM	12188504	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-HFC10-25.R.03-A-50-125	25	3	14781080	○
	C-SSM-HFC10-25.R.03-A-50-225	25	3	11536252	•
	A-SSM-HFC10-40.R.04	40	4	11536253	•
	A-SSM-HFC10-50.R.05	50	5	11536255	•
	A-SSM-HFC10-63.R.06	63	6	11536256	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M3.5 x 7.2 – T15 (only for C-)	3.2	54976	•
	M3.5 x 8.6 – T15 (only for A-)	3.2	165795	•
	Power screw M8.0 x 30.0 (only for A-SSM-HFC-40.R.04)	15	11036880	•

Cutting data HFC10 – XDLX

Starting parameters:



Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.15 – 2.5	1 – 0.1
M	Stainless steel	SCM	CTPM240 CTC5235 CTC5240	200 – 60	0.1 – 2.4	1 – 0.1

Available range HFC13

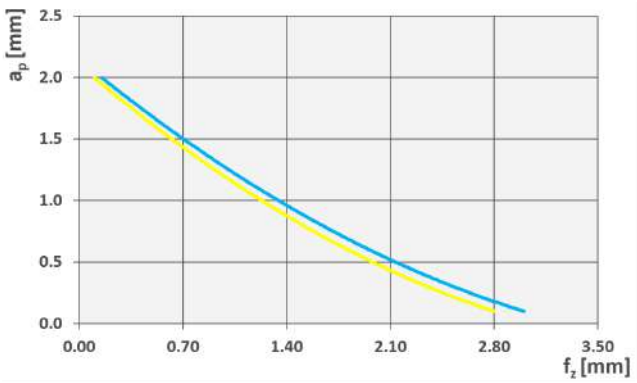
Insert	Designation	Chipbreaker	Material number	Available
	XOLT 130410SR-HCM CTCP230	…-HCM	12193499	•
	XOLT 130410SR-HCM CTPP235	…-HCM	12193508	•
	XOLT 130410ER-SCM CTPM240	…-SCM	14652630	•
	XOLT 130410ER-SCM CTC5235	…-SCM	11940763	•
	XOLT 130410ER-SCM CTC5240	…-SCM	11940765	•

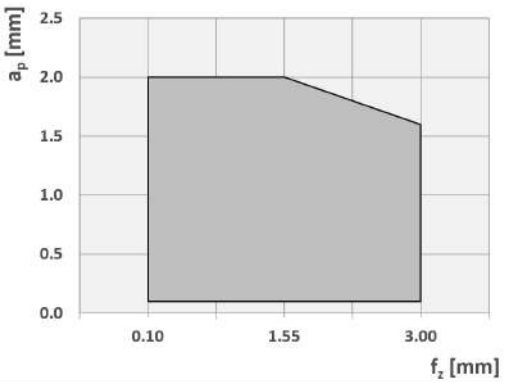
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-HFC13-35.R.03-B32-63-144	35	3		○
	C-SSM-HFC13-35.R.03-A32-63-250	35	3	11536246	•
	G-SSM-HFC13-35.R.03	35	3	147781079	○
	A-SSM-HFC13-50.R.04	50	4	11536249	•
	A-SSM-HFC13-63.R.05	63	5	11536248	•
	A-SSM-HFC13-80.R.07	80	7	11536247	•
	A-SSM-HFC13-100.R.09	100	9	14743388	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.5 x 10.5 – T20	5	106022	•

Cutting data HFC13

Starting parameters:





Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.15 – 3	2 – 0.1
M	Stainless steel	SCM	CTPM240 CTC5235 CTC5240	200 – 60	0.1 – 2.8	2 – 0.1

Available range HFC13 - Cool

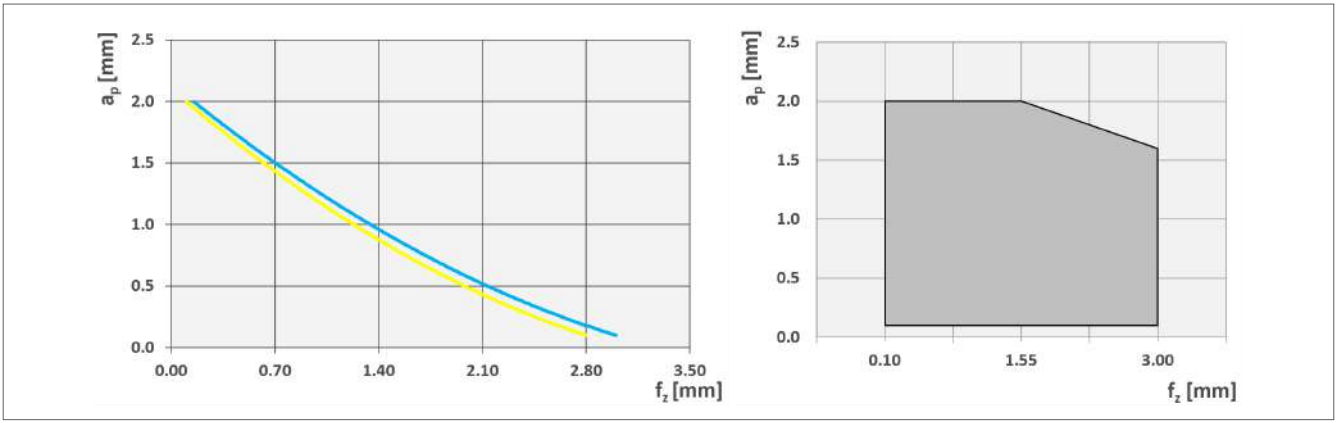
Insert	NEW	Designation	Chipbreaker	Material number	Available
		XOLT 130410ER-COOL-SCM CTC5240	…-SCM	12645469	•
		XOLT 130410ER-COOL-SCM CTC5235	…-SCM	12645989	•
		XOLT 130410ER-COOL-SCM CTPM240	…-SCM	12645995	•

Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-SSM-HFC13-50.R.04-LF	50	4	14417738	○
	A-SSM-HFC13-52.R.04-LF	52	4	14935040	•
	A-SSM-HFC13-63.R.05-LF	63	5	14896853	•
	A-SSM-HFC13-80.R.06-LF	80	6	14938335	•
	A-SSM-HFC13-100.R.08-LF	100	8	14915048	•
	A-SSM-HFC13-100.R.09-LF	100	9	14915049	•

Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.5 x 15 T20 Head8.6 (110809)	5	14960854	•

Cutting data HFC13 - Cool

Starting parameters:



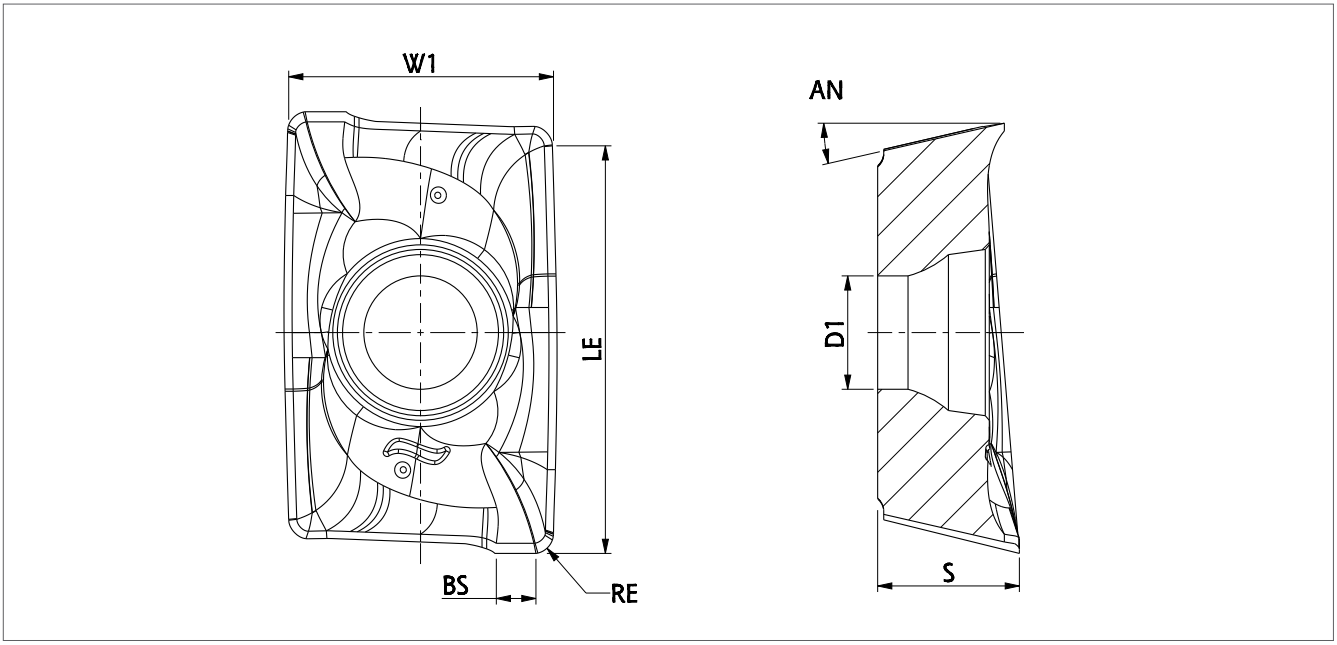
Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	HCM	CTCP230 CTPP235	220 – 60	0.15 – 3	2 – 0.1
M	Stainless steel	SCM	CTPM240 CTC5235 CTC5240	200 – 60	0.1 – 2.8	2 – 0.1

Technical Data

SSM-A / Shouldering 2 x 90°

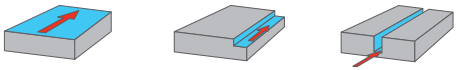
Insert (APKT / APHT 10)

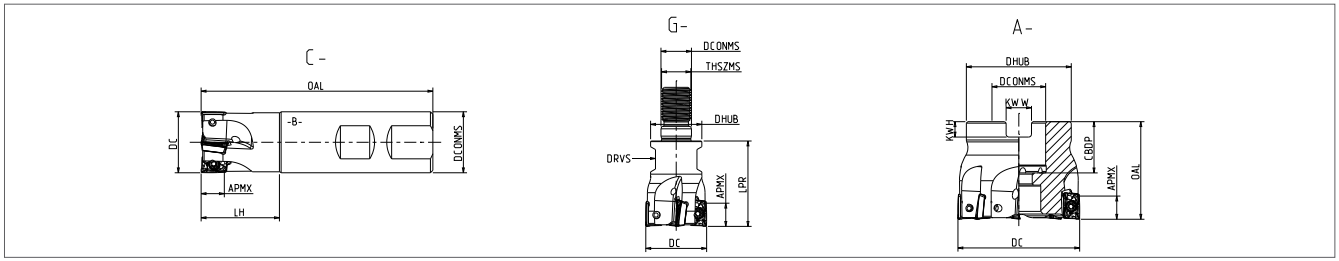


Description	d [mm]	l [mm]	s [mm]	l_1 [mm]	r [mm]	d_1 [mm]	x [°]
APKT 1003PDER-HCM	6.75	10	3.5	1	0.5	2.8	11
APKT 1003PDER-SCM	6.75	10	3.5	1	0.5	2.8	11
APKT 1003PDER-CCM	6.75	10	3.5	1	0.5	2.8	11
APHT 100302FR-LMM	6.75	10	3	2.2	0.2	2.85	11
APHT 100304FR-LMM	6.75	10	3	2.2	0.4	2.85	11
APHT 100308FR-LMM	6.75	10	3	2.2	0.8	2.85	11
APKT 100308ER-RCM	6.7	10	3.5	0.64	0.85	2.8	11
APKT 100312ER-RCM	6.7	10	3.5	0.5	1.2	2.8	11
APKT 100316ER-RCM	6.7	11.5	3.4	0	1.6	2.85	11
APKT 100330ER-RCM	6.7	11.5	3.4	0.2	3	2.85	11

SSM-A / Shouldering 2 x 90°

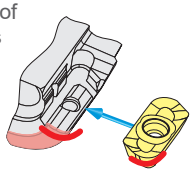
Milling body (APKT10)



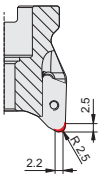


Description	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]		CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-UA10-12.R.01-B16-24-79	12	79	24	-	16	10	55000	1	-	-	-	-	-	-
C-SSM-UA10-16.R.02-B-25-80	16	80	25	-	16	10	42000	2	-	-	-	-	-	-
C-SSM-UA10-20.R.03-B-25-85	20	85	25	-	20	10	36900	3	-	-	-	-	-	-
C-SSM-UA10-25.R.04-B-32-95	25	95	32	-	25	10	33200	4	-	-	-	-	-	-
C-SSM-UA10-32.R.05-B-40-105	32	105	40	-	32	10	30200	5	-	-	-	-	-	-
G-SSM-UA10-16.R.02	16	-	-	25	8.5	10	42000	2	13	SW10	M8	-	-	-
G-SSM-UA10-20.R.03	20	-	-	30	10.5	10	36900	3	18	SW15	M10	-	-	-
G-SSM-UA10-25.R.04	25	-	-	35	12.5	10	33200	4	21	SW17	M12	-	-	-
G-SSM-UA10-32.R.05	32	-	-	40	17	10	30200	5	29	SW24	M16	-	-	-
A-SSM-UA10-40.R.04	40	40	-	-	16	10	27700	4	38	-	-	19	8.4	5.6
A-SSM-UA10-40.R.06	40	40	-	-	16	10	27700	6	38	-	-	19	8.4	5.6
A-SSM-UA10-50.R.05	50	40	-	-	22	10	25400	5	43	-	-	21	10.4	6.3
A-SSM-UA10-50.R.08	50	40	-	-	22	10	25400	8	43	-	-	21	10.4	6.3
A-SSM-UA10-63.R.06	63	40	-	-	22	10	23300	6	48	-	-	21	10.4	6.3
A-SSM-UA10-63.R.09	63	40	-	-	22	10	23300	9	48	-	-	21	10.4	6.3
A-SSM-UA10-80.R.07	80	50	-	-	27	10	21300	7	58	-	-	23	12.4	7
A-SSM-UA10-80.R.10	80	50	-	-	27	10	21300	10	58	-	-	23	12.4	7
A-SSM-UA10-100.R.12	100	50	-	-	32	10	19600	12	78	-	-	26	14.4	8

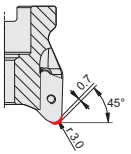
Modification of cutter bodies



> r 1.6

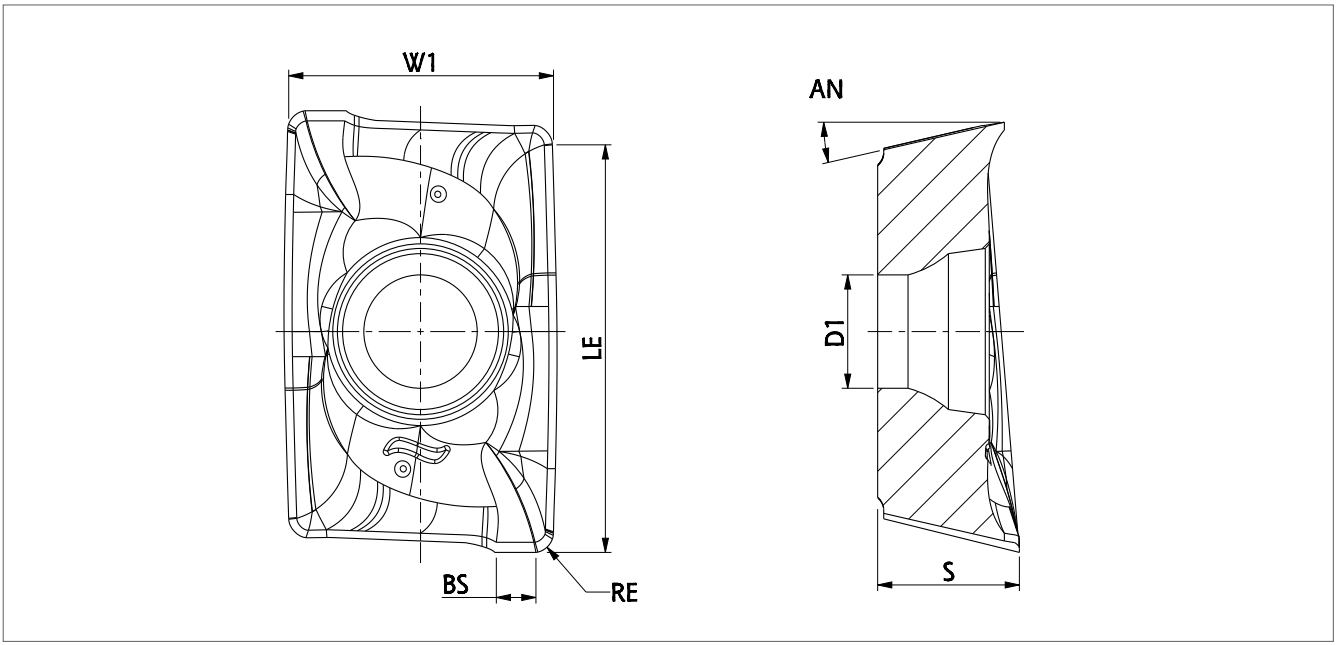


> r 3.0



SSM-A / Shouldering 2 x 90°

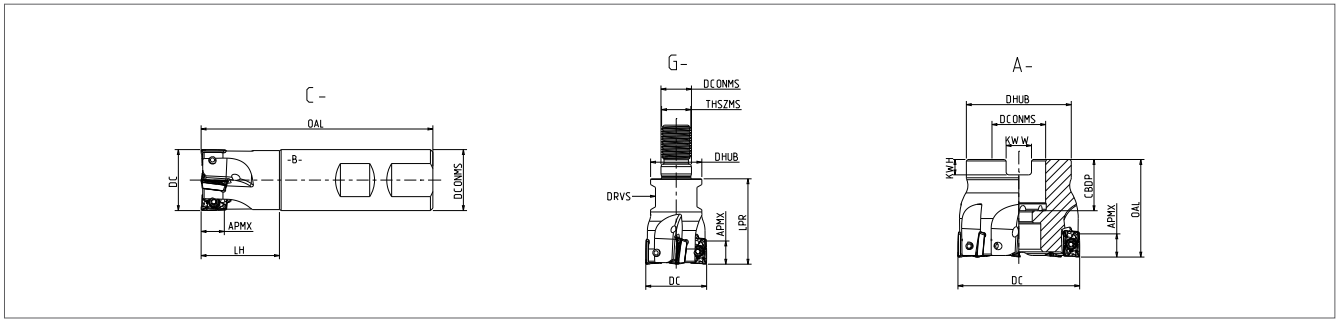
Insert (APKT / APHT 16)



Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
APKT 1604PDER-HCM	9.5	15.3	5.25	1.4	0.85	4.4	11.5
APKT 1604PDER-SCM	9.5	15.3	5.25	1.4	0.85	4.4	11.5
APKT 1604PDER-CCM	9.5	15.3	5.25	1.4	0.85	4.4	11.5
APHT 1604PDFR-LMM	9.5	15.3	4.65	2	0.85	4.4	11.5
APKT 160416ER-RCM	9.5	15.3	5.25	0.65	1.6	4.4	11.5
APKT 160424ER-RCM	9.5	15.3	5.25	0.6	2.4	4.4	11.5
APKT 160432ER-RCM	9.5	15.3	5.25	0.3	3.2	4.4	11.5
APKT 160440ER-RCM	9.5	15.3	5.25	0.3	4.0	4.4	11.5
APKT 160448ER-RCM	9.5	15.3	5.8	0.3	4.8	4.5	11.5

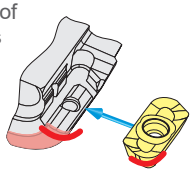
SSM-A / Shouldering 2 x 90°

Milling body (APKT16)

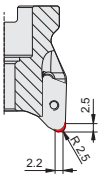


Descirption	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]		CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-UA16-25.R.02-B-40-95	25	95	40	-	25	15.3	26560	2	-	-	-	-	-	-
C-SSM-UA16-32.R.03-B-40-105	32	105	40	-	32	15.3	24160	3	-	-	-	-	-	-
C-SSM-UA16-40.R.04-B-50-125	40	125	50	-	40	15.3	22160	4	-	-	-	-	-	-
G-SSM-UA16-25.R.02	25	-	-	35	12.5	15.3	26560	2	21	SW17	M12	-	-	-
G-SSM-UA16-32.R.03	32	-	-	40	17	15.3	20500	3	29	SW24	M15	-	-	-
G-SSM-UA16-40.R.04	40	-	-	40	17	15.3	16400	4	29	SW24	M16	-	-	-
A-SSM-UA16-40.R.04	40	40	-	-	16	15.3	22160	4	38	-	-	20	8.4	5.6
A-SSM-UA16-50.R.05	50	40	-	-	22	15.3	20320	5	43	-	-	21	10.4	6.3
A-SSM-UA16-63.R.06	63	40	-	-	22	15.3	18640	6	48	-	-	21	10.4	6.3
A-SSM-UA16-80.R.07	80	50	-	-	27	15.3	17040	7	0	-	-	23	12.4	7
A-SSM-UA16-80.R.08	80	50	-	-	27	15.3	17040	8	58	-	-	23	12.4	7
A-SSM-UA16-100.R.09	100	50	-	-	32	15.3	15680	9	78	-	-	26	14.4	8
A-SSM-UA16-125.R.09	125	63	-	-	40	15.3	12600	9	0	-	-	28	16.4	9

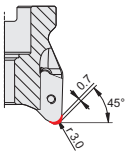
Modification of cutter bodies



> r 1.6

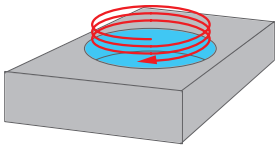


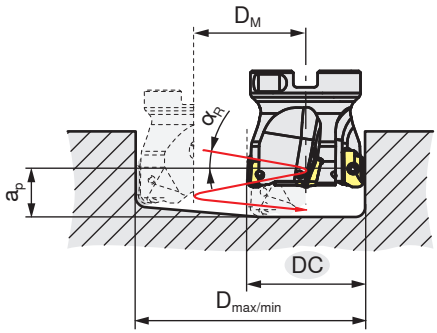
> r 3.0



SSM-A / Shouldering 2 x 90°

Application data (helical plunge milling APKT10)



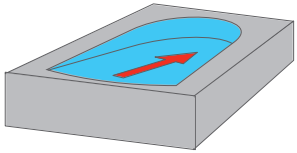


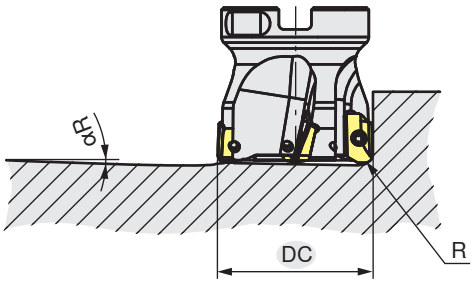
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-UA10-12.R.01-B16-24-79	12	21	14	16.0
C-SSM-UA10-16.R.02-B-25-80	16	29	18	9.5
C-SSM-UA10-20.R.03-B-25-85	20	37	30	7.0
C-SSM-UA10-25.R.04-B-32-95	25	47	40	4.5
C-SSM-UA10-32.R.05-B-40-105	32	61	53	3.2
G-SSM-UA10-16.R.02	16	29	18	9.5
G-SSM-UA10-20.R.03	20	37	30	7.0
G-SSM-UA10-25.R.04	25	47	40	4.5
G-SSM-UA10-32.R.05	32	61	53	3.2
A-SSM-UA10-40.R.04	40	77	72	2.2
A-SSM-UA10-40.R.06	40	77	72	2.2
A-SSM-UA10-50.R.05	50	98	93	1.7
A-SSM-UA10-50.R.08	50	98	93	1.7
A-SSM-UA10-63.R.06	63	123	118	1.5
A-SSM-UA10-63.R.09	63	123	118	1.5
A-SSM-UA10-80.R.07	80	157	152	1.0
A-SSM-UA10-80.R.10	80	157	152	1.0
A-SSM-UA10-100.R.12	100	197	192	0.8

SSM-A / Shouldering 2 x 90°

Application data (angled ramping APKT10)

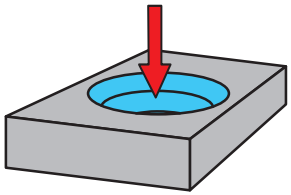


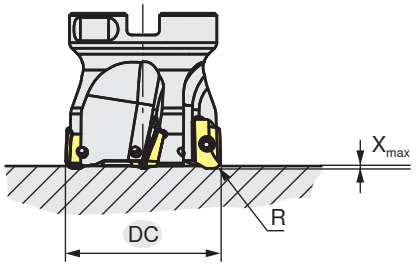


Description	DC [mm]	α_R [°]
C-SSM-UA10-12.R.01-B16-24-79	12	18.0
C-SSM-UA10-16.R.02-B-25-80	16	10.8
C-SSM-UA10-20.R.03-B-25-85	20	9.8
C-SSM-UA10-25.R.04-B-32-95	25	7.5
C-SSM-UA10-32.R.05-B-40-105	32	4.8
G-SSM-UA10-16.R.02	16	10.8
G-SSM-UA10-20.R.03	20	9.8
G-SSM-UA10-25.R.04	25	7.5
G-SSM-UA10-32.R.05	32	4.8
A-SSM-UA10-40.R.04	40	2.9
A-SSM-UA10-40.R.06	40	2.9
A-SSM-UA10-50.R.05	50	2.2
A-SSM-UA10-50.R.08	50	2.2
A-SSM-UA10-63.R.06	63	1.8
A-SSM-UA10-63.R.09	63	1.8
A-SSM-UA10-80.R.07	80	1.4
A-SSM-UA10-80.R.10	80	1.4
A-SSM-UA10-100.R.12	100	1.1

SSM-A / Shouldering 2 x 90°

Application data (axial plunging APKT10)

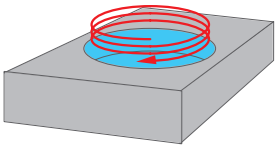




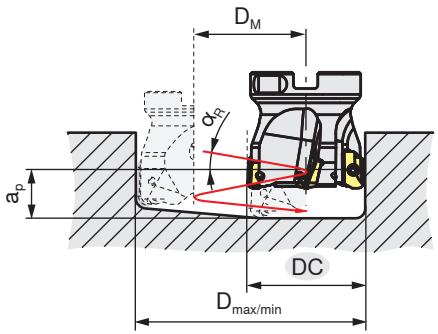
Description	DC [mm]	X_{max} [mm]
C-SSM-UA10-12.R.01-B16-24-79	12	1.3
C-SSM-UA10-16.R.02-B-25-80	16	1.5
C-SSM-UA10-20.R.03-B-25-85	20	2.0
C-SSM-UA10-25.R.04-B-32-95	25	2.0
C-SSM-UA10-32.R.05-B-40-105	32	1.8
G-SSM-UA10-16.R.02	16	1.5
G-SSM-UA10-20.R.03	20	2.0
G-SSM-UA10-25.R.04	25	2.0
G-SSM-UA10-32.R.05	32	1.8
A-SSM-UA10-40.R.04	40	1.6
A-SSM-UA10-40.R.06	40	1.6
A-SSM-UA10-50.R.05	50	1.6
A-SSM-UA10-50.R.08	50	1.6
A-SSM-UA10-63.R.06	63	1.6
A-SSM-UA10-63.R.09	63	1.6
A-SSM-UA10-80.R.07	80	1.6
A-SSM-UA10-80.R.10	80	1.6
A-SSM-UA10-100.R.12	100	1.6

SSM-A / Shouldering 2 x 90°

Application data (helical plunge milling APKT16)



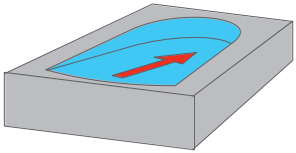
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

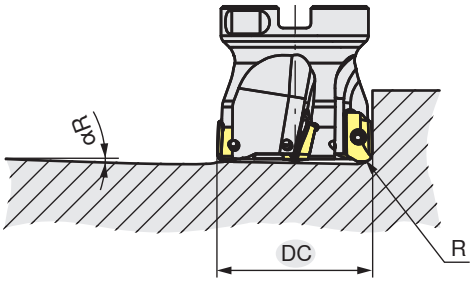


Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-UA16-25.R.02-B-40-95	25	47	40	4.5
C-SSM-UA16-32.R.03-B-40-105	32	61	53	3.2
C-SSM-UA16-40.R.04-B-50-125	40	77	72	2.2
G-SSM-UA16-25.R.02	25	47	40	4.5
G-SSM-UA16-32.R.03	32	61	53	3.2
G-SSM-UA16-40.R.04	40	77	72	2.2
A-SSM-UA16-40.R.04	40	77	72	2.2
A-SSM-UA16-50.R.05	50	98	93	1.7
A-SSM-UA16-63.R.06	63	123	118	1.5
A-SSM-UA16-80.R.07	80	157	152	1.0
A-SSM-UA16-80.R.08	80	157	152	1.0
A-SSM-UA16-100.R.09	100	197	191	0.8
A-SSM-UA16-125.R.09	125	247	242	0.6

SSM-A / Shouldering 2 x 90°

Application data (angled ramping APKT16)

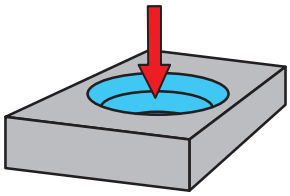


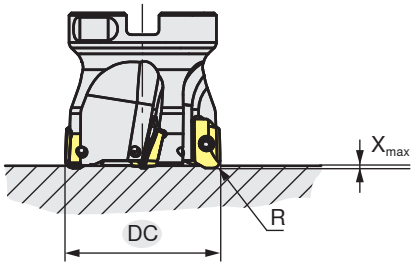


Description	DC [mm]	α_R [°]
C-SSM-UA16-25.R.02-B-40-95	25	7.5
C-SSM-UA16-32.R.03-B-40-105	32	4.8
C-SSM-UA16-40.R.04-B-50-125	40	2.9
G-SSM-UA16-25.R.02	25	7.5
G-SSM-UA16-32.R.03	32	4.8
G-SSM-UA16-40.R.04	40	2.9
A-SSM-UA16-40.R.04	40	2.9
A-SSM-UA16-50.R.05	50	2.2
A-SSM-UA16-63.R.06	63	1.8
A-SSM-UA16-80.R.07	80	1.4
A-SSM-UA16-80.R.08	80	1.4
A-SSM-UA16-100.R.09	100	1.1
A-SSM-UA16-125.R.09	125	0.8

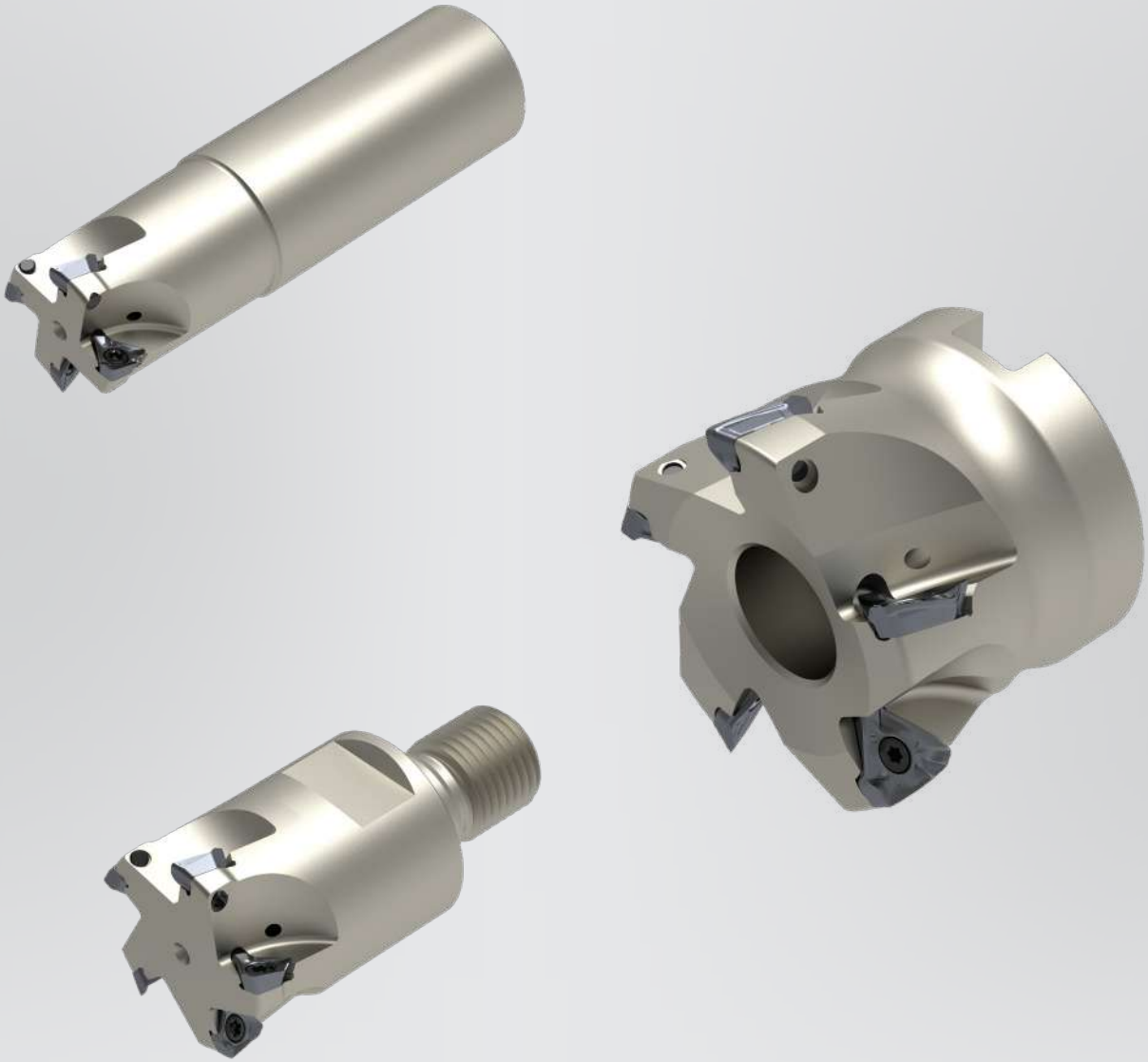
SSM-A / Shouldering 2 x 90°

Application data (axial plunging APKT16)



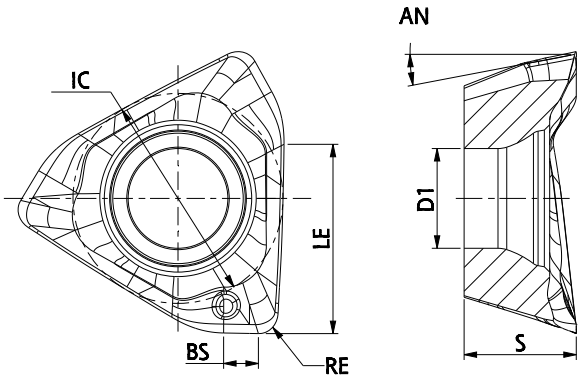


Description	DC [mm]	X_{max} [mm]
C-SSM-UA16-25.R.02-B-40-95	25	2.0
C-SSM-UA16-32.R.03-B-40-105	32	1.8
C-SSM-UA16-40.R.04-B-50-125	40	1.6
G-SSM-UA16-25.R.02	25	2.0
G-SSM-UA16-32.R.03	32	1.8
G-SSM-UA16-40.R.04	40	1.6
A-SSM-UA16-40.R.04	40	1.6
A-SSM-UA16-50.R.05	50	1.6
A-SSM-UA16-63.R.06	63	1.6
A-SSM-UA16-80.R.07	80	1.6
A-SSM-UA16-80.R.08	80	1.6
A-SSM-UA16-100.R.09	100	1.6
A-SSM-UA16-125.R.09	125	1.6

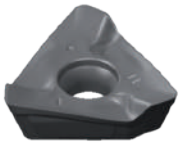


SSM-T / Shouldering 3 x 90°

Insert (TOKX)



-HCM



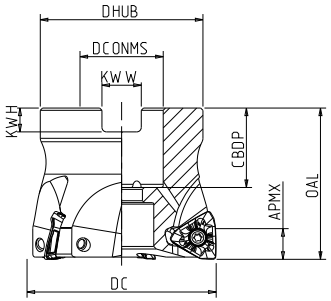
-SCM

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
TOKX 070305PDER-HCM	5.9	5.5	3.15	1	0.5	2.8	14
TOKX 070305PDER-SCM	5.9	5.5	3.15	1	0.5	2.8	14
TOKX 070308PDER-HCM	5.9	5.5	3.15	1	0.8	2.8	14
TOKX 070308PDER-SCM	5.9	5.5	3.15	1	0.8	2.8	14
TOKX 09T308PDER-HCM	9.525	9.2	3.8	1.5	1.2	3.4	12
TOKX 09T308PDER-SCM	9.525	9.2	3.8	1.5	0.8	3.4	12
TOKX 09T312PDER-HCM	9.525	9.2	3.8	1.5	1.2	3.4	12
TOKX 09T312PDER-SCM	9.525	9.2	3.8	1.5	1.2	3.4	12
TOKX 09T316PDER-HCM	9.525	9.2	3.8	1.5	1.6	3.4	12
TOKX 09T316PDER-SCM	9.525	9.2	3.8	1.5	1.6	3.4	12

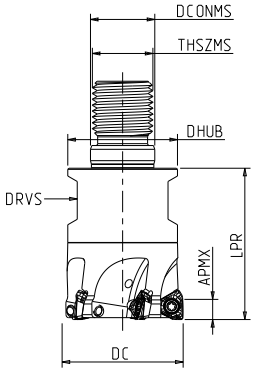
SSM-T / Shouldering 3 x 90°

Milling body (TOKX07)

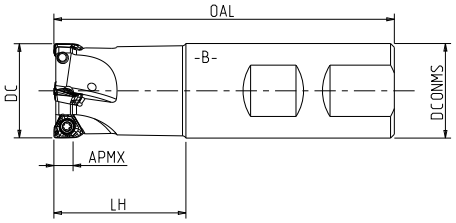
A-



G-



C-

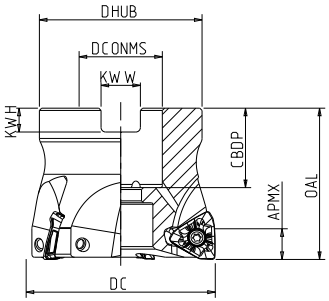


Description	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]		CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-T07-20.R.03-B-25-77	20	77	25	-	20	5	22000	3	-	-	-	-	-	-
C-SSM-T07-25.R.04-B-34-90	25	90	34	-	25	5	20000	4	-	-	-	-	-	-
C-SSM-T07-32.R.05-B-40-102	32	102	40	-	32	5	19700	5	-	-	-	-	-	-
G-SSM-T07-20.R.03	20	-	-	30	10.5	5	36900	3	18	SW15	M10	-	-	-
G-SSM-T07-25.R.04	25	-	-	35	12.5	5	33200	4	21	SW17	M12	-	-	-
G-SSM-T07-32.R.05	32	-	-	40	17	5	30200	5	29	SW24	M16	-	-	-
A-SSM-T07-40.R.05	40	40	-	-	16	5	17000	5	38	-	-	20	8.4	5.6
A-SSM-T07-50.R.06	50	40	-	-	22	5	14800	6	43	-	-	21	10.4	6.3

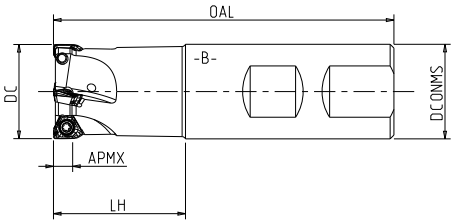
SSM-T / Shouldering 3 x 90°

Milling body (TOKX09)

A-



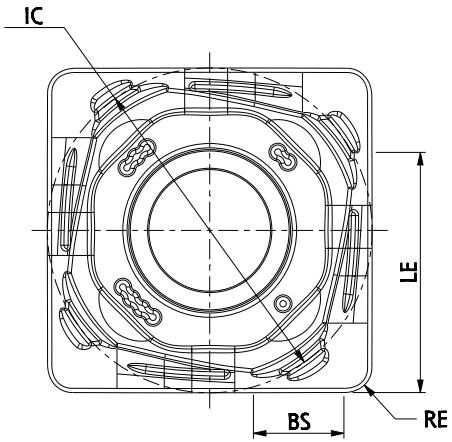
C-

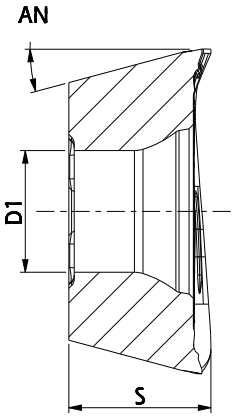


Description	DC [mm]	OAL [mm]	(C-) LH [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-T09-32.R.03-B-40-102	32	102	40	32	8	19700	3	-	-	-	-
A-SSM-T09-40.R.04	40	40	-	16	8	17000	4	38	20.5	8.4	5.6
A-SSM-T09-50.R.05	50	40	-	22	8	14800	5	43	21	10.4	6.3
A-SSM-T09-63.R.06	63	40	-	22	8	12850	6	48	21	10.4	6.3

SSM-S / Shouldering 4 x 90°

Insert (SDKT)





-HCM

-SCM

-CCM

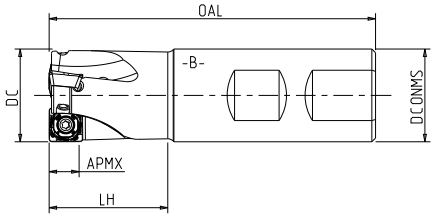
-LMM

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
SDKT 09T308SR-HCM	9.9	7.4	3.97	2.5	0.8	3.4	15
SDKT 09T308SR-SCM	9.9	7.4	3.97	2.5	0.8	3.4	15
SDKT 09T308SR-CCM	9.9	7.4	3.97	2.5	0.8	3.4	15
SDHT 09T308FR-LMM	9.9	7.4	3.97	2.5	0.8	3.4	15
SDKT 120508SR-HCM	12.3	9.8	5	2.5	0.8	4.7	15
SDKT120508SR-SCM	12.3	9.8	5	2.5	0.8	4.7	15
SDKT 120508SR-CCM	12.3	9.8	5	2.5	0.8	4.7	15
SDHT 120508FR-LMM	12.3	9.8	5	2.5	0.8	4.7	15

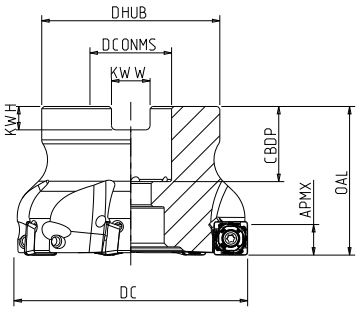
SSM-S / Shouldering 4 x 90°

Milling body (SDKT09)

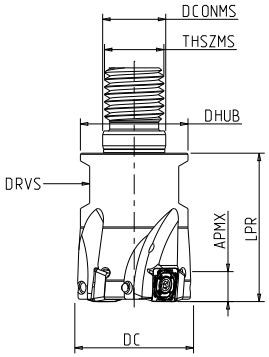
C-



A-



G-

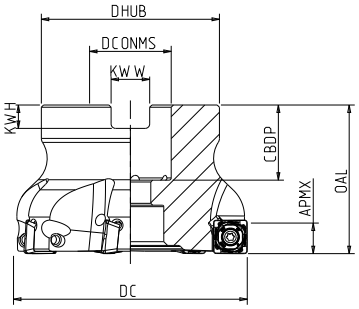


Description	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]	THSZMS [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-S09-25.R.03-B-32-88	25	88	32	-	25	8	23700	3	-	-	-	-	-	-
C-SSM-S09-32.R.04-B-40-100	32	100	40	-	32	8	19700	4	-	-	-	-	-	-
G-SSM-S09-25.R.03	25	-	-	35	12.5	8	33200	3	21	SW17	M12	-	-	-
G-SSM-S09-32.R.04	32	-	-	40	17	8	30200	4	29	SW24	M16	-	-	-
A-SSM-S09-40.R.05	40	40	-	-	16	8	17000	5	38	-	-	20	8.4	5.6
A-SSM-S09-50.R.06	50	40	-	-	22	8	14800	6	43	-	-	20	10.4	6.3
A-SSM-S09-63.R.07	63	40	-	-	22	8	12855	7	48	-	-	20	10.4	6.3
A-SSM-S09-80.R.09	80	50	-	-	27	8	11250	9	58	-	-	22	12.4	7

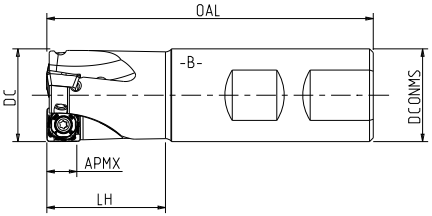
SSM-S / Shouldering 4 x 90°

Milling body (SDKT12)

A-



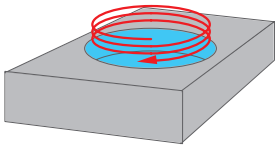
C-

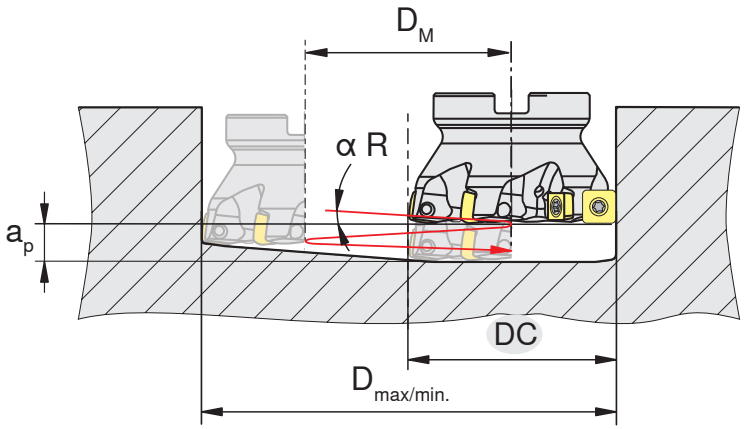


Description	DC [mm]	OAL [mm]	(C-) LH [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-S12-32.R.03-B-40-100	32	100	40	32	10	19700	3	-	-	-	-
A-SSM-S12-40.R.04	40	40	-	16	10	17000	4	38	20	8.4	5.6
A-SSM-S12-50.R.05	50	40	-	22	10	14800	5	43	20	10.4	6.3
A-SSM-S12-63.R.06	63	40	-	22	10	12850	6	48	21	10.4	6.3
A-SSM-S12-80.R.07	80	50	-	27	10	11250	7	58	22	12.4	7

SSM-S / Shouldering 4 x 90°

Application data (helical plunge milling SDKT09)



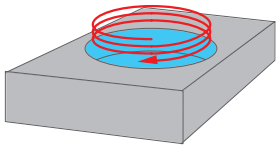


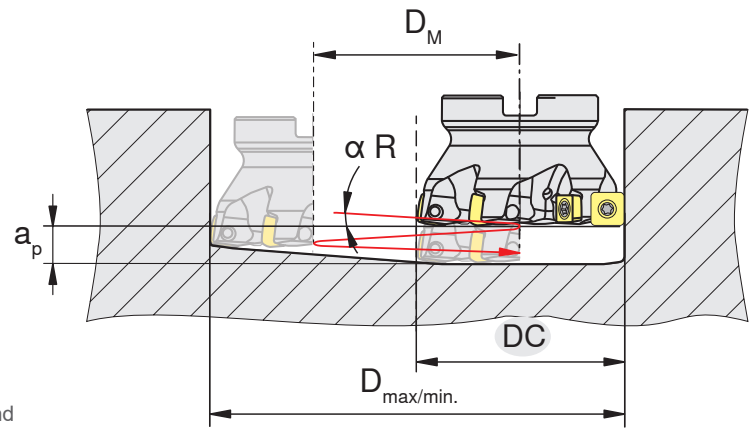
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-S09-25.R.03-B-32-88	25	48	37	4.4
C-SSM-S09-32.R.04-B-40-100	32	62	47	2.2
G-SSM-S09-25.R.03	25	48	37	4.4
G-SSM-S09-32.R.04	32	62	47	2.2
A-SSM-S09-40.R.05	40	78	63	0.75
A-SSM-S09-50.R.06	50	98	83	0.5
A-SSM-S09-63.R.07	63	124	109	0.35
A-SSM-S09-80.R.09	80	158	143	0.25

SSM-S / Shouldering 4 x 90°

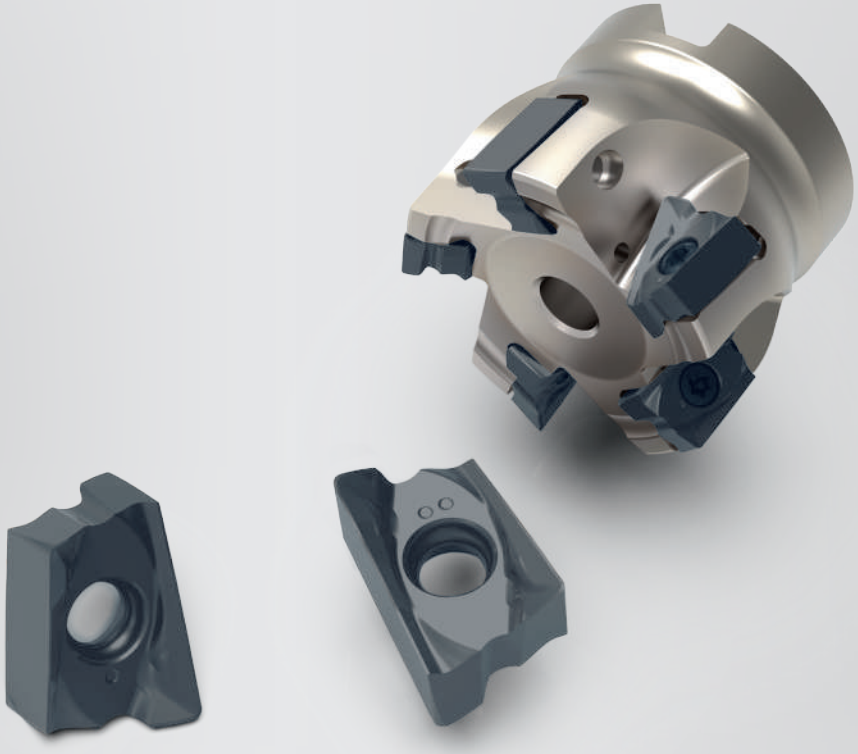
Application data (helical plunge milling SDKT12)





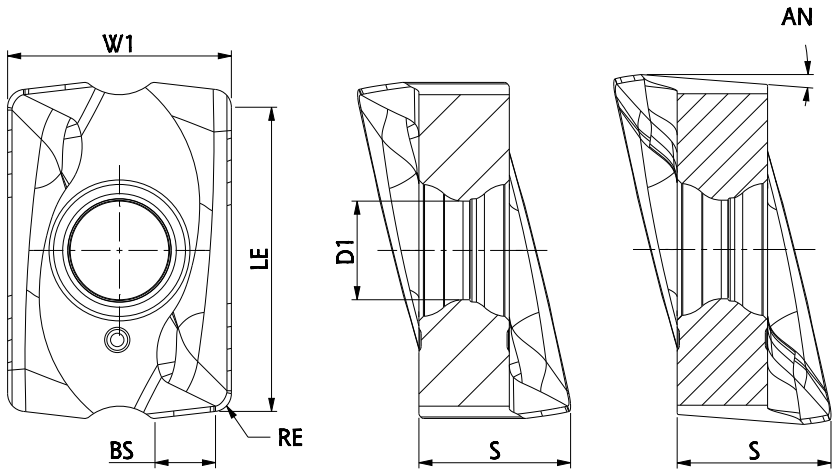
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-S12-32.R.03-B-40-100	32	62	41	2.0
A-SSM-S12-40.R.04	40	78	57	2.0
A-SSM-S12-50.R.05	50	98	77	1.2
A-SSM-S12-63.R.06	63	124	103	0.7
A-SSM-S12-80.R.07	80	158	137	0.6



DSM-L / Shouldering 4 x 90°

Insert (LNKU12 / LOKU12)



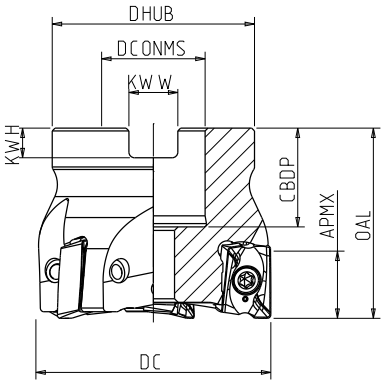
LNKU12 LOKU12

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
LNKU 120608ER-HCM	10	13.4	6.78	2.7	0.8	4.4	0
LNKU 120608ER-SCM	10	13.4	6.78	2.7	0.8	4.4	0
LNKU 120608ER-CCM	10	13.4	6.78	2.7	0.8	4.4	0
LOKU 120608ER-SCM	10	13.4	6.87	2.7	0.8	4.4	5
LOKU 120608ER-XCM	10	13.4	6.87	2.7	0.8	4.4	5

DSM-L / Shouldering 4 x 90°

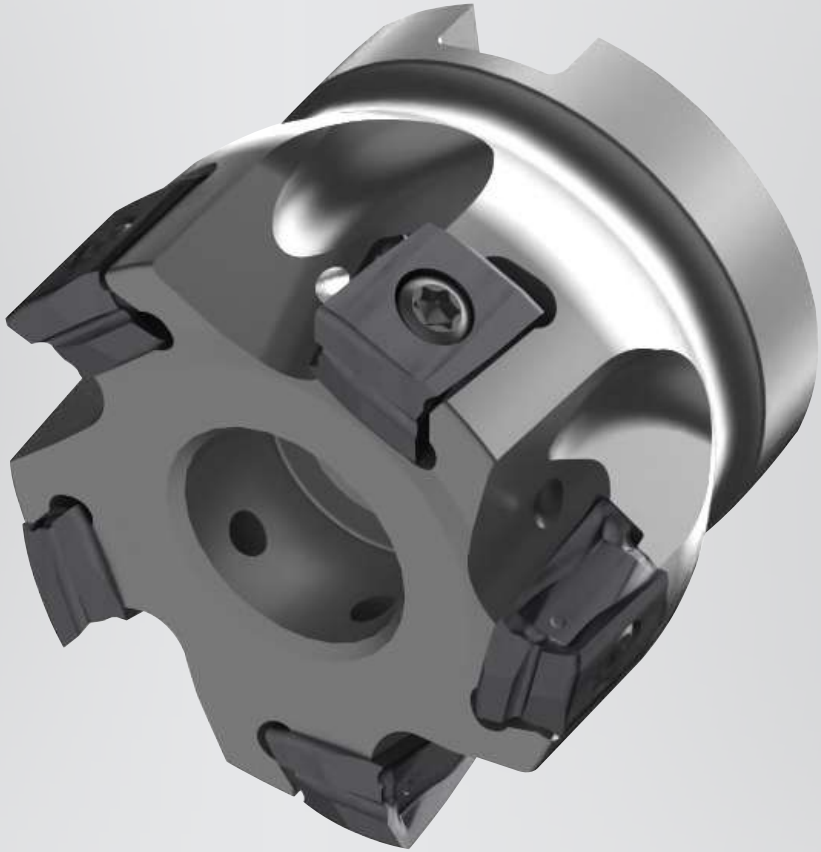
Milling body (LNKU12 / LOKU12)

A-



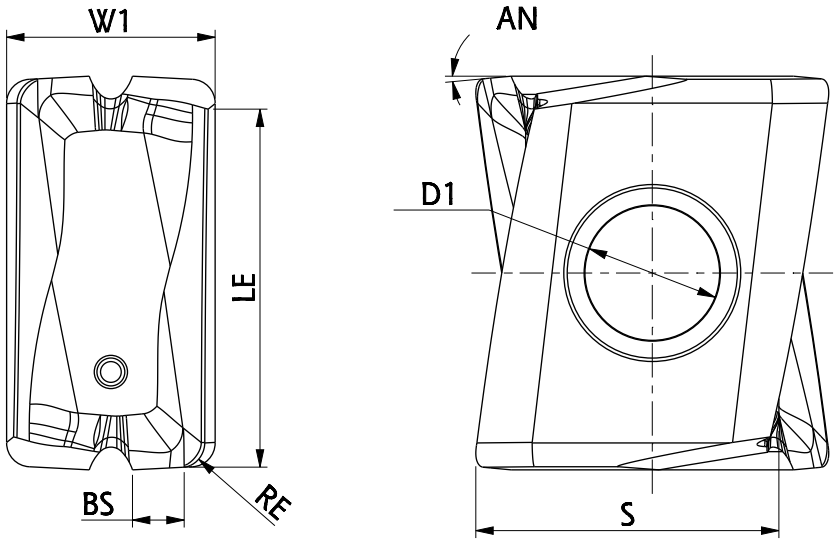
Description	DC [mm]	OAL [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
A-DSM-LO/LN12-40.R.04	40	40 / 40.44*	16	12	21050	4	38	20	8.4	5.6
A-DSM-LO/LN12-50.R.05	50	40 / 40.44*	22	12	16800	5	43	20	10.4	6.3
A-DSM-LO/LN12-63.R.06	63	40 / 40.44*	22	12	13300	6	48	21	10.4	6.3
A-DSM-LO/LN12-80.R.07	80	50 / 50.44*	27	12	10450	7	58	22	12.4	7
A-DSM-LO/LN12-100.R.08	100	50 / 50.44*	32	12	8350	8	78	26	14.4	8
A-DSM-LO/LN12-125.R.09	125	50 / 50.44*	40	12	6650	9	88	28	16.4	9
A-DSM-LO/LN12-160.R.11	160	63 / 63.44*	40	12	4800	11	98	29	16.4	9

*with LOKU insert



DSM-L / Shouldering 4 x 90°

Insert (LNHU12)

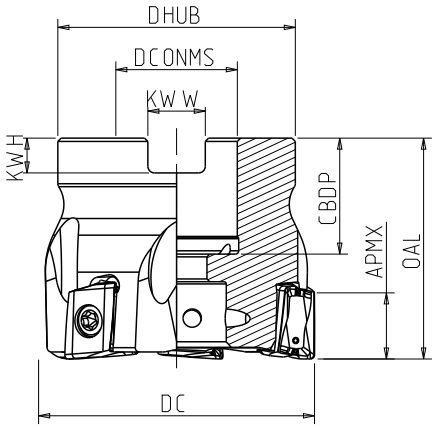


Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
LNHU 120608-HCM	7	12	10.17	1.9	0.8	4.52	11
LNHU 120608R-SCM	7	12	10.17	1.9	0.8	4.52	11
LNHU 120608-CCM	7	12	10.17	1.9	0.8	4.52	11
LOHU 120608-XCM	7	12	10.17	1.9	0.8	4.52	11

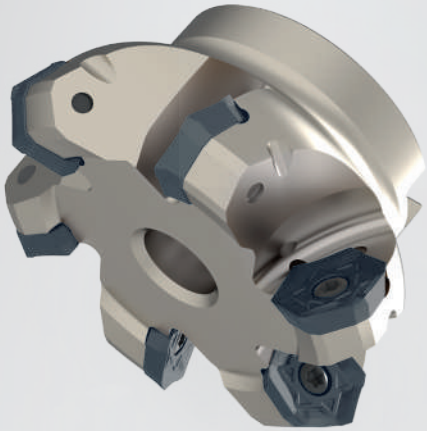
DSM-L / Shouldering 4 x 90°

Milling body (LNHU12)

A-

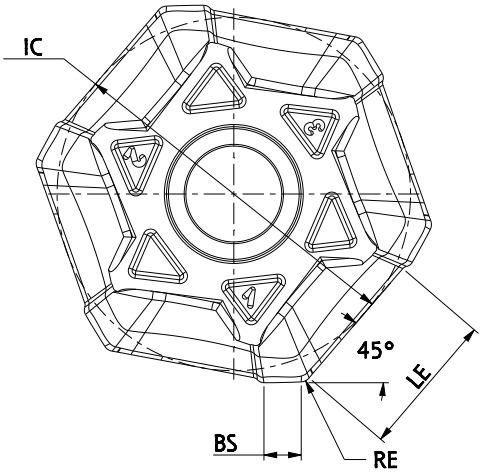


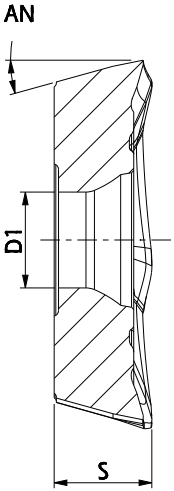
Description	DC [mm]	OAL [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
A-DSM-T-LN12-40.R.04	40	40	16	12	21050	4	38	19	8.4	5.6
A-DSM-T-LN12-50.R.05	50	40	22	12	16800	5	43	21	10.4	6.3
A-DSM-T-LN122-63.R.06	63	40	22	12	13300	6	48	21	10.4	6.3
A-DSM-T-LN122-80.R.07	80	50	27	12	10450	7	58	23	12.4	7
A-DSM-T-LN122-100.R.08	100	50	32	12	8350	9	78	26	14.4	8
A-DSM-T-LN12-125.R.09	125	63	40	12	6650	11	88	28	16.4	9



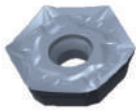
SSM-H / Face milling 6 x 45°

Insert (HPKT, HOKT, HPCT and HOCT)



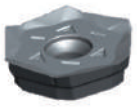


HPKT-HCM



HOKT-HCM

HPKT-SCM



HOCT-SCM

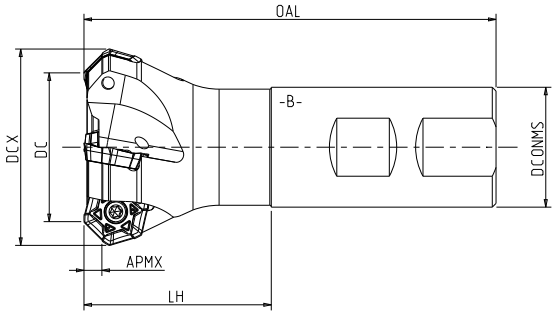
HPCT-LMM

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
HPKT 0604AZER-HCM	16.3	6.5	4.5	1.7	0.5	4.4	11
HPKT 0604AZER-SCM	16.3	6.5	4.5	1.7	0.5	4.4	11
HPCT 0604AZFR-LMM	16.3	6.5	4.5	1.7	0.4	4.4	11
HOKT 0604AZER-HCM	16.3	6.5	4.5	1.7	0.5	4.4	10
HOCT 0604AZER-SCM	16.3	6.5	4.5	1.7	0.4	4.4	10

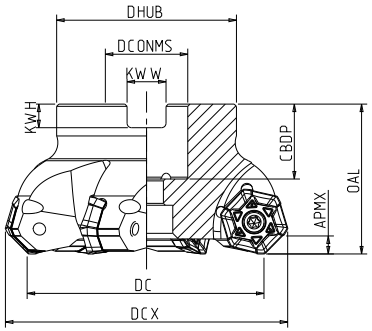
SSM-H / Face milling 6 x 45°

Milling body (HPKT. HOKT, HPCT and HOCT)

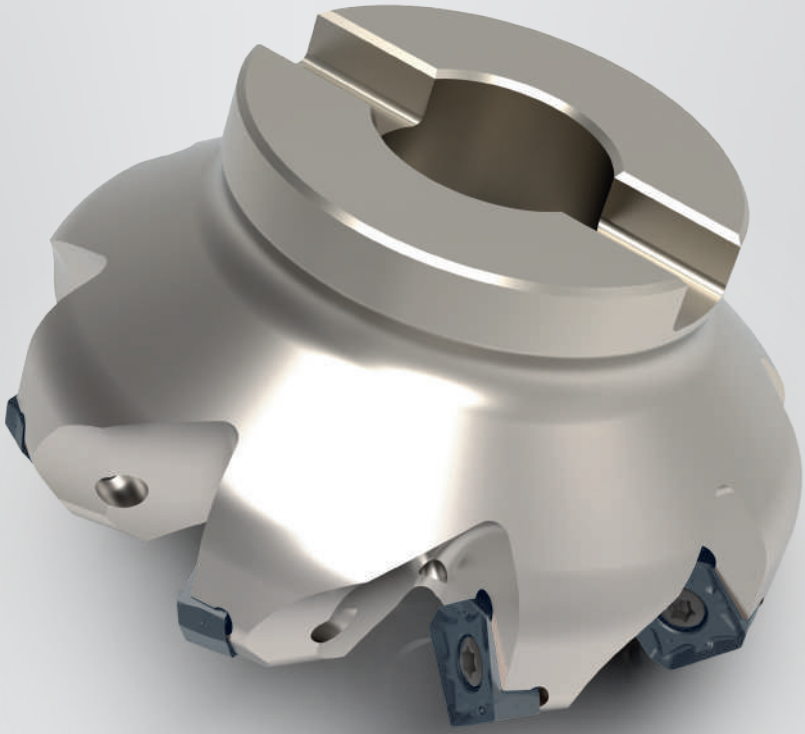
C-



A-

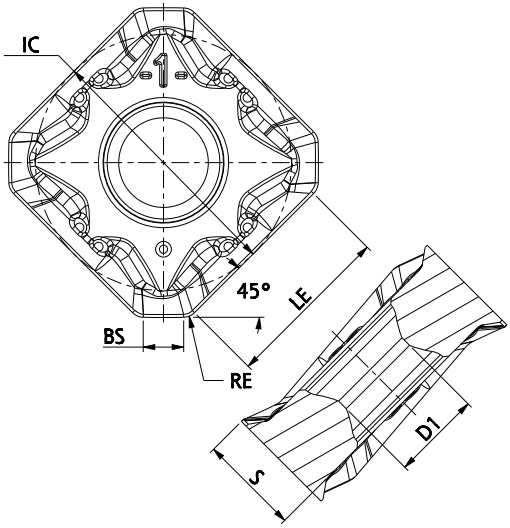


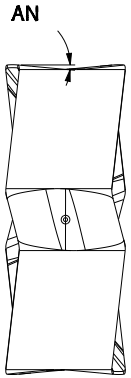
Description	DC [mm]	DCX [mm]	OAL [mm]	(C-) LH [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-H06-40.R.04-B32-50-110	40	52.2	110	50	32	4.5	17000	4	-	-	-	-
A-SSM-H06-40.R.04	40	52.2	40		16	4.5	19900	4	38	19	8.4	5.6
A-SSM-H06-50.R.05	50	62.2	40		22	4.5	15900	5	43	20	10.4	6.3
A-SSM-H06-63.R.06	63	75.2	40		22	4.5	12600	6	48	20	10.4	6.3
A-SSM-H06-80.R.07	80	92.2	50		27	4.5	9900	7	58	22	12.4	7
A-SSM-H06-100.R.09	100	112.2	50		32	4.5	7900	9	78	25	14.4	8
A-SSM-H06-125.R.10	125	137.2	63		40	4.5	6300	10	88	33	16.4	9



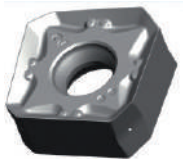
DSM-S / Face milling 8 x 45°

Insert (SOKU)

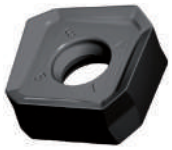




-HCM



-SCM



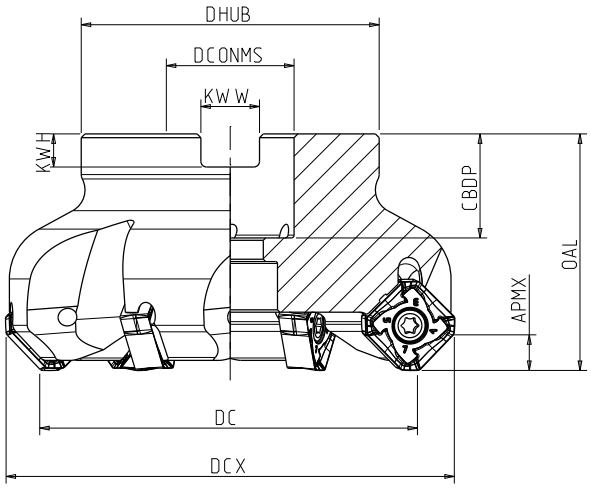
-CCM

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
SOKU 1205AZER-HCM	13	8.5	5.1	2	0.8	4.55	6
SOKU 1205AZER-SCM	13	8.5	5.1	2	0.8	4.55	6
SOKU 1205AZER-CCM	13	8.5	5.1	2	0.8	4.55	6
SOKU 1505AZER-HCM	15.875	10.5	6	2.7	1	5.74	6
SOKU 1505AZER-SCM	15.875	10.5	6	2.7	1	5.74	6
SOKU 1505AZER-CCM	15.875	10.5	6	2.7	1	5.74	6

DSM-S / Face milling 8 x 45°

Milling body (SOKU12)

A-

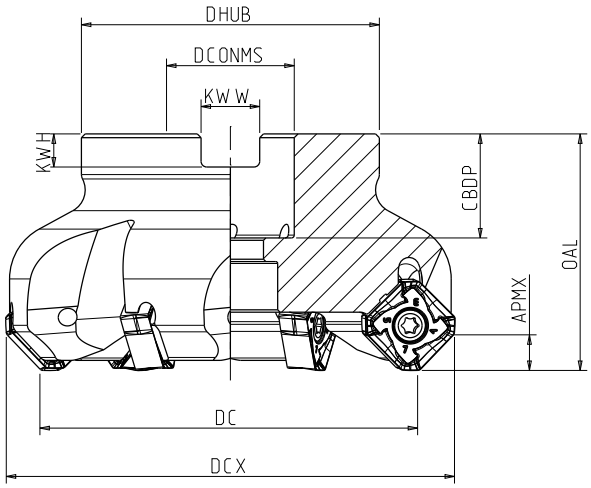


Description	DC [mm]	DCX [mm]	OAL [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
A-DSM-S12-40.R.04	40	52.4	45	16	6	19900	4	38	19	8.4	5.6
A-DSM-S12-50.R.05	50	62.4	45	22	6	15900	5	43	20	10.4	6.3
A-DSM-S12-63.R.06	63	75.4	45	22	6	12600	6	48	20	10.4	6.3
A-DSM-S12-80.R.08	80	92.4	50	27	6	9900	8	58	23	12.4	7
A-DSM-S12-100.R.10	100	112.4	50	32	6	7900	10	78	25	14.4	8
A-DSM-S12-125.R.12	125	137.4	63	40	6	6300	12	88	28	16.4	9

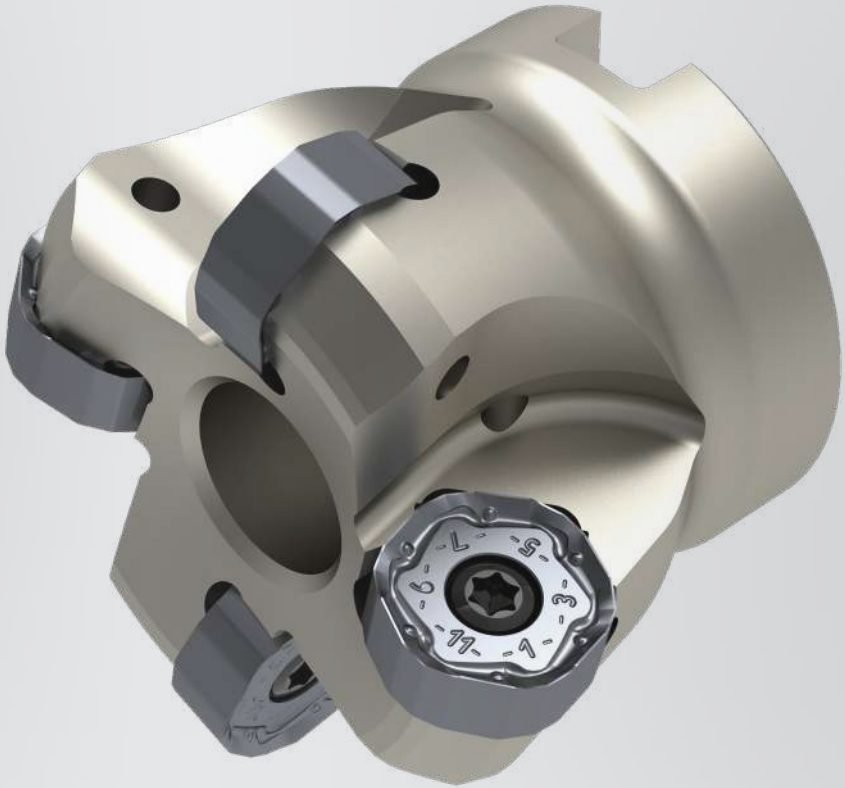
DSM-S / Face milling 8 x 45°

Milling body (SOKU15)

A-

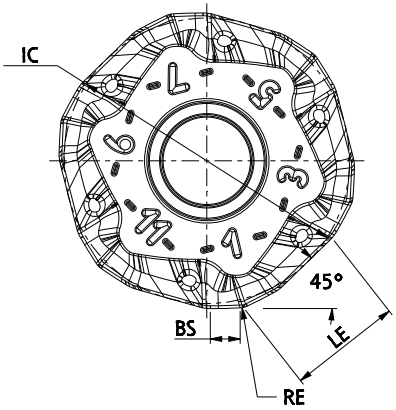


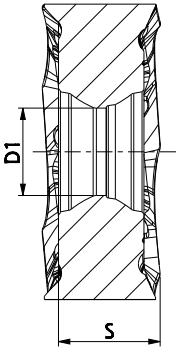
Description	DC [mm]	DCX [mm]	OAL [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
A-DSM-S15-40.R.04	40	55	45	16	6.5	15900	4	38	19	8.4	5.6
A-DSM-S15-50.R.04	50	65	45	22	6.5	12700	4	43	20	10.4	6.3
A-DSM-S15-63.R.05	63	78	45	22	6.5	10100	5	48	20	10.4	6.3
A-DSM-S15-80.R.06	80	95	50	27	6.5	7900	6	58	22	12.4	7
A-DSM-S15-100.R.07	100	115	50	32	6.5	6300	7	78	25	14.4	8
A-DSM-S15-125.R.08	125	140	63	40	6.5	5000	8	88	28	16.4	9
A-DSM-S15-160.R.10	160	175	63	40	6.5	3800	10	93.4	29	16.4	9



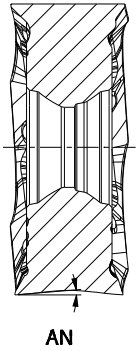
DSM-H / Face milling 12 x 45°

Insert (HNKU / HOKU)





HNKU08



HOKU08

-HCM

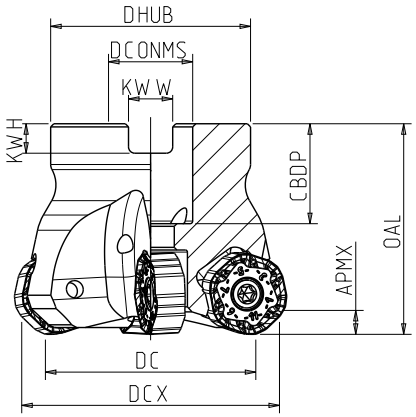
-SCM

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
HNKU 0806AZER-HCM	14.7	7.5	5.19	1.5	1	4.5	-
HNKU 0806AZER-SCM	14.7	7.5	5.19	1.5	1	4.5	-
HOKU 0806AZER-HCM	14.7	7.5	5.23	1.5	1	4.5	4.5
HOKU 0806AZER-SCM	14.7	7.5	5.23	1.5	1	4.5	4.5

DSM-H / Face milling 12 x 45°

Milling body (HNKU / HOKU)

A-

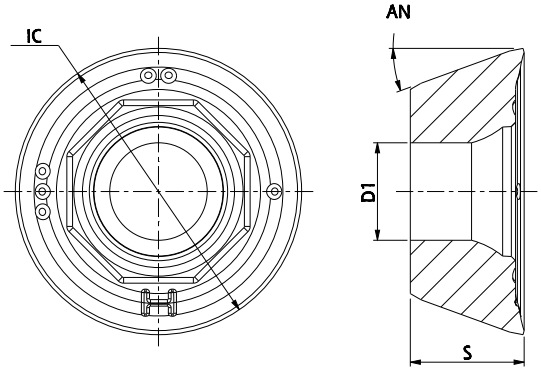


Description	DC [mm]	DCX [mm]	OAL [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
A-DSM-H08-40.R.04	40	52	40	16	4	15900	4	38	19	8.4	5.6
A-DSM-H08-50.R.04	50	62	40	22	4	12700	4	43	20	10.4	6.3
A-DSM-H08-63.R.05	63	75	40	22	4	10100	5	48	20	10.4	6.3
A-DSM-H08-80.R.06	80	92	50	27	4	7900	6	58	22	12.4	7
A-DSM-H08-100.R.08	100	112	50	32	4	6400	8	78	25	14.4	8
A-DSM-H08-125.R.09	125	137	63	40	4	5100	9	88	28	16.4	9


NEW

SSM-R / Form milling

Insert (RPMX. RPHX, RDHW and RDHX)




-HCM


-SCM


-XCM


-MOSN


-LMM

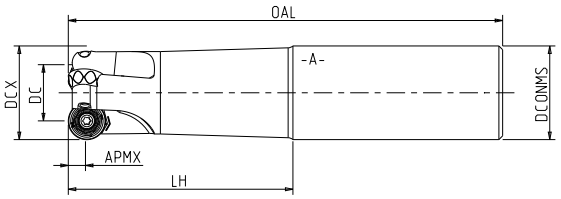

-XCM NEW

Description	W1/IC [mm]	S [mm]	D1 [mm]	AN [°]
RPMX 10T3MO-HCM	10	3.97	3.4	11
RPMX 10T3MO-SCM	10	3.97	3.4	11
RDHX 10T3MO-LMM	10	3.97	3.4	15
RPHX 10T3MO-XCM	10	3.97	3.4	11
RDHW 10T3MOSN	10	3.97	3.4	15
RPMX 1204MO-HCM	12	4.76	4.4	11
RPMX 1204MO-SCM	12	4.76	4.4	11
RDHX 1204MO-LMM	12	4.76	4.4	15
RPHX 1204MO-XCM	12	4.76	4.4	11
RPHX 1204MO-COOL-XCM	12	4.76	4.8	11
RDHW 1204MOSN	12	4.76	4.4	15
RPMX 1605MO-HCM	16	5.56	5.5	11
RPMX 1605MO-SCM	16	5.56	5.5	11
RDHX 1605MO-LMM	16	5.56	5.5	15
RPHX 1605MO-XCM	16	5.56	5.5	11
RPHX 1605MO-COOL-XCM	16	5.56	5.5	11
RDHW 1605MOSN	16	5.56	5.5	15

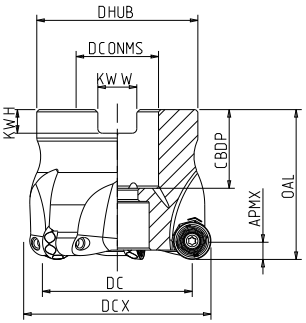
SSM-R / Form milling

Milling body (RP/RD10)

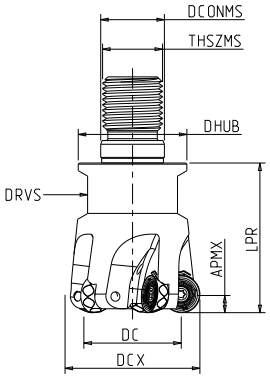
C-



A-



G-

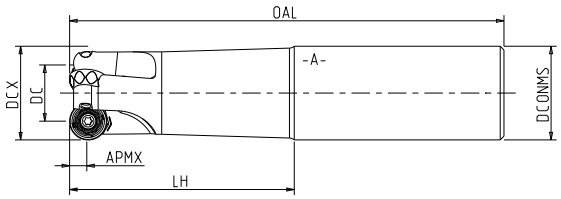


Description	DC [mm]	DCX [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]		CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-R10-	10	20	102	50	-	20	5	31800	2	-	-	-	-	-	-
C-SSM-R10-	10	20	165	50	-	20	5	22260	2	-	-	-	-	-	-
C-SSM-R10-	15	25	116	60	-	25	5	20000	3	-	-	-	-	-	-
C-SSM-R10-	15	25	165	60	-	25	5	20000	3	-	-	-	-	-	-
C-SSM-R10-	22	32	130	70	-	32	5	19000	4	-	-	-	-	-	-
C-SSM-R10-	22	32	165	70	-	32	5	18000	4	-	-	-	-	-	-
G-SSM-R10-20.R.02	10	20	-	-	30	10.5	5	36900	2	18	SW15	M10	-	-	-
G-SSM-R10-25.R.03	15	25	-	-	35	12.5	5	33200	3	21	SW17	M12	-	-	-
G-SSM-R10-32.R.04	22	32	-	-	40	17	5	30200	4	29	SW24	M16	-	-	-
G-SSM-R10-35.R.04	25	35	-	-	40	17	5	30200	4	29	SW24	M16	-	-	-
A-SSM-R10-40.R.04	30	40	40	-	-	16	5	15900	4	38	-	-	20	8.4	5.6
A-SSM-R10-42.R.05	32	42	40	-	-	16	5	15900	5	38	-	-	20	8.4	5.6
A-SSM-R10-50.R.05	40	50	40	-	-	22	5	12700	5	43	-	-	21	10.4	7.6

SSM-R / Form milling

Milling body (RP/RD12)

C-



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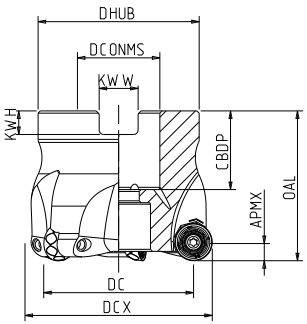
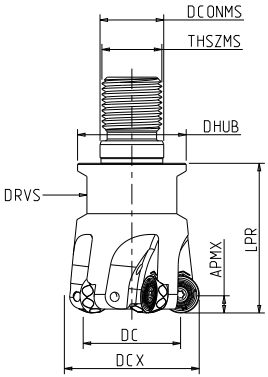


G-

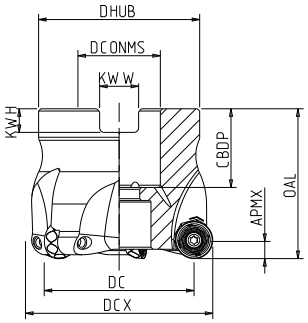


Description	DC [mm]	DCX [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]		CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-R12-	13	25	86	30	-	25	6	25000	2	-	-	-	-	-	-
C-SSM-R12-	13	25	116	60	-	25	6	18000	2	-	-	-	-	-	-
C-SSM-R12-	20	32	100	40	-	32	6	19000	3	-	-	-	-	-	-
C-SSM-R12-	20	32	130	70	-	32	6	17000	3	-	-	-	-	-	-
C-SSM-R12-32.R.03-A-	20	32	130	70	-	32	6	17000	3	-	-	-	-	-	-
C-SSM-R12-40.R.04-LF	28	40	150	50	-	32	6	127400	4	-	-	-	-	-	-
G-SSM-R12-25.R.02	13	25	-	-	35	12.5	6	25000	2	21	SW17	M12	-	-	-
G-SSM-R12-32.R.03	20	32	-	-	35	17	6	19850	3	29	SW24	M16	-	-	-
G-SSM-R12-35.R.03	23	35	-	-	-40	17	6	15900	3	29	SW24	M16	-	-	-
A-SSM-R12-40.R.04	28	40	40	-	-	16	6	15900	4	38	-	-	20	8.4	5.6
A-SSM-R12-40.R.04-LF	28	40	40	-	-	16	6	15900	4	38	-	-	20	8.4	5.6
A-SSM-R12-42.R.04	30	42	40	-	-	16	6	15900	4	38	-	-	20	8.4	5.6
A-SSM-R12-50.R.05	38	50	40	-	-	22	6	12700	5	43	-	-	21	10.4	6.3
A-SSM-R12-50.R.05-LF	38	50	40	-	-	22	6	12700	5	43	-	-	21	10.4	6.3
A-SSM-R12-52.R.05	40	52	40	-	-	22	6	12700	5	43	-	-	21	10.4	6.3
A-SSM-R12-63.R.06	51	63	40	-	-	22	6	10100	6	48	-	-	21	10.4	6.3
A-SSM-R12-63.R.06-LF	51	63	40	-	-	22	6	10100	6	48	-	-	21	10.4	6.3
A-SSM-R12-66.R.06	54	66	40	-	-	27	6	10100	6	58	-	-	23	12.4	7
A-SSM-R12-80.R.08	68	80	50	-	-	27	6	7950	8	58	-	-	22	12.4	7
A-SSM-R12-80.R.08-LF	68	80	50	-	-	27	6	7950	8	58	-	-	22	12.4	7
A-SSM-R12-100.R.10	88	100	50	-	-	32	6	6350	10	78	-	-	26	14.4	8
A-SSM-R12-100.R.10-LF	88	100	50	-	-	32	6	6350	10	78	-	-	26	14.4	8

SSM-R / Form milling

Milling body (RP16)

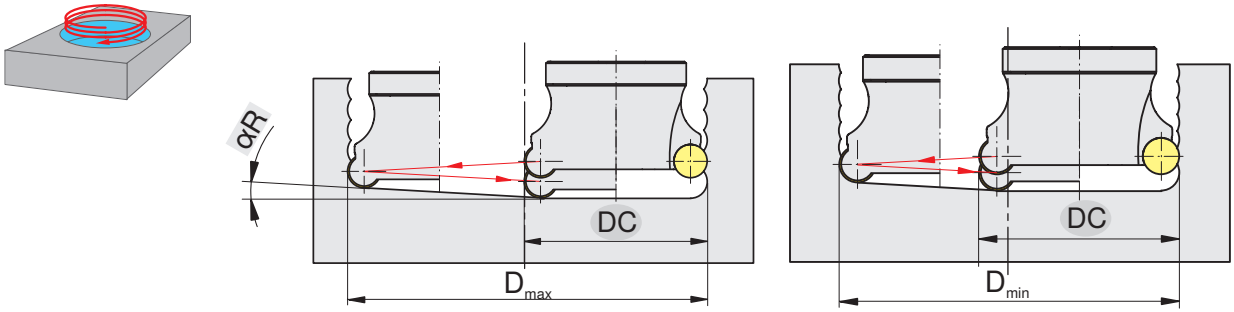
A-



Description	DC [mm]	DCX [mm]	OAL [mm]	DCONMS H6/h6 [mm]	APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
A-SSM-R16-50.R.03	34	50	40	22	8	12700	3	48	22	10.4	6.3
A-SSM-R16-50.R.03-LF	34	50	40	22	8	12700	3	48	22	10.4	6.3
A-SSM-R16-52.R.04	36	52	40	22	8	12700	4	48	21	10.4	6.3
A-SSM-R16-63.R.05	47	63	40	22	8	10100	5	48	21	10.4	6.3
A-SSM-R16-63.R.05-LF	47	63	40	22	8	10100	5	48	21	10.4	6.3
A-SSM-R16-66.R.05	50	66	40	22	8	10100	5	48	21	10.4	6.3
A-SSM-R16-80.R.06	64	80	50	27	8	7950	6	58	23	12.4	7
A-SSM-R16-80.R.06-LF	64	80	50	27	8	7950	6	58	23	12.4	7
A-SSM-R16-100.R.07	84	100	50	32	8	6350	7	78	26	14.4	8
A-SSM-R16-100.R.07-LF	84	100	50	32	8	6350	7	78	26	14.4	8
A-SSM-R16-125.R.08	109	125	63	40	8	5050	8	88	28	16.4	9
A-SSM-R16-125.R.08-LF	109	125	63	40	8	5050	8	88	28	16.4	9

SSM-R / Form milling

Application data (helical plunge milling RP/RD10)

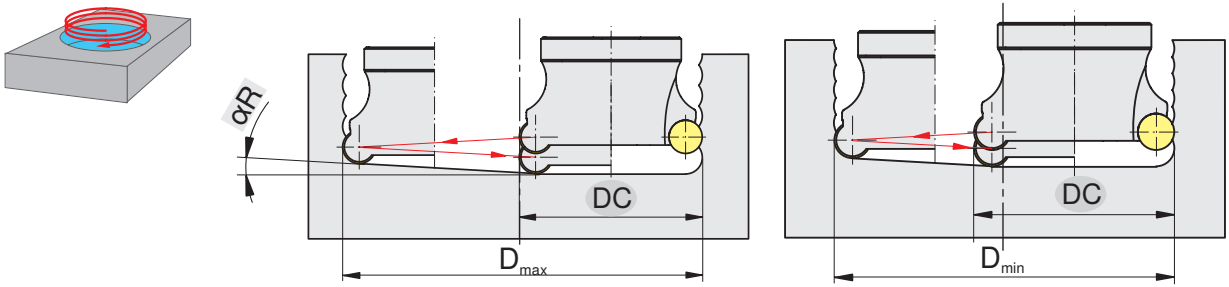


D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-R10-20.R.02-A-50-102	20	30	26	1.3
C-SSM-R10-20.R.02-A-50-165	20	30	26	1.3
C-SSM-R10-25.R.03-A-60-116	25	40	37	1.8
C-SSM-R10-25.R.03-A-60-165	25	40	37	1.8
C-SSM-R10-32.R.04-A-70-130	32	54	50	1.5
C-SSM-R10-32.R.04-A-70-165	32	54	50	1.5
G-SSM-R10-20.R.02	20	30	26	1.3
G-SSM-R10-25.R.03	25	40	37	1.8
G-SSM-R10-32.R.04	32	54	50	1.5
G-SSM-R10-35.R.04	35	54	50	1.5
A-SSM-R10-40.R.04	40	70	64	1.1
A-SSM-R10-42.R.05	42	70	64	1.1
A-SSM-R10-50.R.05	50	74	68	1.1

SSM-R / Form milling

Application data (helical plunge milling RP/RD12)

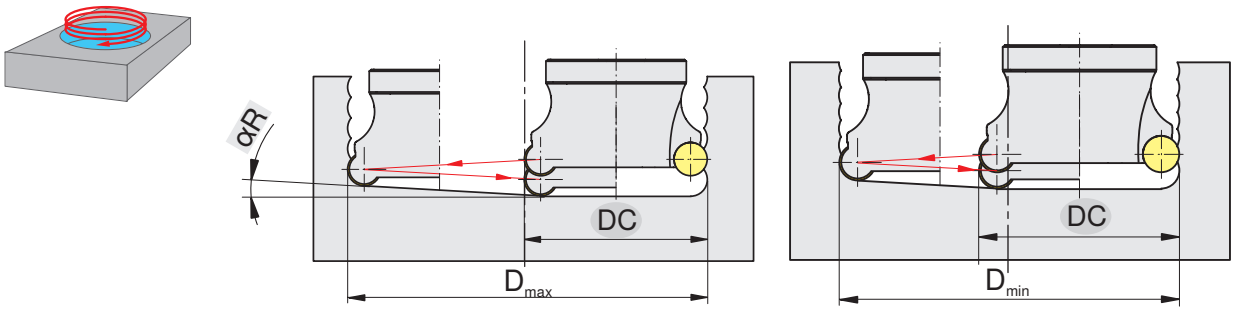


D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-R12-25.R.02-A-30-86	25	38	31	2.2
C-SSM-R12-25.R.02-A-60-116	25	38	31	2.2
C-SSM-R12-32.R.03-A-40-100	32	52	46	1.7
C-SSM-R12-32.R.03-A-70-130	32	52	46	1.7
C-SSM-R12-32.R.03-A-70-130-LF	32	52	46	1.7
C-SSM-R12-40.R.04-LF	40	68	62	1.4
G-SSM-R12-25.R.02	25	38	31	2.2
G-SSM-R12-35.R.03	35	52	46	1.7
A-SSM-R12-40.R.04	40	68	62	1.4
A-SSM-R12-40.R.04-LF	40	68	62	1.4
A-SSM-R12-42.R.04	42	68	62	1.4
A-SSM-R12-50.R.05	50	88	81	1.1
A-SSM-R12-50.R.05-LF	50	88	81	1.1
A-SSM-R12-52.R.05	52	88	81	1.1
A-SSM-R12-63.R.06	63	114	107	0.9
A-SSM-R12-63.R.06-LF	63	114	107	0.9
A-SSM-R12-66.R.06	66	114	107	0.9
A-SSM-R12-80.R.08	80	148	142	0.7
A-SSM-R12-80.R.08-LF	80	148	142	0.7
A-SSM-R12-100.R.10	100	188	181	0.5
A-SSM-R12-100.R.10-LF	100	188	181	0.5

SSM-R / Form milling

Application data (helical plunge milling RP16)

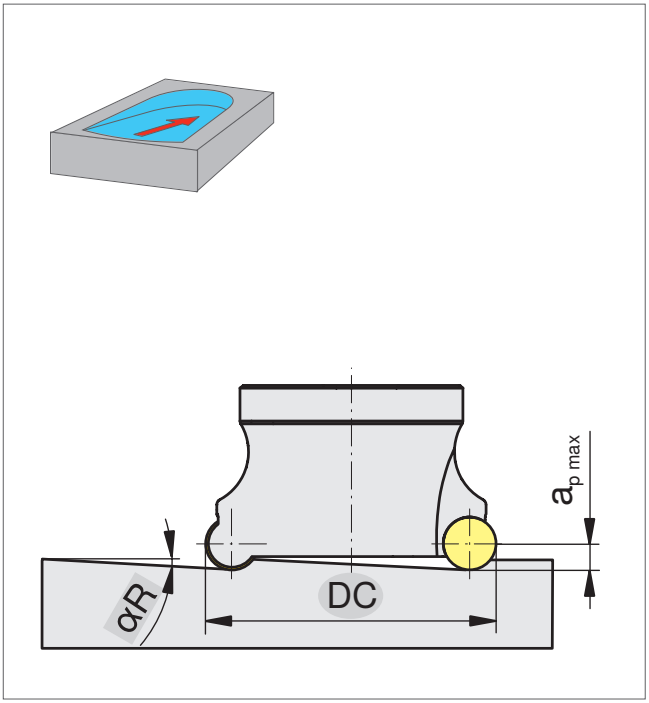


D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
A-SSM-R16-50.R.03	50	84	75	1.5
A-SSM-R16-50.R.03-LF	50	84	75	1.5
A-SSM-R16-52.R.04	52	84	75	1.5
A-SSM-R16-63.R.05	63	110	101	1.1
A-SSM-R16-63.R.05-LF	63	110	101	1.1
A-SSM-R16-66.R.05	66	110	101	1.1
A-SSM-R16-80.R.06	80	144	135	0.9
A-SSM-R16-80.R.06-LF	80	144	135	0.9
A-SSM-R16-100.R.07	100	184	175	0.7
A-SSM-R16-100.R.07-LF	100	184	175	0.7
A-SSM-R16-125.R.08	125	234	225	0.5
A-SSM-R16-125.R.08-LF	125	234	225	0.5

SSM-R / Form milling

Application data (angled ramping)

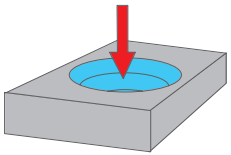


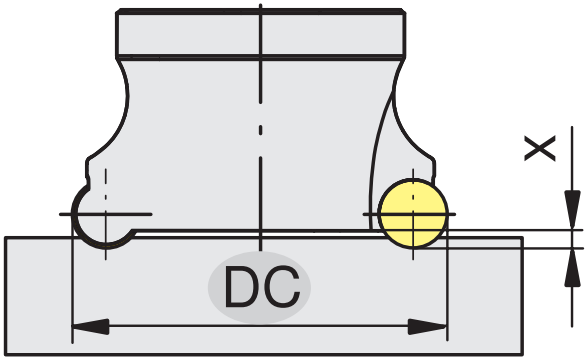
Description	DC [mm]	α_R [°]
C-SSM-R10-20.R.02-A-50-102	20	1.3
C-SSM-R10-20.R.02-A-50-165	20	1.3
C-SSM-R10-25.R.03-A-60-116	25	2.0
C-SSM-R10-25.R.03-A-60-165	25	2.0
C-SSM-R10-32.R.04-A-70-130	32	3.0
C-SSM-R10-32.R.04-A-70-165	32	3.0
G-SSM-R10-20.R.02	20	1.3
G-SSM-R10-25.R.03	25	2.0
G-SSM-R10-32.R.04	32	3.0
G-SSM-R10-35.R.04	35	3.0

Description	DC [mm]	α_R [°]
A-SSM-R10-40.R.04	40	3.3
A-SSM-R10-42.R.04	42	3.3
A-SSM-R10-50.R.05	50	2.4
C-SSM-R12-25.R.02-A-30-86	25	6.4
C-SSM-R12-25.R.02-A-60-116	25	6.4
C-SSM-R12-32.R.03-A-40-100	32	4.0
C-SSM-R12-32.R.03-A-70-130	32	4.0
C-SSM-R12-32.R.03-A.70-130-LF	32	4.0
C-SSM-R12-40.R.04-LF	40	2.8
A-SSM-R12-40.R.04	40	2.8
A-SSM-R12-40.R.04-LF	40	2.8
A-SSM-R12-42.R.04	42	2.8
A-SSM-R12-50.R.05	50	2.6
A-SSM-R12-50.R.05-LF	50	2.6
A-SSM-R12-52.R.05	52	2.6
A-SSM-R12-63.R.06	63	1.9
A-SSM-R12-63.R.06-LF	63	1.9
A-SSM-R12-66.R.06	66	1.9
A-SSM-R12-80.R.08	80	1.3
A-SSM-R12-80.R.08-LF	80	1.3
A-SSM-R12-100.R.10	100	1.0
A-SSM-R12-100.R.10-LF	100	1.0
A-SSM-R16-50.R.03	50	4.0
A-SSM-R16-50.R.03-LF	50	4.0
A-SSM-R16-52.R.03	52	4.0
A-SSM-R16-63.R.05	63	2.8
A-SSM-R16-63.R.05-LF	63	2.8
A-SSM-R16-66.R.05	66	2.8
A-SSM-R16-80.R.06	80	2.0
A-SSM-R16-80.R.06-LF	80	2.0
A-SSM-R16-100.R.07	100	1.5
A-SSM-R16-100.R.07-LF	100	1.5
A-SSM-R16-125.R.08	125	1.0
A-SSM-R16-100.R.07-LF	125	1.0

SSM-R / Form milling

Application data (axial plunging)

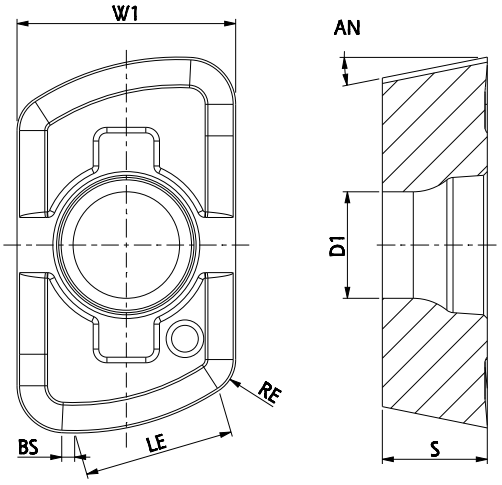




Ø [mm]	DC [mm]	X_{max} [mm]
10	20 – 50	2.4
12	25 – 100	3.1
16	50 – 125	3.1

SSM-E07 / High feed cutting

Insert (EPHT07)

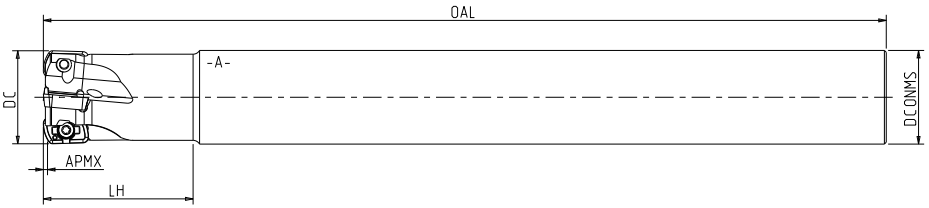


Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
EPHT 070315-12HP	6.98	10	3.35	0.4	1.2	3.4	11
EPHW 070315-12HP	6.98	10	3.35	0.4	1.2	3.4	11

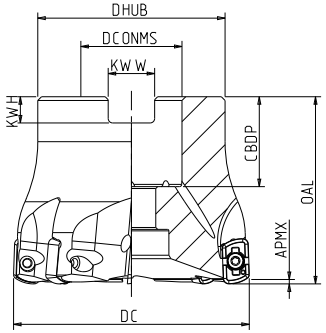
SSM-E07 / High feed cutting

Milling body (EPHT07)

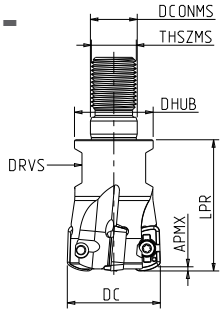
C-



A-



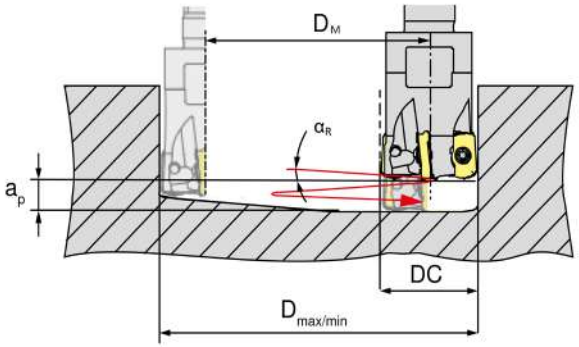
G-



Description	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]	THSZMS [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-E07HP1216.R.02-A-30-160	16	160	30	-	16	1.1	4600	2	-	-	-	-	-	-
C-SSM-E07HP12-20.R.03-A-32-200	20	200	32	-	20	1.1	4200	3	-	-	-	-	-	-
C-SSM-E07HP12-25.R.04-A-40-225	25	225	40	-	25	1.1	4600	4	-	-	-	-	-	-
C-SSM-E07HP12-32.R.05-A-51-250	32	250	51	-	32	1.1	3900	5	-	-	-	-	-	-
G-SSM-E07HP12-16.R.02	16	-	-	23	8.5	1.1	20800	2	13	SW10	M8	-	-	-
G-SSM-E07HP12-20.R.03	20	-	-	30	10.5	1.1	19200	3	18	SW15	M10	-	-	-
G-SSM-E07HP12-25.R.04	25	-	-	35	12.5	1.1	18700	4	21	SW17	M12	-	-	-
G-SSM-E07HP12-32.R.05	32	-	-	40	17	1.1	22000	5	29	SW24	M16	-	-	-
A-SSM-E07HP12-35.R.06	35	40	-	-	16	1.1	26700	6	33	-	-	19	8.4	5.6
A-SSM-E07HP12-40.R.06	40	40	-	-	16	1.1	26400	6	35	-	-	19	8.4	5.6
A-SSM-E07HP12-50.R.07	50	40	-	-	22	1.1	23500	7	43	-	-	21	10.4	6.3
A-SSM-E07HP12-63.R.08	63	50	-	-	27	1.1	20500	8	50	-	-	24	12.4	7

SSM- E07 / High feed cutting

Application data (helical plunge milling EPHT07)

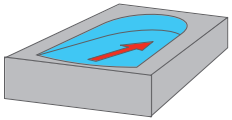


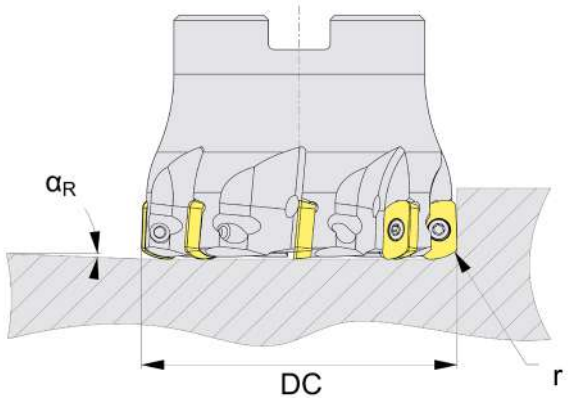
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-E07HP12-16.R.02-A-30-160	16	30	20	2
C-SSM-E07HP12-20.R.02-A-32-200	20	38	28	2
C-SSM-E07HP12-25.R.04-A-40-225	25	48	38	2
C-SSM-E07HP12-32.R.05-A-51-250	32	62	52	2
G-SSM-E07HP12-16.R.02	16	30	20	2
G-SSM-E07HP12-20.R.03	20	38	28	2
G-SSM-E07HP12-25.R.04	25	48	38	2
G-SSM-E07HP12-32.R.05	32	62	52	2
A-SSM-E07HP12-35.R.06	35	68	58	2
A-SSM-E07HP12-40.R.06	40	85	68	1.5
A-SSM-E07HP12-50.R.07	50	102	92	1.5
A-SSM-E07HP12-63.R.08	63	130	120	1

SSM- E07 / High feed cutting

Application data (angled ramping)

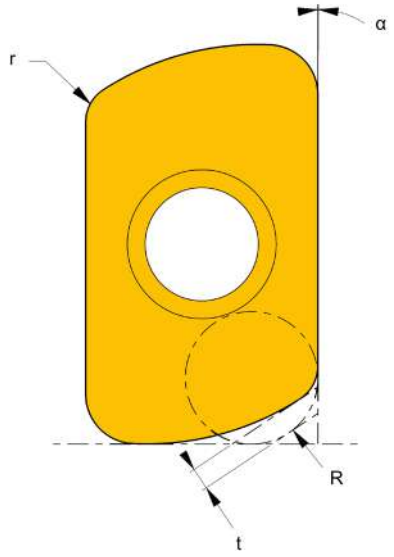




Description	DC [mm]	α_R [°]
C-SSM-E07HP12-16.R.02-A-30-160	16	2
C-SSM-E07HP12-20.R.02-A-32-200	20	2
C-SSM-E07HP12-25.R.04-A-40-225	25	2
C-SSM-E07HP12-32.R.05-A-51-250	32	2
G-SSM-E07HP12-16.R.02	16	2
G-SSM-E07HP12-20.R.03	20	2
G-SSM-E07HP12-25.R.04	25	2
G-SSM-E07HP12-32.R.05	32	2
A-SSM-E07HP12-35.R.06	35	2
A-SSM-E07HP12-40.R.06	40	1.5
A-SSM-E07HP12-50.R.07	50	1.5
A-SSM-E07HP12-63.R.08	63	1

SSM- E07 / High feed cutting

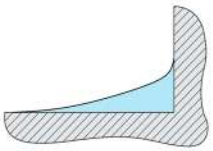
Depth of cut and remaining material



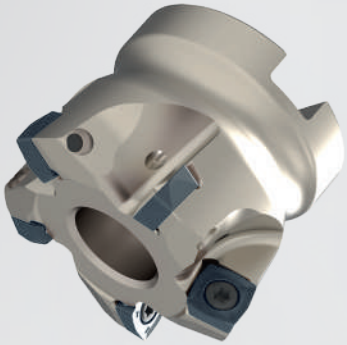
R = programmed radius

Recommended $f_z \geq 0.5$ / tooth

Profile when shoulder and slot milling



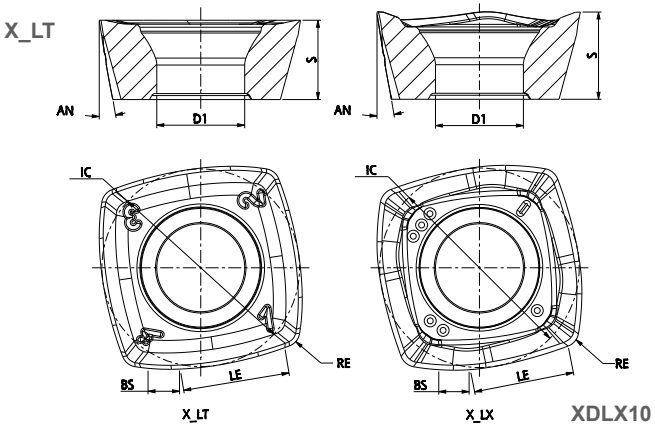
Insert	r [mm]	R [mm]	t [mm]	α [°]
EPH_7	1.2	2	0.7	2°



NEW

SSM-HFC / High feed cutting

Insert (XPLT, XDLT, XDLX and XOLT)




-HCM


-SCM


-HCM


-SCM

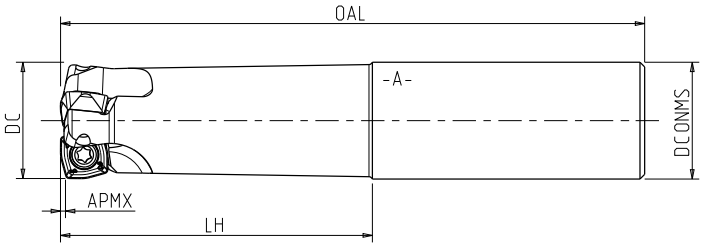

-SCM NEW

Description	W1/IC [mm]	LE [mm]	S [mm]	BS [mm]	RE [mm]	D1 [mm]	AN [°]
XPLT 070305SR-HCM	6.9	3.5	2.75	1	0.5	2.8	11
XPLT 070305ER-SCM	6.9	3.5	2.75	1	0.5	2.8	11
XDLT 10T308SR-HCM	9.9	5.3	3.97	1.5	0.8	4.4	15
XDLT 10T308ER-SCM	9.9	5.3	3.97	1.5	0.8	4.4	15
XDLX 10T308SR-HCM	9.9	5.3	4.38	1.5	0.85	4.4	15
XDLX 10T308SR-SCM	9.9	5.3	4.38	1.5	0.85	4.4	15
XOLT 130410SR-HCM	13.1	6.7	4.76	2	1	5.5	9
XOLT 130410ER-SCM	13.1	6.7	4.76	2	1	5.5	9
XOLT 130410ER-COOL-SCM CTC5240	13.1	6.7	4.76	2	1	5.5	9
XOLT 130410ER-COOL-SCM CTC5235	13.1	6.7	4.76	2	1	5.5	9
XOLT 130410ER-COOL-SCM CTPM240	13.1	6.7	4.76	2	1	5.5	9

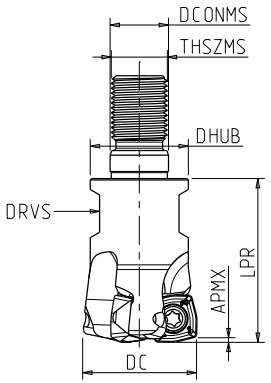
SSM-HFC / High feed cutting

Milling body (XPLT07)

C-



G-

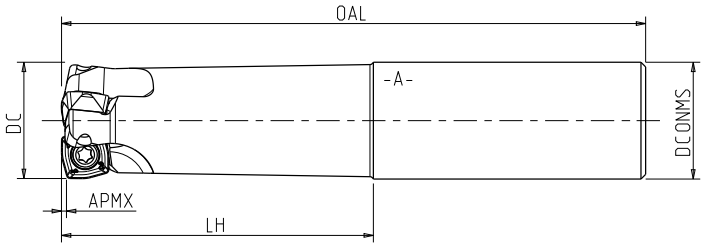


Description	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]	THSZMS [mm]
C-SSM-HFC07-16.R.02-A-50-200	16	200	50	–	16	0.8	4600	2	–	–	–
C-SSM-HFC07-20.R.03-A-50-200	20	200	50	–	20	0.8	4200	3	–	–	–
C-SSM-HFC07-25.R.04-A-50-200	25	200	50	–	25	0.8	3900	4	–	–	–
G-SSM-HFC07-16.R.02	16	–	–	25	8.5	0.8	20800	2	13.8	SW10	M8
G-SSM-HFC07-20.R.03	20	–	–	30	10.5	0.8	19800	3	18	SW15	M10
G-SSM-HFC07-25.R.04	25	–	–	35	12.5	0.8	18700	4	21	SW17	M12

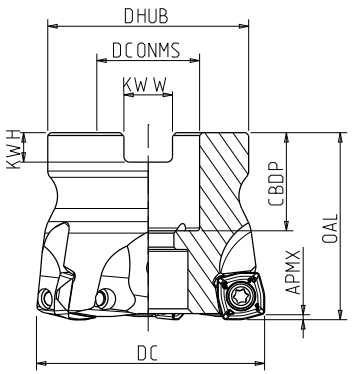
SSM-HFC / High feed cutting

Milling body (XDLT10 and XDLX10)

C-



A-

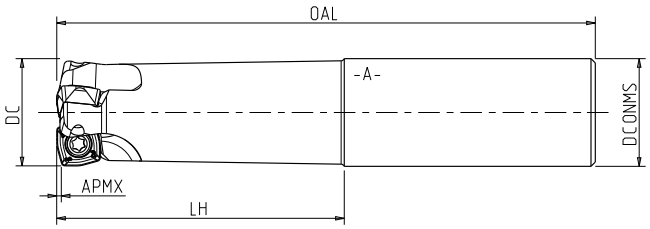


Description	DC [mm]	OAL [mm]	(C-) LH [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-HFC10-25.R.03-A-50-125	25	125	50	25	1	15600	3	-	-	-	-
C-SSM-HFC10-25.R.03-A-50-225	25	225	50	25	1	9000	3	-	-	-	-
A-SSM-HFC10-40.R.04	40	40	-	16	1	26400	4	38	20	8.4	5.6
A-SSM-HFC10-50.R.05	50	40	-	22	1	23500	5	43	21	10.4	6.3
A-SSM-HFC10-63.R.06	63	40	-	22	1	20500	6	48	21	10.4	6.3

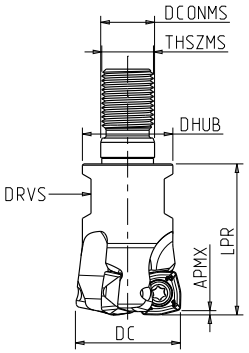
SSM-HFC / High feed cutting

Milling body (XOLT13)

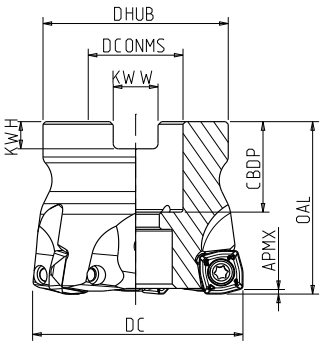
C-



G-



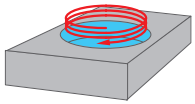
A-

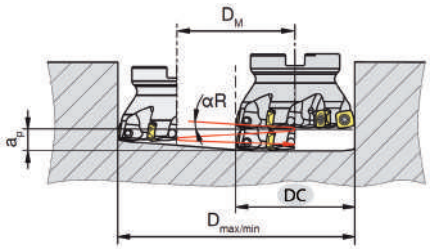


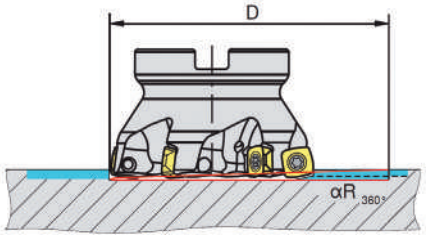
Description	DC [mm]	OAL [mm]	(C-) LH [mm]	(G-) LPR [mm]		APMX [mm]	RPMX [tr/min.]	ZNF	DHUB [mm]	DRVS [mm]	THSZMS [mm]	CBDP [mm]	KWW [mm]	KWH [mm]
C-SSM-HFC13-35.R.03-B32-63-144	35	144	63	-	32	2	9000	3	-	-	-	-	-	-
C-SSM-HFC13-35.R.03-A32-63-250	35	250	63	-	32	2	6400	3	-	-	-	-	-	-
G-SSM-HFC13-35.R.03	35	-	-	40	17	2	21360	3	29	SW24	M16	-	-	-
A-SSM-HFC13-50.R.04	50	40	-	-	22	2	18800	4	43	-	-	21	10.4	6.3
A-SSM-HFC13-50.R.04-LF	50	40	-	-	22	2	18800	4	43	-	-	21	10.4	6.3
A-SSM-HFC13-52.R.04-LF	52	40	-	-	22	2	18800	4	43	-	-	21	10.4	6.3
A-SSM-HFC13-63.R.05	63	40	-	-	22	2	16400	5	48	-	-	21	10.4	6.3
A-SSM-HFC13-63.R.05-LF	63	40	-	-	22	2	16400	5	48	-	-	21	10.4	6.3
A-SSM-HFC13-80.R.06-LF	80	50	-	-	27	2	14000	6	58	-	-	23	12.4	7
A-SSM-HFC13-80.R.07	80	50	-	-	27	2	14000	7	58	-	-	23	12.4	7
A-SSM-HFC13-100.R.08-LF	100	50	-	-	32	2	12000	8	78	-	-	26	14.4	8
A-SSM-HFC13-100.R.09	100	50	-	-	32	2	12000	9	78	-	-	26	14.4	8
A-SSM-HFC13-100.R.09-LF	100	50	-	-	32	2	12000	9	78	-	-	26	14.4	8

SSM-HFC / High feed cutting

Application data (helical plunge milling XPLT07)





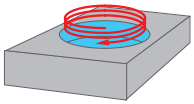


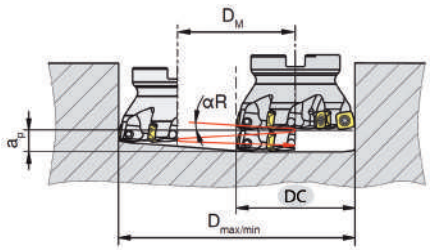
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

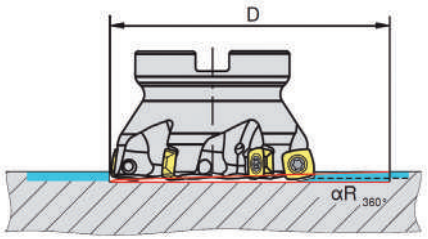
Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	$α_R$ [°]
C-SSM-HFC07-16.R.02-A-50-200	16	31	22	4.5
C-SSM-HFC07-20.R.03-A-50-200	20	39	30	2.3
C-SSM-HFC07-25.R.04-A-50-200	25	49	40	1.3
G-SSM-HFC07-16.R.02	16	31	22	4.5
G-SSM-HFC07-20.R.03	20	39	30	2.3
G-SSM-HFC07-25.R.04	25	49	40	1.3

SSM-HFC / High feed cutting

Application data (helical plunge milling XDLT10, XDLX10)





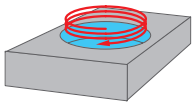


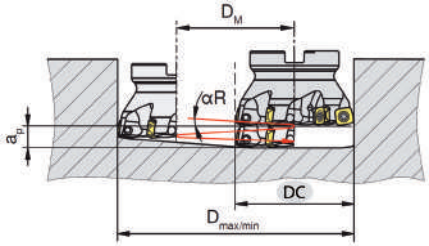
D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

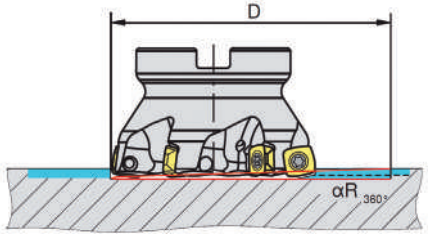
Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-HFC10-25.R.03-A-50-125	25	48	35	3.1
C-SSM-HFC10-25.R.03-A-50-225	25	48	35	3.1
A-SSM-HFC10-40.R.04	40	78	65	1.0
A-SSM-HFC10-50.R.05	50	98	85	0.8
A-SSM-HFC10-63.R.06	63	124	111	0.7

SSM-HFC / High feed cutting

Application data (helical plunge milling XOLT13)





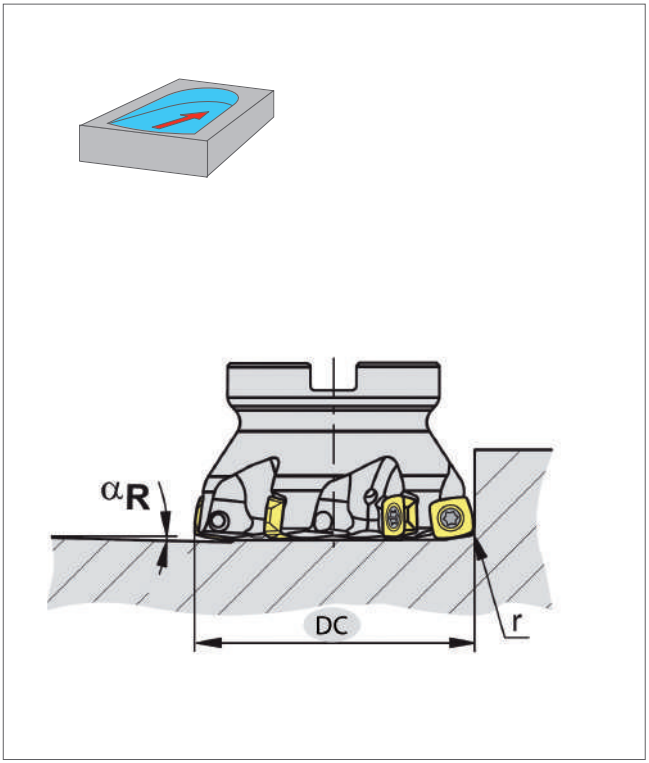


D_{max} [mm] = maximum diameter for flat bottom ground
D_{min} [mm] = minimum hole diameter
$D_M = D_{max} – DC$ or $D_{min} – DC$

Description	DC [mm]	D_{max} [mm]	D_{min} [mm]	α_R [°]
C-SSM-HFC13-35.R.03-A32-63-144	35	68	50	3.7
C-SSM-HFC13-35.R.03-A32-63-250	35	68	50	3.7
G-SSM-HFC13-35.R.03	35	68	59	3.7
A-SSM-HFC13-50.R.04	50	98	80	1.3
A-SSM-HFC13-50.R.04-LF	50	98	80	1.3
A-SSM-HFC13-52.R.04-LF	52	102	84	1.3
A-SSM-HFC13-63.R.05	63	124	106	0.9
A-SSM-HFC13-63.R.05-LF	63	124	106	0.9
A-SSM-HFC13-80.R.06-LF	80	158	140	1.1
A-SSM-HFC13-80.R.07	80	158	140	1.1
A-SSM-HFC13-100.R.08-LF	80	158	140	1.1
A-SSM-HFC13-100.R.09-LF	100	198	180	0.7

SSM-HFC / High feed cutting

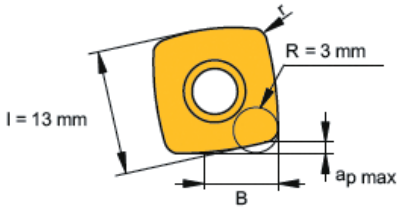
Application data (angled ramping)



Description	DC [mm]	α_R [°]
C-SSM-HFC07-16.R.02-A-50-200	16	5.9
C-SSM-HFC07-20.R.03-A-50-200	20	3.2
C-SSM-HFC07-25.R.04-A-50-200	25	2.0
G-SSM-HFC07-16.R.02	16	5.9
G-SSM-HFC07-20.R.03	20	3.2
G-SSM-HFC07-25.R.04	25	2.0
C-SSM-HFC10-25.R.03-A-50-125	25	3.6
C-SSM-HFC10-25.R.03-A-50-225	25	3.6
A-SSM-HFC10-40.R.04	40	1.2
A-SSM-HFC10-50.R.05	50	0.9
A-SSM-HFC10-63.R.06	63	0.8
C-SSM-HFC13-35.R.03-A-63-144	35	4.4
C-SSM-HFC13-35.R.03-A-63-250	35	4.4
G-SSM-HFC13-35.R.03	35	4.4
A-SSM-HFC13-50.R.04	50	1.5
A-SSM-HFC13-50.R.04-LF	50	1.5
A-SSM-HFC13-52.R.04-LF	52	1.5
A-SSM-HFC13-63.R.05	63	1.1
A-SSM-HFC13-63.R.05-LF		
A-SSM-HFC13-80.R.06-LF	80	1.3
A-SSM-HFC13-80.R.07	80	1.3
A-SSM-HFC13-100.R.08-LF	100	0.7
A-SSM-HFC13-100.R.09	100	0.7
A-SSM-HFC13-100.R.09-LF	100	0.7

SSM-HFC / High feed cutting

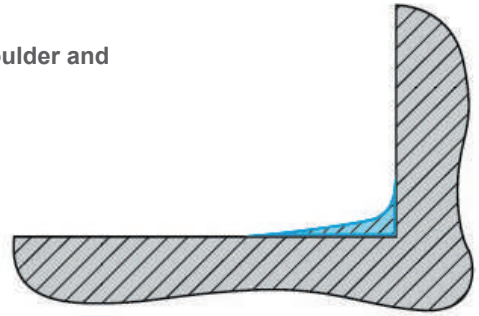
Depth of cut and remaining material



R = programmed radius

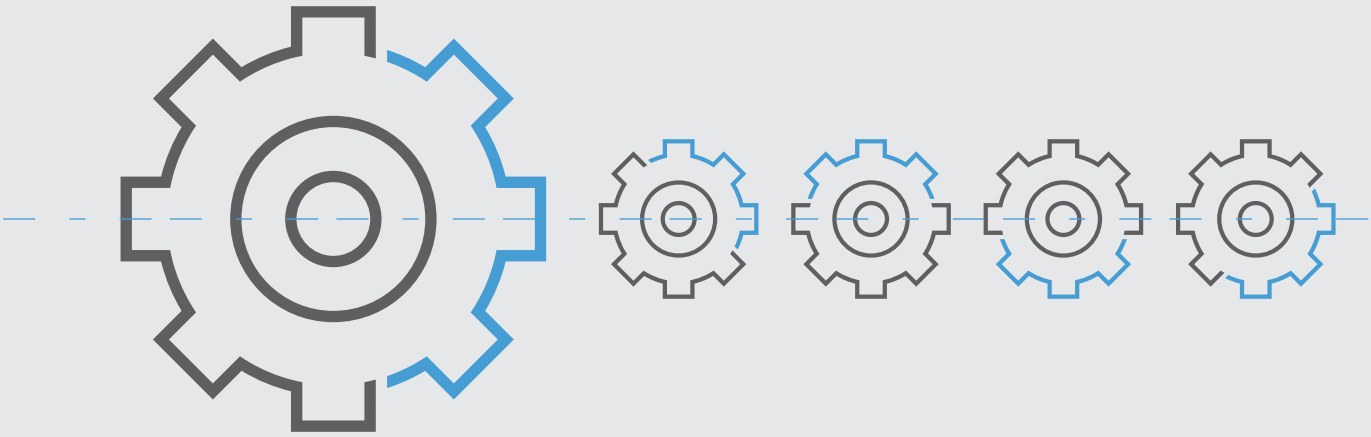
Recommended $f_z \geq 0.5$ / tooth

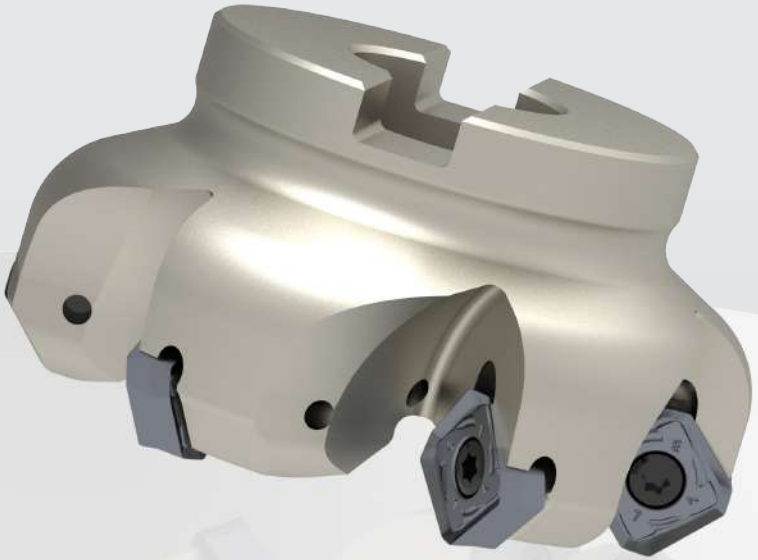
Profile when shoulder and slot milling



Insert	l [mm]	R [mm]	B [mm]	r [mm]	a_p max [mm]
XPLT07	7.15	1.2	4.3	0.5	0.8
XDLT10	10.2	2.0	5.9	0.8	1.0
XDLX10	10.2	2.0	5.9	0.8	1.0
XOLT13	13.5	3.0	8.5	1.0	2.0

Technical information





ELMEC designation system
Insert designation

Insert shape

A	85°
B	82°
K	55°
H	120°
L	90°
O	135°
P	108°
C	80°
D	55°
E	75°
M	86°
V	35°
R	
S	90°
T	60°
W	80°
X Z	Special shapes

Clearance angle

	α
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
O	Special version

Tolerances

	d ±	m ±	s ±	d=6,35/9,52	d=12,7	d=15,8/19,05
A	0.025	0.005	0.025	●	●	●
C	0.025	0.013	0.025	●	●	●
E	0.025	0.025	0.025	●	●	●
F	0.013	0.005	0.025	●	●	●
G	0.025	0.025	0.13	●	●	●
H	0.013	0.013	0.025	●	●	●
	0.05	0.005	0.025	●		
J	0.08	0.005	0.025		●	
	0.10	0.005	0.025			●
	0.05	0.013	0.025	●		
K	0.08	0.013	0.02		●	
	0.10	0.013	0.02			●
	0.05	0.08	0.13	●		
M	0.08	0.13	0.13		●	
	0.10	0.15	0.13			●
	0.05	0.08	0.025	●		
N	0.08	0.13	0.025		●	
	0.10	0.15	0.025			●
	0.08	0.13	0.13	●		
U	0.13	0.20	0.13		●	
	0.18	0.27	0.13			●

Form of top surface

A	
F	
G	
M	
N	
Q	
R	
T	
U	
W	
X	Special shapes

A	P	K	T	10
R	P	G	T	10

Cutting edge length

A	T	C/S	H	R

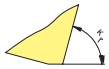
Insert thickness

	s [mm]
01	1.59
T1	1.98
02	2.38
03	3.18
T3	3.97
04	4.76
05	5.56
06	6.35
07	7.94
09	9.52

Facet corner radius

Radius

	r [mm]
M0*	
2	0.2
4	0.4
8	0.8
12	1.2



1st sign

	s [mm]
	r
A	45°
D	60°
E	75°
F	85°
P	90°
Z	Others

2nd sign

	α'n
A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
Z O	Others

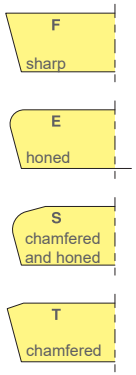
Chipbreaker

Chipbreaker designation

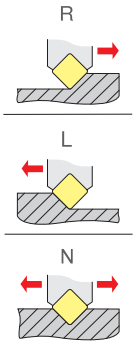
HCM = Steel machining
SCM = Stainless steel machining
CCM = Cast iron machining
LMM = Non-ferrous machining
XCM = Exotic machining
– = Hard material machining
RCM = Insert with specific radius

03	PD	E	R	-	HCM
T3	MO	E	N	-	LMM

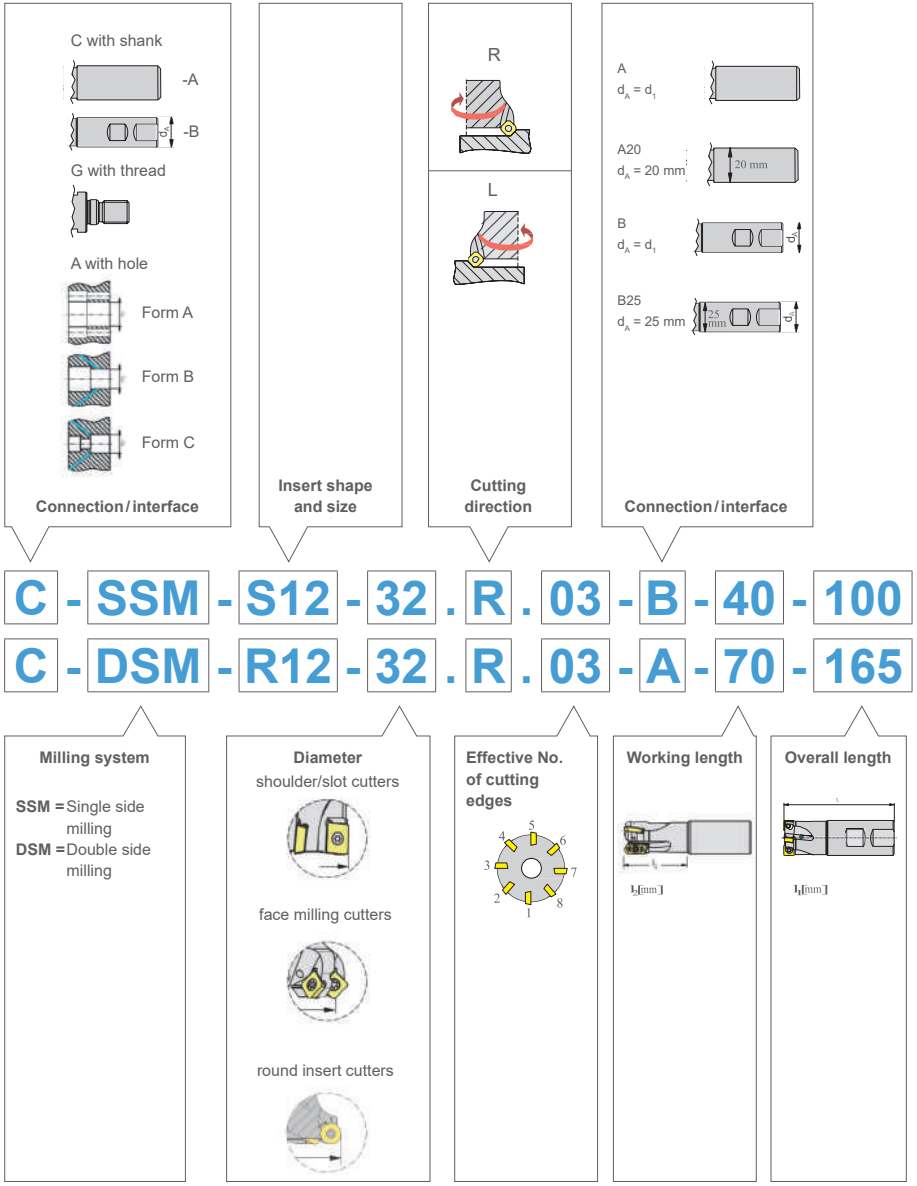
Cutting edge



Cutting direction



ELMEC designation system
Body designation



Application

P	Steel	M	Stainless steel	K	Cast iron
N	Non-ferrous metals and non-metals	S	Heat-resistant alloys, titanium	H	Hard materials

Machining application types

HCM
Strong cutting edge for general steel applications and hard conditions milling.

SCM
Sharp cutting edge for general stainless steel applications and for finishing in steels.

LMM
Sharp cutting edge for aluminium and non-ferrous metals.

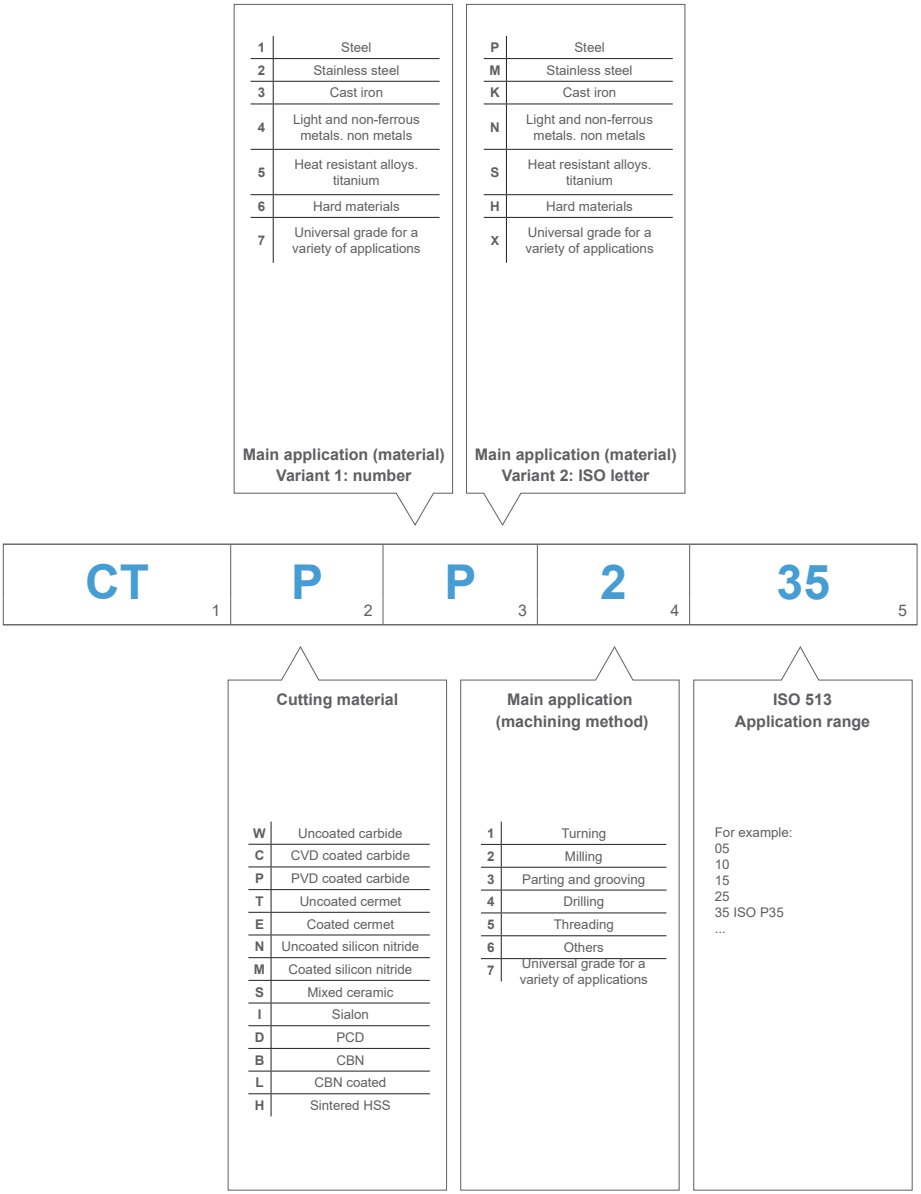
XCM
Stable cutting edge for dedicated exotic materials and titanium.

CCM
Strong cutting edge for cast iron applications.

MOSN
Strong reinforced cutting edge for hard material.

Grade overview

ELMEC designation system

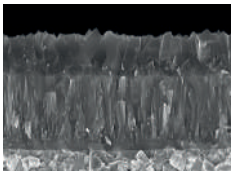


Grade overview

Grade designation	Standard designation ISO	ANSI	*Type of cutting material	Application range 01 05 10 15 20 25 30 35 40 45 50	P Steel	M Stainless	K Cast iron	N Non-ferrous metals	S Heat-resistant	H Hard materials
CTCP230	HC-P30	C6	C		•					
	HC-K25	C2	C				•			
	HC-M25	–	C			•				
CTCP235	HC-P35	C5	C		•					
	HC-M30	–	C			•				
CTPP235	HC-P35	C5	P		•					
	HC-M30	–	P			•				
CTPM240	HC-M40	–	P			•				
	HC-P40	C5	P		•					
CTCK215	HC-K15	C3	C				•			
CTPK220	HC-K20	C2	P				•			
CTWN715	HW-N15	C3	W					•		
	HW-K15	C3	W				•			
CTC5235	HC-S35	–	C						•	
	HC-M35	–	C			•				
CTC5240	HC-S35	–	C						•	
CTP6215	HC-H15	–	P							•
	HC-K15	–	P				•			

● Main application
○ Extended application

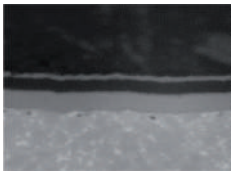
CTCP230 **HC-P30 | HC-K25 | HC-M25** ● ○ ○



Specification:
Composition: Co 10.5 %; mixed carbides 2.0 %; WC balance | Grain size: 1-2 µm | Hardness: HV_{30} 1400 |
Coating specification: CVD TiCN-Al_2O_3

Recommended application:
First choice for dry machining of steels at high cutting speeds.

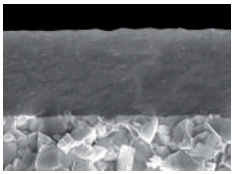
CTCP235 **HC-P35 | HC-M30** ● ○



Specification:
Composition: Co 12.5%; mixed carbides 2.0%; WC balance | Grain size: fine
Hardness: HV_{30} 1380 | Coating specification: CVD TiCN-Al_2O_3 + TiN; 7 µm

Recommended application:
Milling Grade designed for Alloyed Steel cutting.

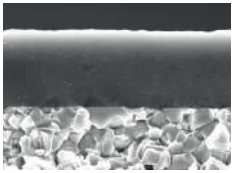
CTPP235 **HC-P35 | HC-M30** ● ○



Specification:
Composition: Co 10.5 %; mixed carbide 2.0 %; WC balance | Grain size: 1-2 µm | Hardness: HV_{30} 1400 |
Coating specification: PVD TiAlTaN

Recommended application:
Particularly suitable for the wet machining of steels.

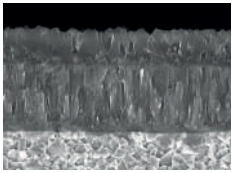
CTPM240 **HC-M40 | HC-P40** ● ○



Specification:
Composition: Co 12.5 %; mixed carbides 2.0 %; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1380 |
Coating specification: PVD TiAlTaN

Recommended application:
The first choice for the machining of austenitic steels.

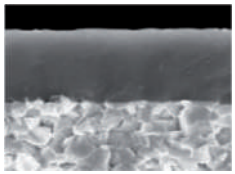
CTCK215 **HC-K15** ●



Specification:
Composition: Co 6.0 %; mixed carbides 2.0 %; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1600 |
Coating specification: CVD TiN, MT-TiCN; Al_2O_3

Recommended application:
The first choice for the machining of cast iron at high cutting spreeds.

CTPK220 **HC-K20** ●



Specification:
Composition: Co 6.0 %; mixed carbides 2.0%, WC balance | Grain size: 1 µm | Hardness: HV_{30} 1630 |
Coating specification: PVD TiAlTaN

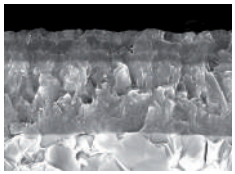
Recommended application:
Optimal for the machining of high-tensile cast icon materials when toughness is required.

CTWN715 **HW-N15 | HW-K15** ● ○

Specification:
Composition: Co 6.0 %; WC balance | Grain size: 1 µm | Hardness: HV_{30} 1630

Recommended application:
The uncoated carbide grade for the machining of aluminium. It's an high wear and high heat resistant carbide with a low tendency to adhesion.

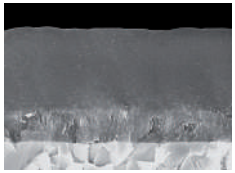
CTC5235 **HC-S35 | HC-M35** ● ●



Specification:
Composition: 10.0 % binder; WC balance | Grain size: 2 µm | Hardness: HV_{30} 1330 |
Coating specification: CVD TiCN-Al_2O_3 multi-layer

Recommended application:
Particularly suitable for the machining of heat-resistant steels and iron-based alloys.

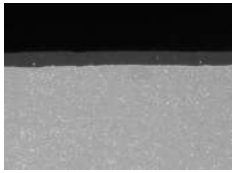
CTC5240 **HC-S35** ●



Specification:
Composition: Co 10.0 %; WC balance | Grain size: 2 µm | Hardness: HV 1330 |
Coating specification: CVD TiN +TiB2; 4 µm

Recommended application:
Recommended for the machining of titanium materials.

CTP6215 **HC-H15 | HC-K15** ● ○



Specification:
Composition: Co 12.0 %; WC balance | Grain size: 4 µm | Hardness: HV 1730 |
Coating specification: PVD (TiA)N; 4 µm

Recommended application:
Particularly suitable for the machining of hardened steels.

Production

The carbide formula for success

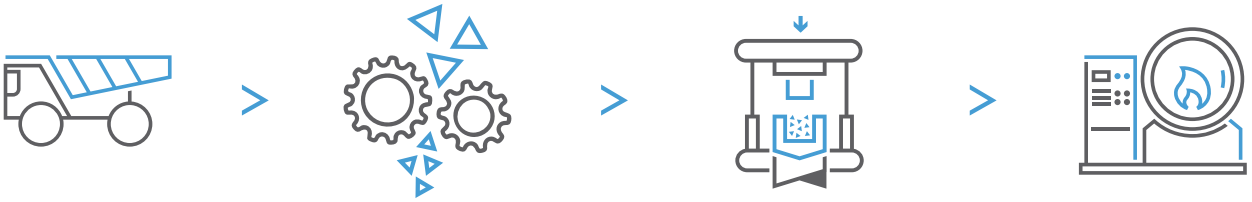
ELMEC has the metallurgical competence that allows it to control the entire process chain of carbide production: from raw materials production and powder preparation to forming, sintering and finishing, we can make the right adjustments at any time and adapt the material properties to your individual requirements, and with a dedicated production line for private label and toolmakers customers, and with a dedicated production line for private label and toolmakers customers.

Composite materials with valuable properties
Cemented carbides are composite materials consisting of a hard component and a comparatively soft binder metal, such as cobalt. The performance characteristics of carbide are determined by hardness, transverse rupture strength and fracture toughness. With regard to their application, important parameters for the optimisation of the characteristics here are the cobalt content and the grain size of the metal binder phase. The tungsten carbide grains have an average size of 0.5 up to several micrometres (µm). The cobalt fills the gaps between the carbide grains. On the one hand, when extremely high toughness is required, the cobalt content can amount up to 30%. On the other, the cobalt content is reduced and the grain size decreased to the submicron range (for example 0.3 µm), in order to guarantee maximum wear resistance.

ELMEC produces far more than 100 different carbide grades particularly for wear parts and cutting tools, thus offering a customised solution for every one of your applications.

Passion for cemented carbide

From the ore to the ready-to-use-tool



Mineral extraction > Preparation and mixing of the raw materials > Forming / pressing > Sintering

Surface treatment > Quality assurance > Dispatch > Recycling

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