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

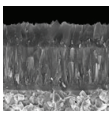
Chipbreaker

PC: Steel
MC: Stainless Steel
KC: Cast iron **NC:**
Aluminium **RC:**
Specific radius

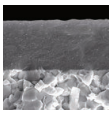
Grade

Standard grades

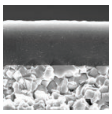
PMK30C



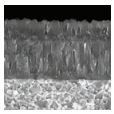
PM35P



MP40P

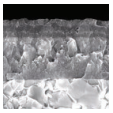


K15C

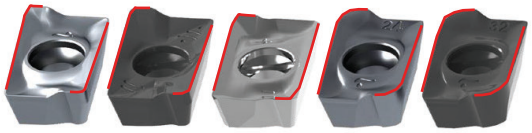


NK15S

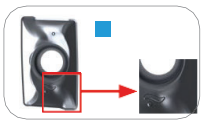
SM35C



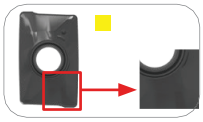
2 effective cutting edges



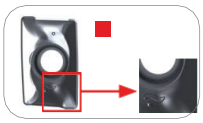
Which chipbreaker to use?



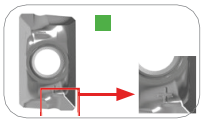
PC
Strong cutting edge for general steel applications and hard conditions milling.



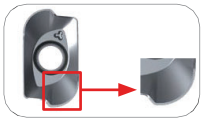
MC
Sharp cutting edge for general stainless steel applications and for finishing in steels.



KC
Strong cutting edge for cast iron applications.



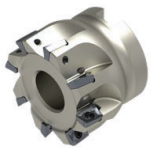
NC
Extremely sharp cutting edge for aluminium and non-ferrous metals.



RC
Specific radius.

Available range APKT10

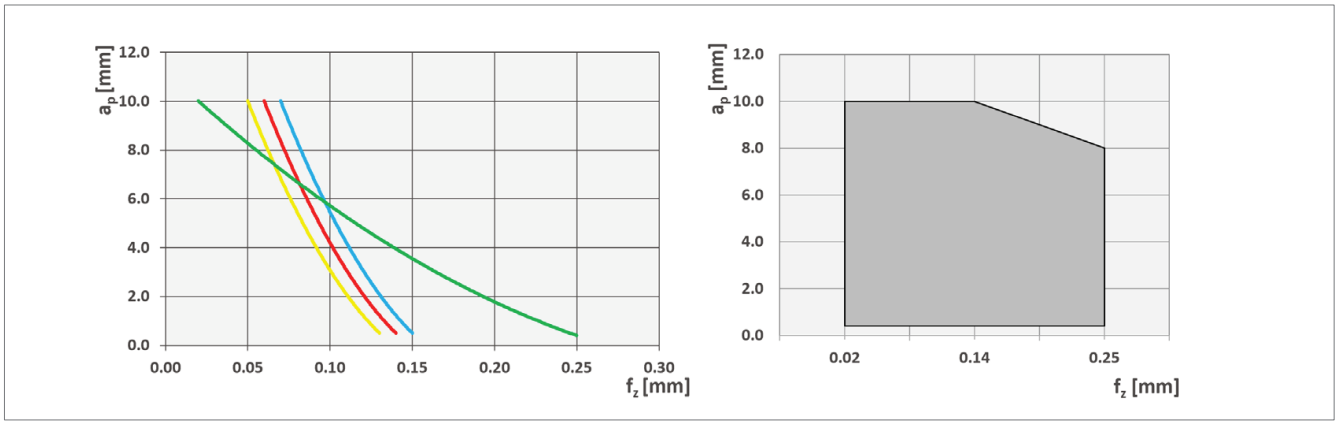
Insert	Designation	Chipbreaker	Material number	Available
	APKT 1003PDER-PC PMK30C	...-PC	12384796	●
	APKT 1003PDER-PC PM35P	...-PC	14534961	●
	APKT 1003PDER-MC MP40P	...-MC	14534962	●
	APKT 1003PDER-MC SM35C	...-MC	11582506	●
	APKT 1003PDER-KC K15C	...-KC	14641285	●
	APHT 100302FR-NC NK15S	...-NC	14617035	●
	APHT 100304FR-NC NK15S	...-NC	14617031	●
	APHT 100308FR-NC NK15S	...-NC	11348849	●
	APKT 100308ER-RC PM35P	...-RC	12234997	○
	APKT 100308ER-RC MP40P	...-RC	14641330	●
	APKT 100308ER-RC K15C	...-RC		○
	APKT 100312ER-RC PM35P	...-RC	14652659	●
	APKT 100312ER-RC MP40P	...-RC	14652660	●
	APKT 100312ER-RC K15C	...-RC		○
	APKT 100316ER-RC PM35P	...-RC	14641303	●
	APKT 100316ER-RC MP40P	...-RC	14641333	●
	APKT 100316ER-RC K15C	...-RC		○
	APKT 100330ER-RC PM35P	...-RC	14641320	○
	APKT 100330ER-RC MP40P	...-RC	14641335	○
	APKT 100330ER-RC K15C	...-RC		○

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:

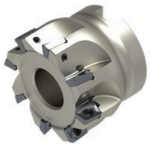


Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	PC	PMK30C	220 – 60	0.07 – 0.15	10 – 0.5
		RC	PM35P			10 – 1.6
M	Stainless steel	MC	MP40P	200 – 60	0.05 – 0.13	10 – 0.5
		RC	SM35C		0.07 – 0.15	10 – 1.6
K	Cast iron	KC	K15C	320 – 100	0.06 – 0.14	10 – 0.5
		RC			0.07 – 0.15	10 – 1.6
N	Non-ferrous	NC	NK15S	< 2000	0.02 – 0.25	10 – 0.2

Available range APKT16

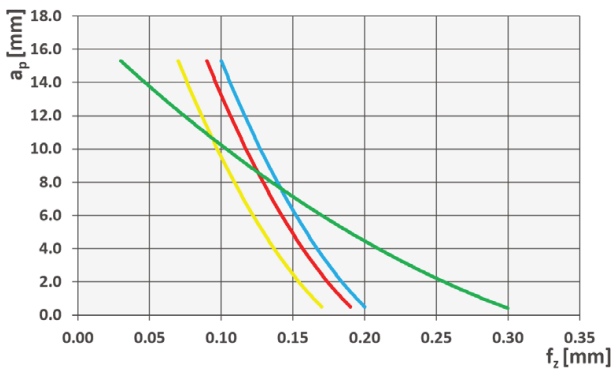
Insert	Designation	Chipbreaker	Material number	Available
	APKT 1604PDER-PC PMK30C	...-PC	14641339	●
	APKT 1604PDER-PC PM35P	...-PC	14534966	●
	APKT 1604PDER-MC MP40P	...-MC	14534968	●
	APKT 1604PDER-MC SM35C	...-MC	11582503	●
	APKT 1604PDER-KC K15C	...-KC	14641345	●
	APHT 1604PDFR-NC NK15S	...-NC	11348852	●
	APKT 160416ER-RC PM35P	...-RC	12067441	●
	APKT 160416ER-RC MP40P	...-RC	14641347	●
	APKT 160416ER-RC K15C	...-RC	14652661	●
	APKT 160424ER-RC PM35P	...-RC	12067437	○
	APKT 160424ER-RC MP40P	...-RC	14641349	●
	APKT 160424ER-RC K15C	...-RC		○
	APKT 160432ER-RC PM35P	...-RC	12067435	○
	APKT 160432ER-RC MP40P	...-RC	14641353	●
	APKT 160432ER-RC K15C	...-RC		○
	APKT 160440ER-RC PM35P	...-RC		○
	APKT 160440ER-RC MP40P	...-RC	14677925	●
	APKT 160440ER-RC K15C	...-RC	14828072	●
	APKT 160448ER-RC PM35P	...-RC	12314049	○
	APKT 160448ER-RC MP40P	...-RC	14641361	●
	APKT 160448ER-RC K15C	...-RC		○

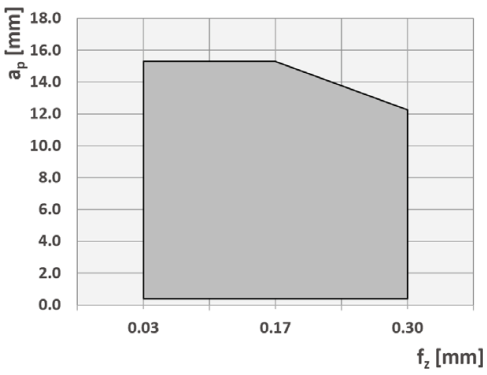
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-UA16-25.R.02-B-40-95	25	2	14655187	•
	C-SSM-UA16-32.R.03-B-40-105	32	3	12630641	•
	C-SSM-UA16-40.R.04-B-50-125	40	4	12630643	•
	G-SSM-UA16-25.R.02	25	2	14655190	•
	G-SSM-UA16-32.R.03	32	3	14655192	•
	G-SSM-UA16-40.R.04	40	4	14655184	•
	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	PC	PMK30C	220 – 60	0.1 – 0.2	15.3 – 0.5
		RC	PM35P			15.3 – 1.6
M	Stainless steel	MC	MP40P	200 – 60	0.07 – 0.17	15.3 – 0.5
		RC	SM35C		0.1 – 0.2	15.3 – 1.6
K	Cast iron	KC	K15C	320 – 100	0.09 – 0.19	15.3 – 0.5
		RC			0.1 – 0.2	15.3 – 1.6
N	Non-ferrous	NC	NK15S	< 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

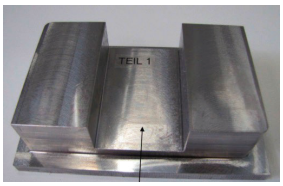
PC: Steel – Cast iron*
MC: Stainless Steel – Exotic* – Titanium*

3 effective cutting edges

* secondary application

Customer benefits

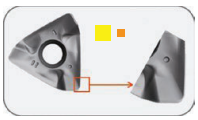
- High precision 90° milling
- Low power consumption. maximum chip removal rate
- Chipbreaker optimised by FEM
- Soft cutting providing quiet machining and maximum spindle protection



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

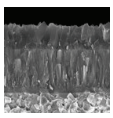
Which chipbreaker to use?

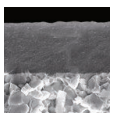
PC
Strong cutting edge for general steel applications and hard conditions milling.

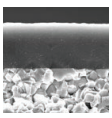


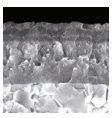
MC
Sharp cutting edge for general stainless steel applications and for finishing in steels.

Grades

PMK30C 

PM35P 

MP40P 

SM35C 

Available range TOKX07

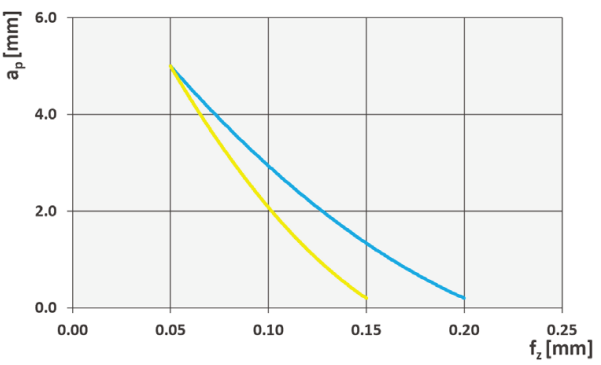
Insert	Designation	Chipbreaker	Material number	Available
	TOKX 070305PDER-PC PMK30C	...-PC	12193325	○
	TOKX 070305PDER-PC PM35P	...-PC	12069063	●
	TOKX 070305PDER-MC MP40P	...-MC	12120017	○
	TOKX 070305PDER-MC SM35C	...-MC	12069061	●
	TOKX 070308PDER-PC PMK30C	...-PC	12307051	○
	TOKX 070308PDER-PC PM35P	...-PC	12143629	●
	TOKX 070308PDER-MC MP40P	...-MC	12143626	○
	TOKX 070308PDER-MC SM35C	...-MC	12143628	○

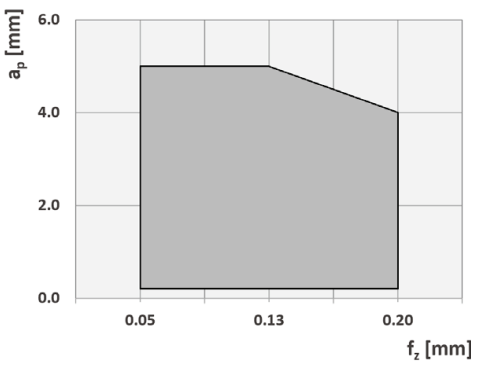
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-T07-20.R.03-B-25-77	20	3	12074285	●
	C-SSM-T07-25.R.04-B-34-90	25	4	11998760	●
	C-SSM-T07-32.R.05-B-40-102	32	5	12074282	●
	G-SSM-T07-20.R.03	20	3	12152218	●
	G-SSM-T07-25.R.04	25	4	12152220	●
	G-SSM-T07-32.R.05	32	5	12152223	●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



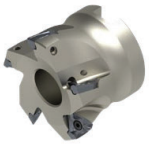


Grades and materials:

	Material group	Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	PC	PMK30C PM35P	220 – 60	0.05 – 0.2	5 – 0.2
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.05 – 0.15	5 – 0.2

Available range TOKX09

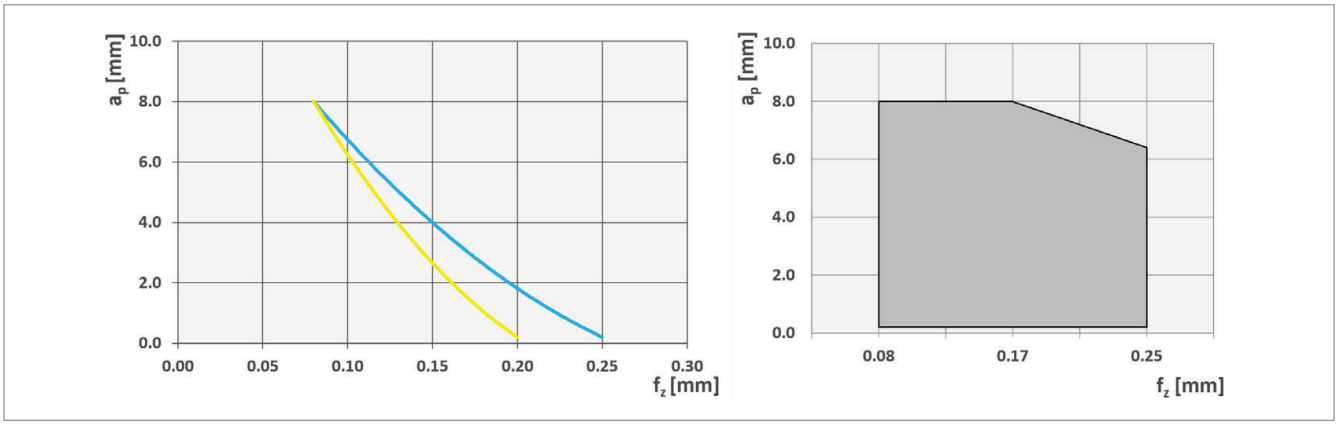
Insert	Designation	Chipbreaker	Material number	Available
	TOKX 09T308PDER-PC PMK30C	...-PC	12324207	●
	TOKX 09T308PDER-PC PM35P	...-PC	12262506	●
	TOKX 09T308PDER-MC MP40P	...-MC	12119996	○
	TOKX 09T308PDER-MC SM35C	...-MC	12066590	○
	TOKX 09T312PDER-PC PMK30C	...-PC	12378662	○
	TOKX 09T312PDER-PC PM35P	...-PC	12376480	○
	TOKX 09T312PDER-MC MP40P	...-MC	12143645	○
	TOKX 09T312PDER-MC SM35C	...-MC	12143648	○
	TOKX 09T316PDER-PC PMK30C	...-PC	12378664	○
	TOKX 09T316PDER-PC PM35P	...-PC	12376489	○
	TOKX 09T316PDER-MC MP40P	...-MC	12143637	○
	TOKX 09T316PDER-MC SM35C	...-MC	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	PC	PMK30C PM35P	220 – 60	0.08 – 0.25	8 – 0.2
M	Stainless steel	MC	MP40P SM35C	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 PC:

Steel
MC: Stainless Steel – Exotic* – Titanium*
KC: Cast iron
NC: Aluminium

4 effective cutting edges

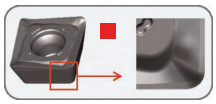
Customer benefits

- ▲ 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!

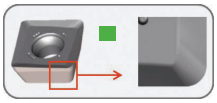
Which chipbreaker to use?

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

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



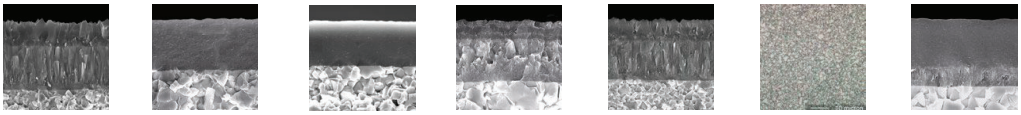
KC
Strong cutting edge for cast iron applications.



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

Grades

PMK30C ■ PM35P ■ MP40P ■ SM35C ■ K15C ■ NK15S ■ S35C ■



* secondary application

Available range SDKT09

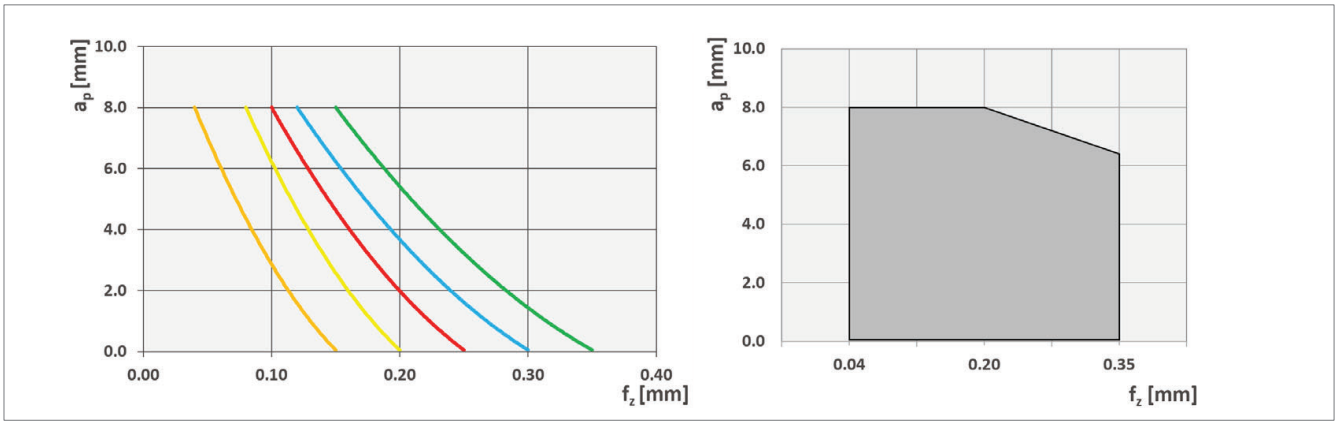
Insert	Designation	Chipbreaker	Material number	Available
	SDKT 09T308SR-PC PMK30C	**...-PC**	11979028	●
	SDKT 09T308SR-PC PM35P	**...-PC**	11979030	●
	SDKT 09T308SR-MC MP40P	**...-MC**	11979032	●
	SDKT 09T308SR-MC SM35C	**...-MC**	11584645	●
	SDKT 09T308SR-MC S35C	**...-MC**	11710895	●
	SDKT 09T308SR-KC K15C	**...-KC**	12193340	○
	SDHT 09T308FR-NC NK15S	**...-NC**	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	PC	PMK30C PM35P	220 – 60	0.12 – 0.3	8 – 0.05
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.08 – 0.2	8 – 0.05
K	Cast iron	KC	K15C	320 – 100	0.1 – 0.25	8 – 0.05
N	Non-ferrous	NC	NK15S	< 2000	0.15 – 0.35	8 – 0.05
S	Heat resistant alloys	MC	SM35C	75 – 25	0.04 – 0.15	8 – 0.05
S	Titanium	MC	S35C			

Available range SDKT12

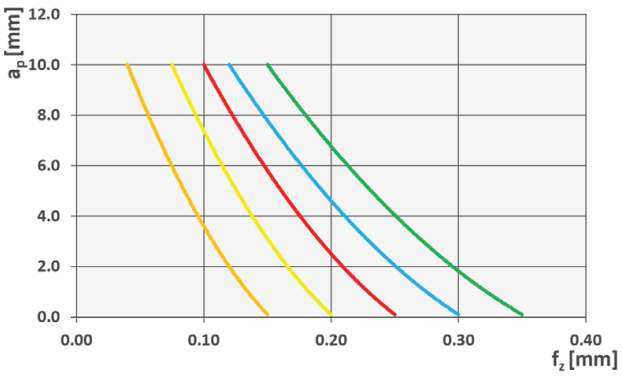
Insert	Designation	Chipbreaker	Material number	Available
	SDKT 120508SR-PC PMK30C	**...-PC**	12154549	•
	SDKT 120508SR-PC PM35P	**...-PC**	12062538	•
	SDKT 120508SR-MC MP40P	**...-MC**	12074525	•
	SDKT 120508SR-MC SM35C	**...-MC**	12067263	•
	SDKT 120508SR-MC S35C	**...-MC**	12071921	•
	SDKT 120508SR-KC K15C	**...-KC**	12154553	•
	SDHT 120508FR-NC NK15S	**...-NC**	14652623	•

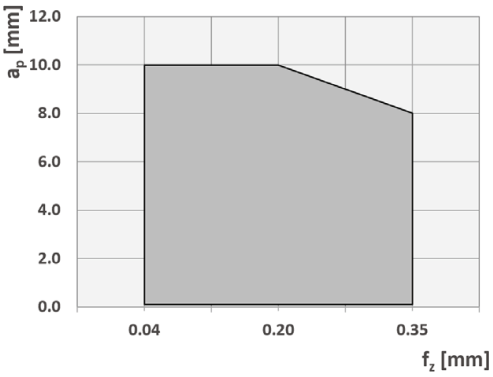
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-S12-32.R.03-B-40-100	32	3	12138258	•
	A-SSM-S12-40.R.04	40	4	11965069	•
	A-SSM-S12-50.R.05	50	5	11981629	•
	A-SSM-S12-63.R.06	63	6	12060728	•
	A-SSM-S12-80.R.07	80	7	12060727	•

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	PC	PMK30C PM35P	220 – 60	0.12 – 0.3	10 – 0.1
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.08 – 0.2	10 – 0.1
K	Cast iron	KC	K15C	320 – 100	0.1 – 0.25	10 – 0.1
N	Non-ferrous	NC	NK15S	< 2000	0.15 – 0.35	10 – 0.1
S	Heat resistant alloys	MC	SM35C	75 – 25	0.04 – 0.15	10 – 0.1
S	Titanium	MC	S35C			

Overview LNKU / LOKU

Application

1) Shoulder milling

2) Slot milling (90°)

3) Face milling

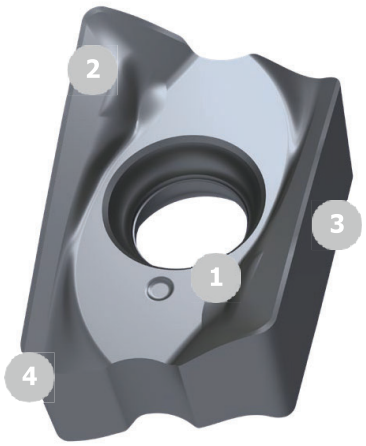
4) Peripheral milling

5) Trochoidal slot milling

Chipbreaker

PC: Steel – Cast iron*
MC: Stainless Steel – Exotic* – Titanium*
KC: Cast iron

4 effective cutting edges

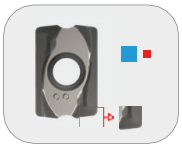


* secondary application

Customer benefits

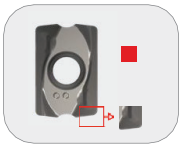
- High precision 90° milling
- Low power consumption, maximum chip removal rate
- Chipbreaker optimised by FEM
- Soft cutting providing quiet machining and maximum spindle protection

Which chipbreaker to use?



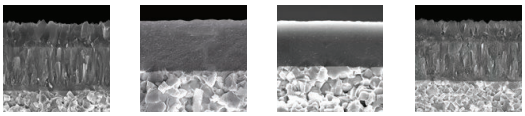
PC
Strong cutting edge for general steel applications and hard conditions milling.

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



KC
Strong cutting edge for cast iron applications.

PMK30C PM35P MP40P K15C



Available range LNKU12 / LOKU 12

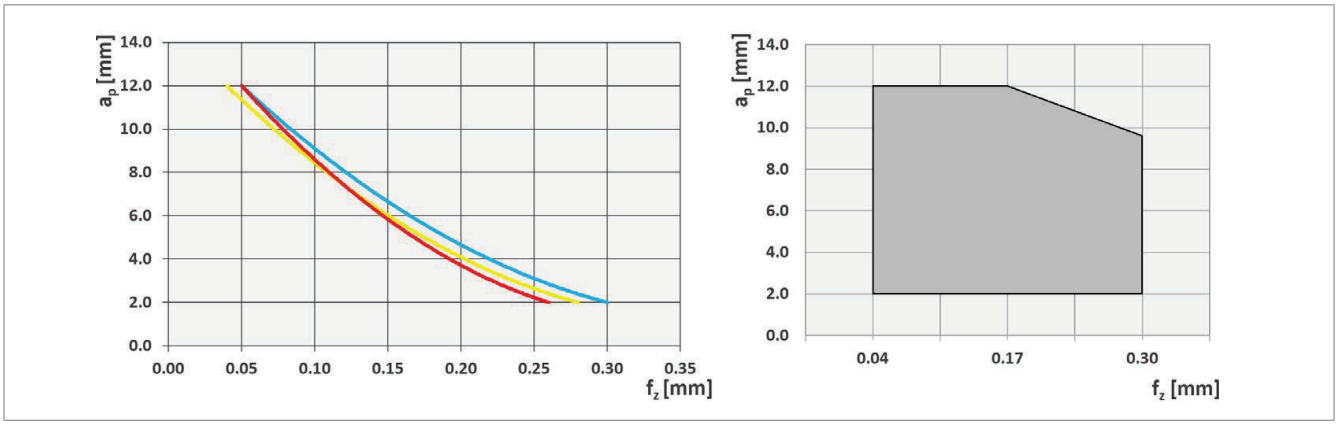
Insert	Designation	Chipbreaker	Material number	Available
	LNKU 120608ER-PC PMK30C	...-PC	12434604	●
	LNKU 120608ER-PC PM35P	...-PC	12158008	●
	LNKU 120608ER-MC MP40P	...-MC	12373789	●
	LNKU 120608ER-KC K15C	...-KC	14659156	●
	LOKU 120608ER-MC MP40P	...-MC	12373779	●
	LOKU 120608ER-SC SM35C	...-SC		○
	LOKU 120608ER-SC S35C	...-SC		○

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	PC	PMK30C PM35P	220 – 60	0.05 – 0.30	12 – 2.0
M	Stainless steel	MC	MP40P	200 – 60	0.04 – 0.28	12 – 2.0
K	Cast iron	KC	K15C	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 PC:

Steel
MC: Stainless Steel
KC: Cast iron
SC: Exotic – Titanium

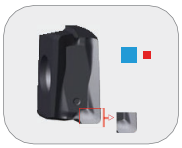
4 effective cutting edges

Customer benefits

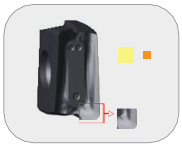
NEW

- 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?



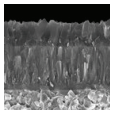
PC
Strong cutting edge for general steel applications and hard conditions milling.

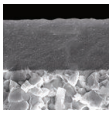


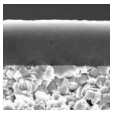
MC
Sharp cutting edge for general stainless steel applications and for finishing in steels.

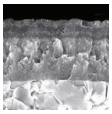
KC
Strong cutting edge for cast iron applications.

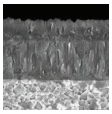
SC
Stable cutting edge for dedicated exotic materials and titanium.

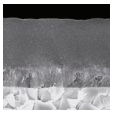
PMK30C


PM35P


MP40P


SM35C


K15C


S35C


Available range LNHU12

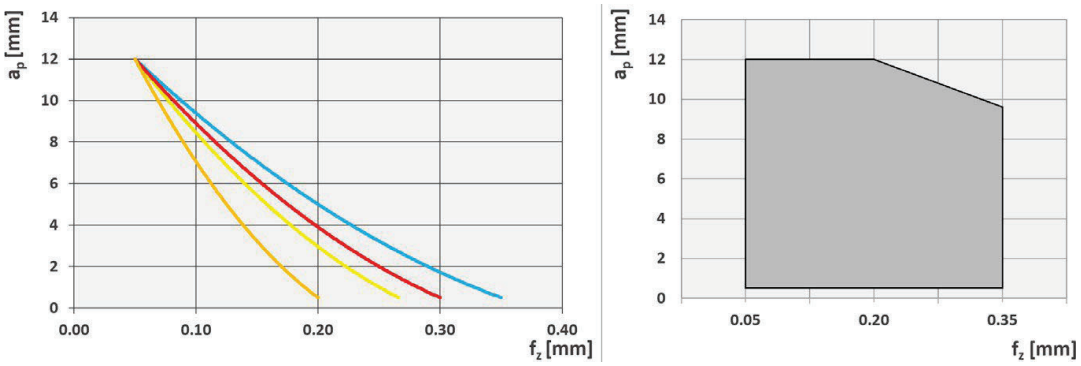
Insert	Designation	Chipbreaker	Material number	Available
	LNHU 120608-PC PMK30C	...-PC	14442228	•
	LNHU 120608-PC PM35P	...-PC	12431735	•
	LNHU 120608-MC MP40P	...-MC	14894889	•
	LNHU 120608-MC SM35C	...-MC	14894892	•
	LOHU 120608-KC K15C	...-KC	14536051	•
	LOHU 120608-SC S35C	...-SC	14894894	•

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:



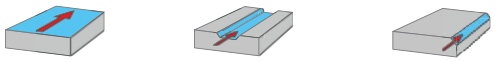
Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	PC	PMK30C PM35P	220 – 60	0.05 – 0.35	12 – 0.5
M	Stainless steel	MC	MP40P	200 – 60	0.05 – 0.27	12 – 0.5
K	Cast iron	KC	K15C	320 – 100	0.05 – 0.3	12 – 0.5
S	Heat resistant alloys	SC	SM35C	75 – 25	0.05 – 0.2	12 – 0.5
S	Titanium		S35C			

Overview HPKT... HPCT...

Application

1) Face milling 2) Slot milling 3) Chamfering



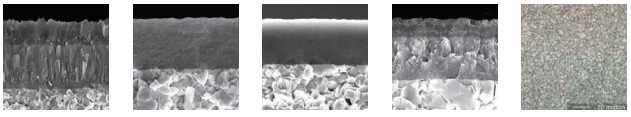
Chipbreaker

PC: Steel – Cast iron*
MC: Stainless Steel – Exotic* – Titanium*
NC: Aluminium and non-ferrous metals

6 effective cutting edges

Grades

PMK30C ■ PM35P■ MP40P ■ SM35C ■ NK15S ■



* secondary application

Masterfinish

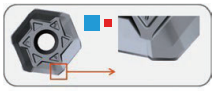
Extremely soft, spindle-friendly cut. The very positive cutting edge chipbreaker paired with the new chipbreaker designs revolutionizes milling on small to medium sized milling machines.

"Masterfinish technology"

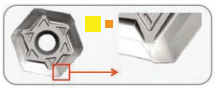
Indexing 6 times

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

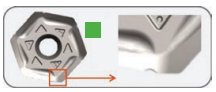
Which chipbreaker to use?



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

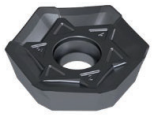


MC
Sharp cutting edge for general stainless steel applications and for finishing in steels.



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

Available range HPKT... HPCT...

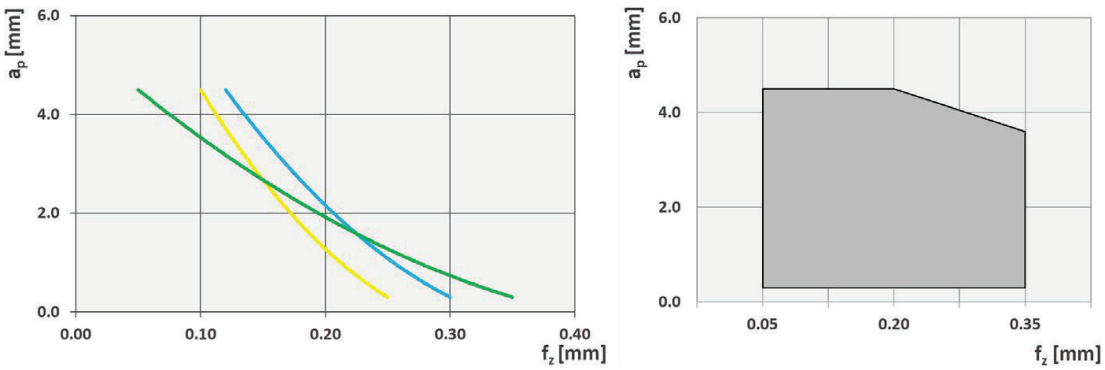
Insert	Designation	Chipbreaker	Material number	Available
	HPKT 0604AZER-PC PMK30C	**...-PC**	12193366	○
	HPKT 0604AZER-PC PM35P	**...-PC**	12193369	●
	HPKT 0604AZER-MC SM35C	**...-MC**	11526389	●
	HPCT 0604AZFR-NC NK15S	**...-NC**	14652610	●

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	PC	PMK30C PM35P	220 – 60	0.12 – 0.3	4.5 – 0.3
M	Stainless steel	MC	SM35C	200 – 60	0.1 – 0.25	4.5 – 0.3
N	Non-ferrous	NC	NK15S	< 2000	0.05 – 0.35	4.5 – 0.3

Overview HOKT... HOCT...

Application

1) Face milling 2) Slot milling 3) Chamfering



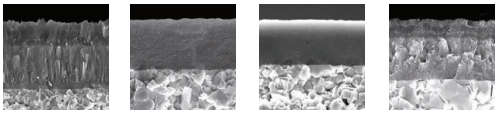
Chipbreaker

PC: Steel – Cast iron*
MC: Stainless Steel – Exotic* – Titanium*

6 effective cutting edges

Grades

PMK30C ■ PM35P■ MP40P ■ SM35C ■



* secondary application

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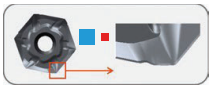
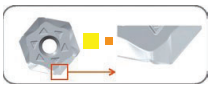
Which chipbreaker to use?



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



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

Available range HOKT... HOCT...

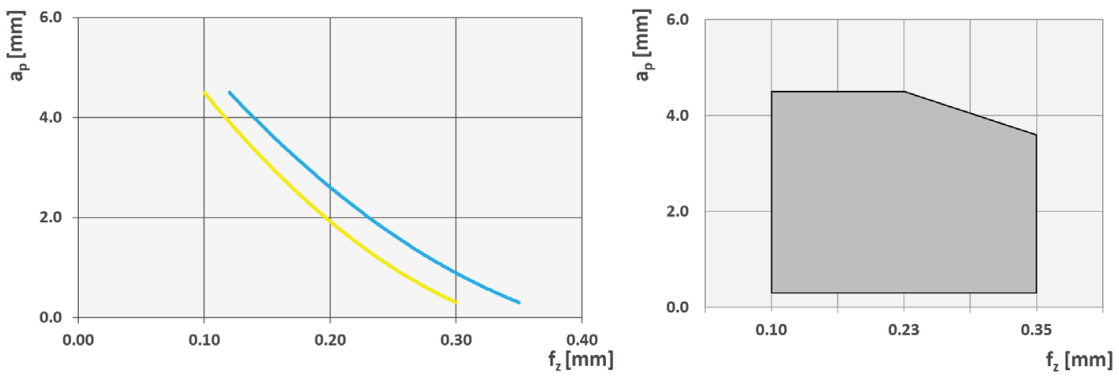
Insert	Designation	Chipbreaker	Material number	Available
	HOKT 0604AZER-PC PMK30C	**...-PC**	11950674	○
	HOKT 0604AZER-PC PM35P	**...-PC**	11943817	●
	HOCT 0604AZER-MC MP40P	**...-MC**	14652624	○
	HOCT 0604AZER-MC SM35C	**...-MC**	12212264	○

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	PC	PMK30C PM35P	220 – 60	0.12 – 0.35	4 – 0.3
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.1 – 0.3	4 – 0.3

Overview SOKU

Application

1) Face milling

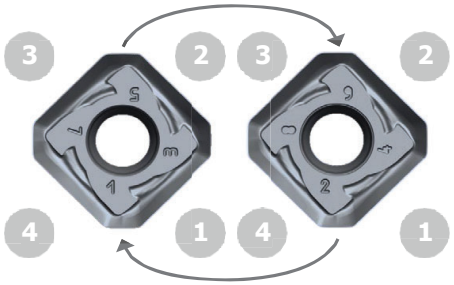
2) Slot milling

3) Chamfering

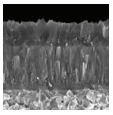
Chipbreaker

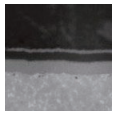
PC: Steel / Medium & roughing operations
MC: Steel – Stainless Steel / Finishing **KC:** Cast iron

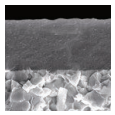
Indexing 4 times and reversible

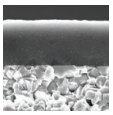


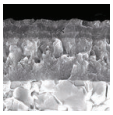
Grades

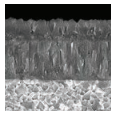
PMK30C 

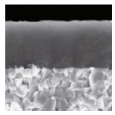
PM35C 

PM35P 

MP40P 

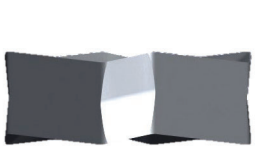
SM35C 

K15C 

K20P 

Customer benefits

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



Square double-sided insert!

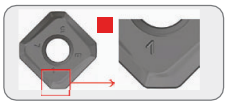
Available in 2 dimensions

IC 12 IC 15

Which chipbreaker to use?

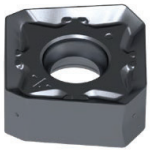
PC
Strong cutting edge for general steel applications and hard conditions milling.

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



KC
Strong cutting edge for cast iron applications.

Available range SOKU12

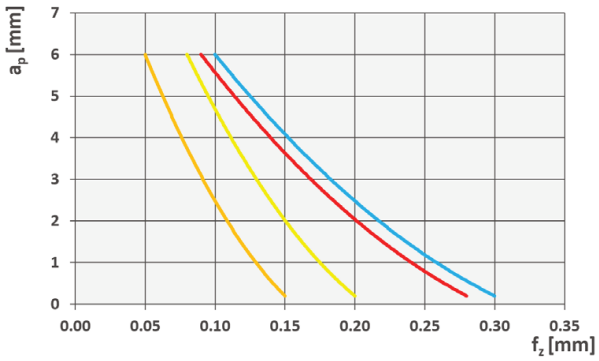
Insert	Designation	Chipbreaker	Material number	Available
	SOKU 1205AZER-PC PMK30C	**...-PC**	12193374	●
	SOKU 1205AZER-PC PM35C	**...-PC**	12219854	●
	SOKU 1205AZER-PC PM35P	**...-PC**	12193377	●
	SOKU 1205AZER-MC MP40P	**...-MC**	11988963	●
	SOKU 1205AZER-MC SM35C	**...-MC**	11906808	●
	SOKU 1205AZER-MC S35C	**...-MC**	14764281	●
	SOKU 1205AZER-KC K15C	**...-KC**		○
	SOKU 1205AZER-KC K20P	**...-KC**		○

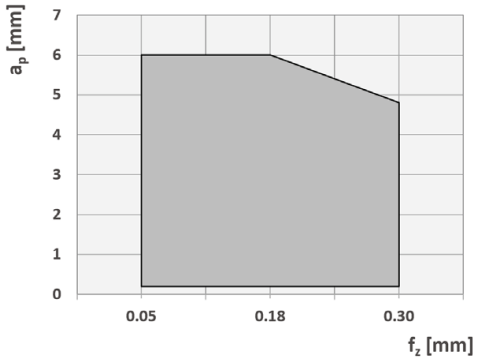
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-S12-40.R.04	40	4	11939775	●
	A-DSM-S12-50.R.05	50	5	11909357	●
	A-DSM-S12-63.R.06	63	6	11939774	●
	A-DSM-S12-80.R.08	80	8	11939772	●
	A-DSM-S12-100.R.10	100	10	11939771	●
	A-DSM-S12-125.R.12	125	12	11939769	●

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

Cutting data SOKU12

Starting parameters:

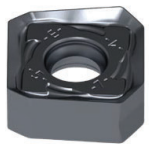




Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	PC	PMK30C PM35C PM35P	220 – 60	0.1 – 0.3	6 – 0.2
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.08 – 0.2	6 – 0.2
K	Cast iron	KC	K15C K20P	320 – 100	0.09 - 0.28	6 – 0.2
S	Heat resistant alloys Titanium	MC	S35C	75 – 25	0.05 – 0.15	6 – 0.2

Available range SOKU15

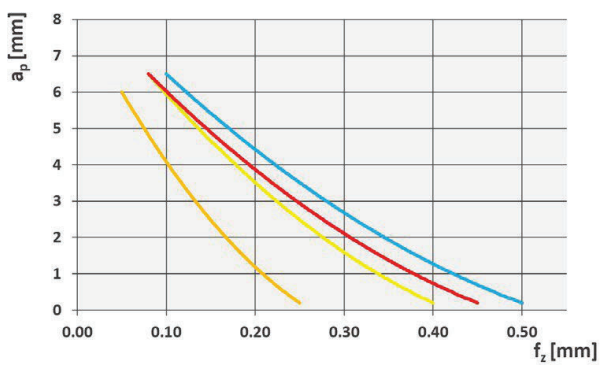
Insert	Designation	Chipbreaker	Material number	Available
	SOKU 1505AZER-PC PMK30C	**...-PC**	12237265	●
	SOKU 1505AZER-PC PM35P	**...-PC**	12193379	●
	SOKU 1505AZER-PC PM35C	**...-PC**	12219850	●
	SOKU 1505AZER-MC MP40P	**...-MC**	11979060	●
	SOKU 1505AZER-MC SM35C	**...-MC**	11526409	●
	SOKU 1505AZER-MC S35C	**...-MC**	11968808	●
	SOKU 1505AZER-KC K15C	**...-KC**	12299379	●
	SOKU 1505AZER-KC K20P	**...-KC**	12145626	○

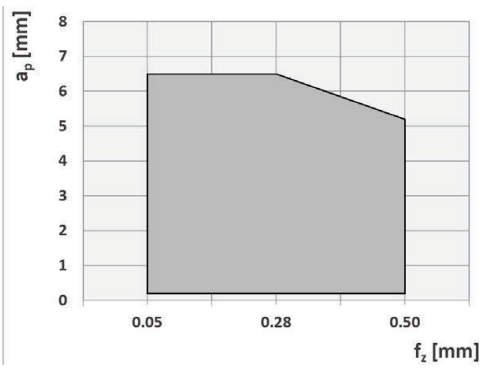
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-DSM-S15-40.R.04	40	4	11520461	●
	A-DSM-S15-50.R.04	50	4	11520462	●
	A-DSM-S15-63.R.05	63	5	11520463	●
	A-DSM-S15-80.R.06	80	6	11520464	●
	A-DSM-S15-100.R.07	100	7	11520465	●
	A-DSM-S15-125.R.08	125	8	11520466	●
	A-DSM-S15-160.R.10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

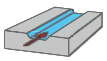
Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	PC	PMK30C PM35C PM35P	220 – 60	0.1 – 0.5	6.5 – 0.2
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.08 – 0.4	6.5 – 0.2
K	Cast iron	KC	K15C K20P	320 – 100	0.08 – 0.45	6.5 – 0.2
S	Heat resistant alloys Titanium	MC	S35C	75 – 25	0.05 – 0.25	6.5 – 0.2

Overview HNKU / HOKU

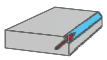
Application

1) Face milling

2) Slot milling



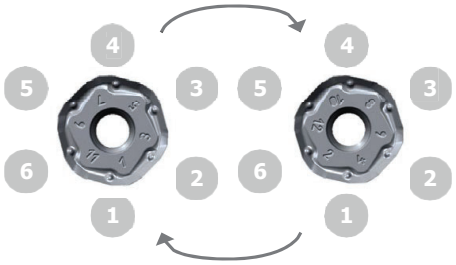
3) Chamfering



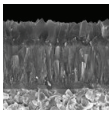
Chipbreaker

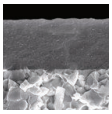
PC: Steel – Cast iron*
MC: Stainless Steel – Exotic* – Titanium*

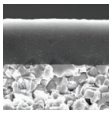
Indexing 6 times and reversible

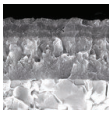


Grades

PMK30C 

PM35P 

MP40P 

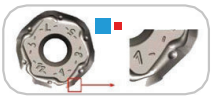
SM35C 

* secondary application

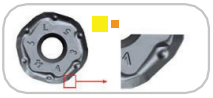
Customer benefits

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

Which chipbreaker to use?



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



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

Available range HNKU

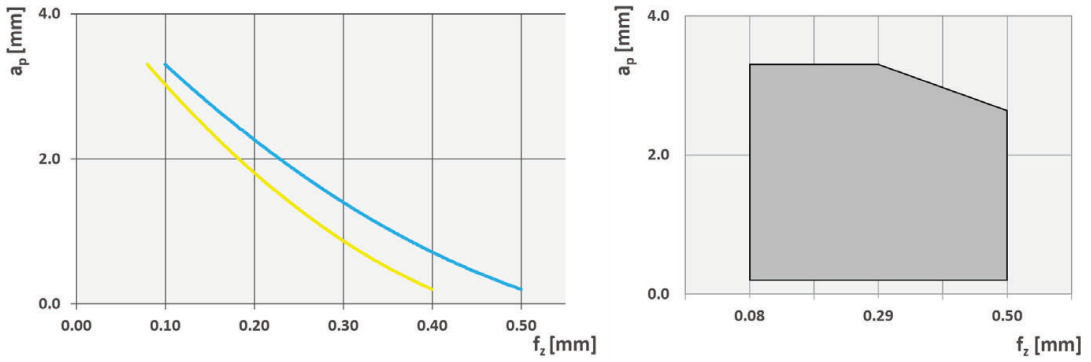
Insert	Designation	Chipbreaker	Material number	Available
	HNKU 0806AZER-PC PMK30C	**...-PC**	12193383	●
	HNKU 0806AZER-PC PM35P	**...-PC**	12193384	●
	HNKU 0806AZER-MC MP40P	**...-MC**		○
	HNKU 0806AZER-MC SM35C	**...-MC**	11887368	●

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	PC	PMK30C PM35P	220 – 60	0.1 – 0.5	3.3 – 0.2
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.08 – 0.4	3.3 – 0.2

Available range HOKU

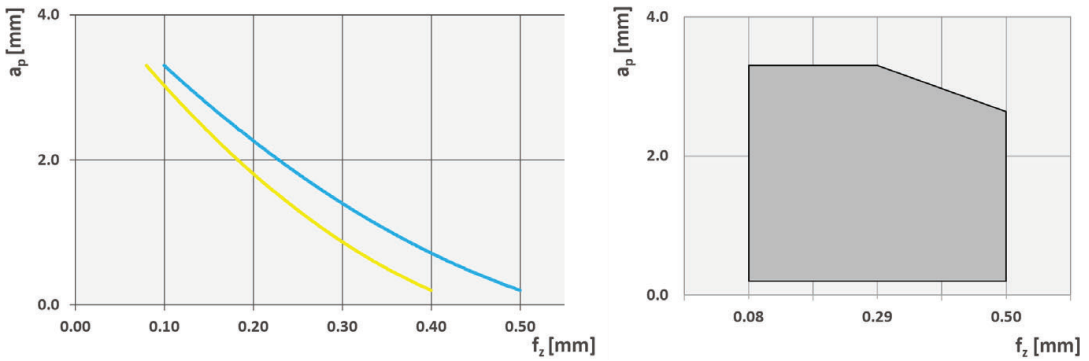
Insert	Designation	Chipbreaker	Material number	Available
	HOKU 0806AZER-PC PMK30C	**...-PC**	12623510	•
	HOKU 0806AZER-PC PM35P	**...-PC**	12623511	•
	HOKU 0806AZER-MC MP40P	**...-MC**	12630187	•
	HOKU 0806AZER-MC SM35C	**...-MC**	12623507	•

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	PC	PMK30C PM35P	220 – 60	0.1 – 0.5	3.3 – 0.2
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.08 – 0.4	3.3 – 0.2

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 

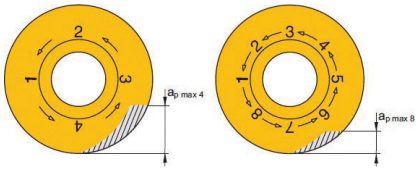
8) Turn milling 

Chipbreaker

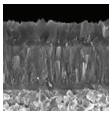
PC: Steel – Cast iron*
MC: Stainless Steel **SC:**
Exotic – Titanium*
NC: Aluminium and non-ferous metals
HC: Reinforced for hard materials

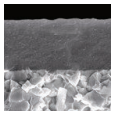
Indexing 4 or 8 times

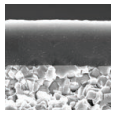
8 facets for 4 or 8 indexing according to your d.o.c.



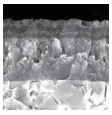
Grades

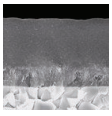
PMK30C 

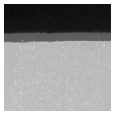
PM35P 

MP40P 

NK15S 

SM35C 

S35C 

HK15P 

* secondary application

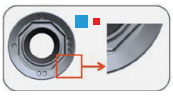
Customer benefits

- 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

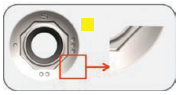
Available in 3 dimensions

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

Which chipbreaker to use?

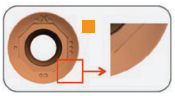


PC
Strong cutting edge for general steel applications and hard conditions milling.

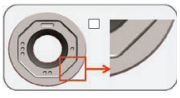


MC
Sharp cutting edge for general stainless steel applications and for finishing in steels.

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



SC
Stable cutting edge for dedicated exotic materials and titanium.



HC
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

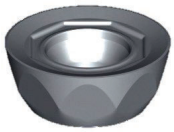
15° (RD...): for Hard materials and non-ferrous metals.

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

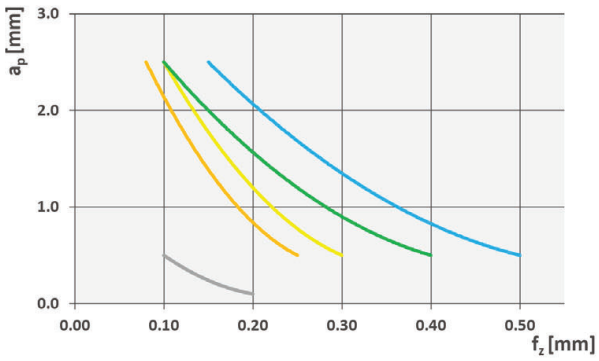
Insert	Designation	Chipbreaker	Material number	Available
	RPMX 10T3MO-PC PMK30C	**...-PC**	11978869	●
	RPMX 10T3MO-PC PM35P	**...-PC**	11978872	●
	RPMX 10T3MO-MC MP40P	**...-MC**	11978876	●
	RPMX 10T3MO-MC SM35C	**...-MC**	12193387	●
	RDHX 10T3MO-NC NK15S	**...-NC**	14652613	●
	RPHX 10T3MO-SC SM35C	**...-SC**	11678477	●
	RPHX 10T3MO-SC S35C	**...-SC**	11678481	●
	RDHW 10T3HC HK15P	**-**	11716131	●

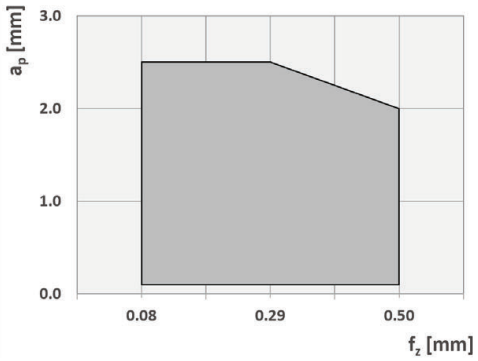
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-R10-20.R.02-A-50-102	20	2	11720312	●
	C-SSM-R10-20.R.02-A-50-165	20	2	11720313	●
	C-SSM-R10-25.R.03-A-60-116	25	3	11720314	●
	C-SSM-R10-25.R.03-A-60-165	25	3	11720315	●
	C-SSM-R10-32.R.04-A-70-130	32	4	11720318	●
	C-SSM-R10-32.R.04-A-70-165	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]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	PC	PMK30C PM35P	220 – 60	0.15 – 0.5	2.5 – 0.5
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.1 – 0.3	2.5 – 0.5
N	Non-ferrous	NC	NK15S	< 2000	0.1 – 0.4	2.5 – 0.5
S	Heat-resistant alloys	SC	SM35C	75 – 25	0.08 – 0.25	2.5 – 0.5
S	Titanium	SC	S35C			
H	Hard materials	–	HK15P	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-PC PMK30C	**...-PC**	11979003	●
	RPMX 1204MO-PC PM35P	**...-PC**	11979006	●
	RPMX 1204MO-MC MP40P	**...-MC**	11979015	●
	RPMX 1204MO-MC SM35C	**...-MC**	12193389	●
	RDHX 1204MO-NC NK15S	**...-NC**	14652616	●
	RPHX 1204MO-SC SM35C	**...-SC**	11666768	●
	RPHX 1204MO-SC S35C	**...-SC**	11666769	●
	RDHW 1204HC HK15P	**-**	11716128	●

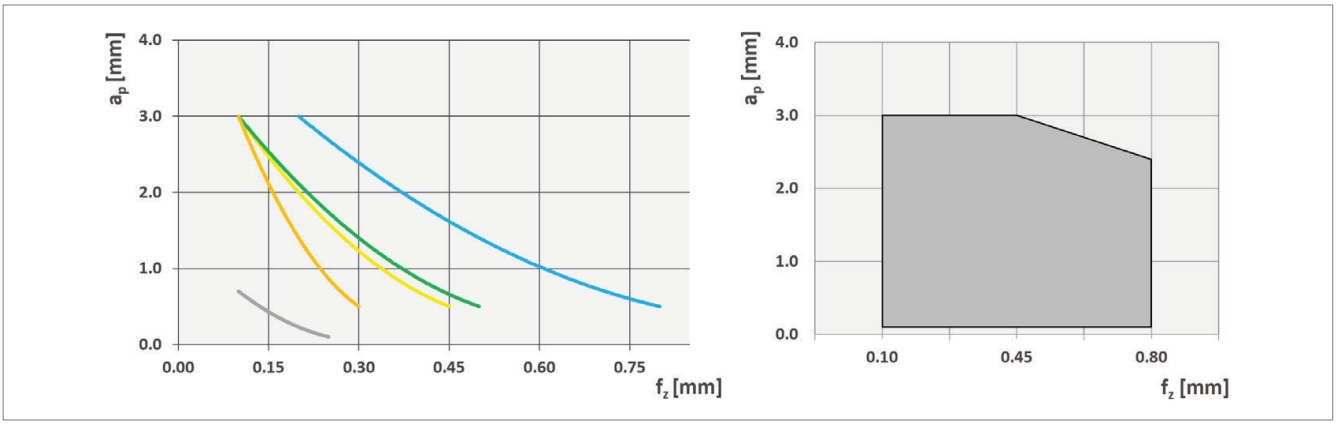
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	C-SSM-R12-25.R.02-A-30-86	25	2	11720305	●
	C-SSM-R12-25.R.02-A-60-116	25	2	11720307	●
	C-SSM-R12-32.R.03-A-40-100	32	3	11720308	●
	C-SSM-R12-32.R.03-A-70-130	32	3	11720310	●
	G-SSM-R12-25.R.02	25	2	12156946	●
	G-SSM-R12-32.R.03-35	32	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:



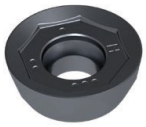
Grades and materials:

Material group		Chipbreaker	Grade	Cutting data v_c [m/min]	f_z [mm]	a_p [mm]
P	Steel	PC	PMK30C PM35P	220 – 60	0.2 – 0.8	3 – 0.5
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.1 – 0.45	3 – 0.5
N	Non-ferrous	NC	NK15S	< 2000	0.1 – 0.5	3 – 0.5
S	Heat-resistant alloys	SC	SM35C	75 – 25	0.1 – 0.3	3 – 0.5
S	Titanium	SC	S35C			
H	Hard materials	–	HK15P	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-PC PMK30C	**...-PC**	11979017	●
	RPMX 1605MO-PC PM35P	**...-PC**	11979021	●
	RPMX 1605MO-MC MP40P	**...-MC**	11979026	●
	RPMX 1605MO-MC SM35C	**...-MC**	12193449	●
	RDHX 1605MO-NC NK15S	**...-NC**		○
	RPHX 1605MO-SC SM35C	**...-SC**	11670391	●
	RPHX 1605MO-SC S35C	**...-SC**	11670392	●
	RDHW 1605HC HK15P	**-**		○

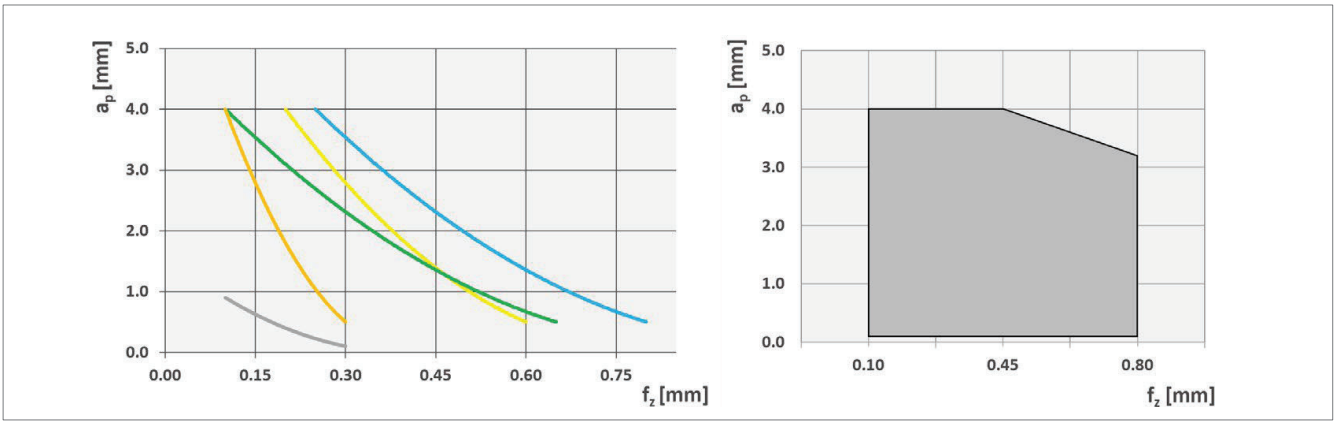
Body	Designation	ø Milling cutter [mm]	z	Material number	Available
	A-SSM-R16-50.R.03	50	3	11739864	●
	A-SSM-R16-52.R.04	52	4	14653992	●
	A-SSM-R16-63.R.05	63	5	11739862	●
	A-SSM-R16-66.R.05	66	5	14653995	●
	A-SSM-R16-80.R.06	80	6	11739860	●
	A-SSM-R16-100.R.07	100	7	11739857	●
	A-SSM-R16-125.R.08	125	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]	Cutting data f_z [mm]	Cutting data a_p [mm]
P	Steel	PC	PMK30C PM35P	220 – 60	0.25 – 0.8	4 – 0.5
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.2 – 0.6	4 – 0.5
N	Non-ferrous	NC	NK15S	< 2000	0.1 – 0.65	4 – 0.5
S	Heat-resistant alloys	SC	SM35C	75 – 25	0.1 – 0.3	4 – 0.5
S	Titanium	SC	S35C			
H	Hard materials	–	HK15P	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-SC S35C	**...-SC**	14874676	•
		RPMX 1204MO-COOL-SC SM35C	**...-SC**	14960071	•
		RPMX 1204MO-COOL-SC MP40P	**...-SC**	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				
	A-SSM-R12-50.R.05-LF				
	A-SSM-R12-63.R.06-LF				
	A-SSM-R12-80.R.08-LF				
	A-SSM-R12-100.R.10-LF				

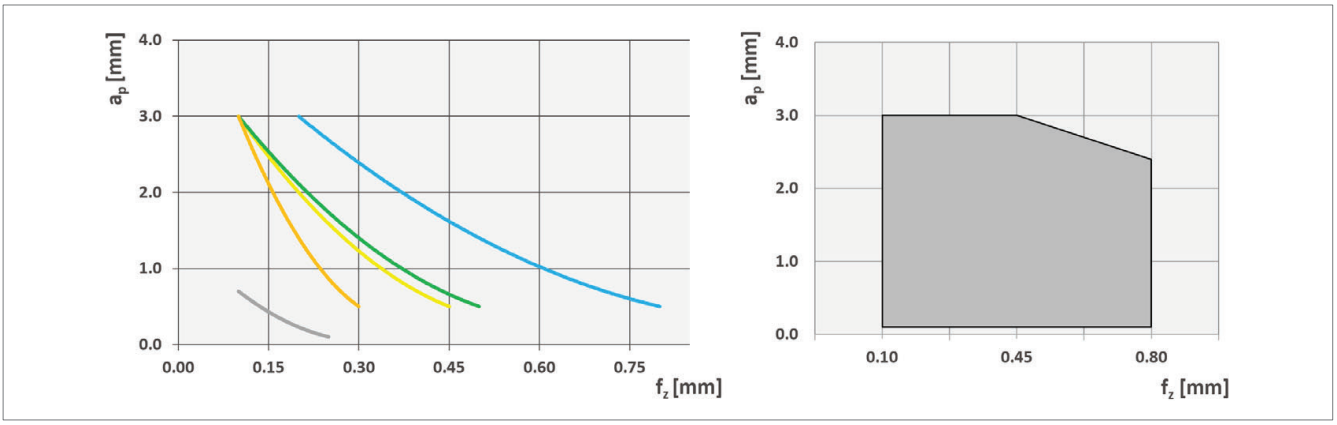
Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.0 x 13.0 - T15 Head7 (110810)	5	14960856	•
	Power screw M8.0 x 30.0 (for A-SSM-R12-40.R.04)	15	11036880	•

Note: Be carefull both system are not interchangeable!

• available from stock, • 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	PC	PMK30C PM35P	220 – 60	0.2 – 0.8	3 – 0.5
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.1 – 0.45	3 – 0.5
N	Non-ferrous	NC	NK15S	< 2000	0.1 – 0.5	3 – 0.5
S	Heat-resistant alloys	SC	SM35C	75 – 25	0.1 – 0.3	3 – 0.5
S	Titanium	SC	S35C			
H	Hard materials	–	HK15P	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	NEW	Designation	Chipbreaker	Material number	Available
		RPHX 1605MO-COOL-PC S35C	**...-SC**	14818563	•
		RPHX 1605MO-COOL-PC SM35C	**...-SC**	14818564	•
		RPHX 1605MO-COOL-PC MP40P	**...-SC**	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	•

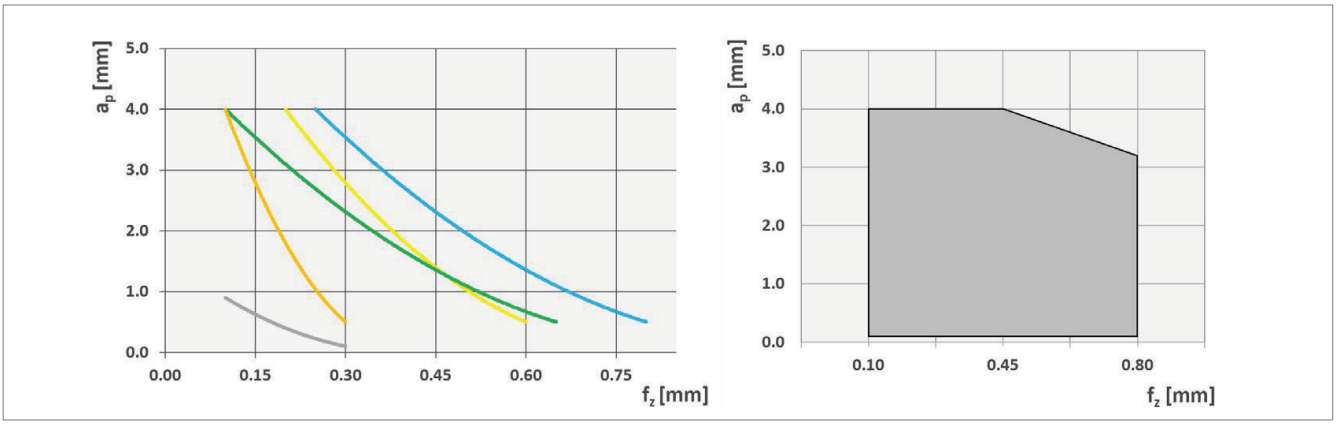
Spare parts	Designation	Torque moment [Nm]	Material number	Available
	M4.5 x 15 T20 Head8.6 (110809)	5	14960854	•
	Power screw M10.0 x 31.0 (for A-SSM-R16-50.R.03)	20	11040298	•

Note: Be carefull both system are not interchangeable!

• available from stock, • 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	PC	PMK30C PM35P	220 – 60	0.25 – 0.8	4 – 0.5
M	Stainless steel	MC	MP40P SM35C	200 – 60	0.2 – 0.6	4 – 0.5
N	Non-ferrous	NC	NK15S	< 2000	0.1 – 0.65	4 – 0.5
S	Heat-resistant alloys	SC	SM35C	75 – 25	0.1 – 0.3	4 – 0.5
S	Titanium	SC	S35C			
H	Hard materials	–	HK15P	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


2 effectives cutting edges

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)

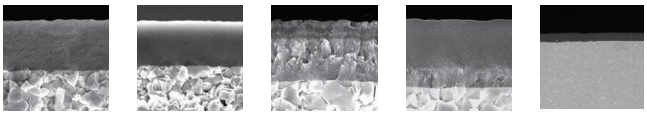
The result:
Rough milling of faces in minimum time combined with maximum tool life.

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

PM35P ■ MP40P ■ SM35C ■ S35C ■ HK15P □



Available range EPHT07... EPHW07...

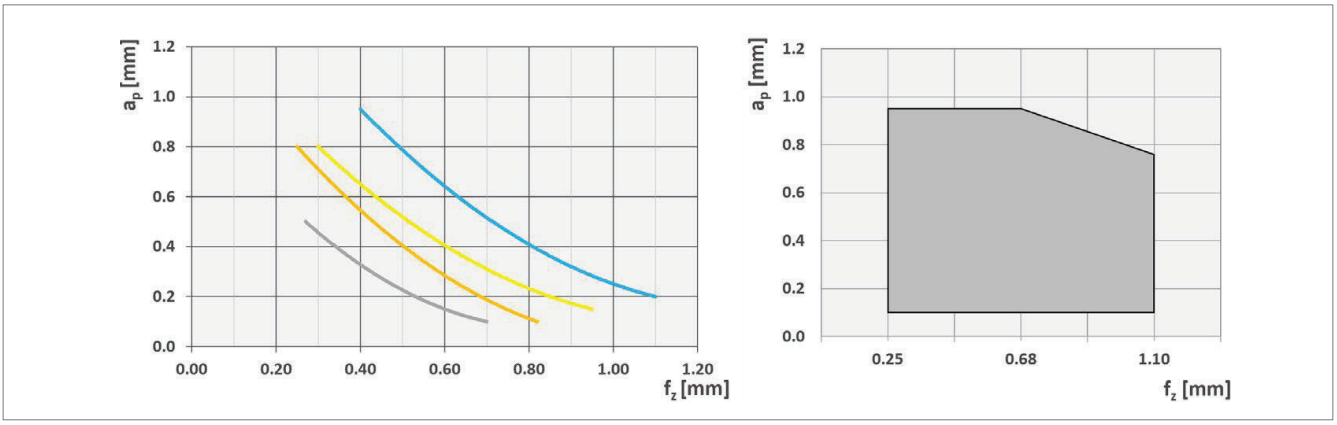
Insert	Designation	Chipbreaker	Material number	Available
	EPHT 070315-12HP PM35P	**...-12HP**	12139712	●
	EPHT 070315-12HP MP40P	**...-12HP**	12139716	●
	EPHT 070315-12HP SM35C	**...-12HP**	12139723	●
	EPHT 070315-12HP S35C	**...-12HP**	12139720	●
	EPHW 070315-12HP HK15P	**...-12HP**	12139730	●

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		PM35C	300 – 80	0.4 – 1.1	0.95 – 0.2
M	Stainless steel	12HP	MSP40P SM35C	300 – 60	0.3 – 0.95	0.8 – 0.15
S	Heat-resistant alloys		SM35C	80 – 20	0.25 – 0.82	0.8 – 0.1
S	Titanium		S35C			
H	Hard materials	–	HK15P	150 – 60	0.27 – 0.7	0.5 – 0.1

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

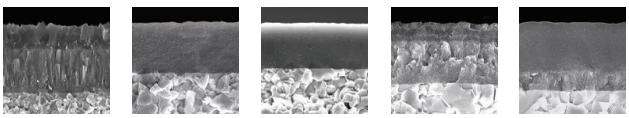

Chipbreaker

PC: Steel – Cast iron*
MC: Stainless Steel – Titanium*

4 effective cutting edges

Grades

PMK30C ■ PM35P ■ MP40P ■ SM35C ■ S35C ■



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?

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

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

Available range HFC07

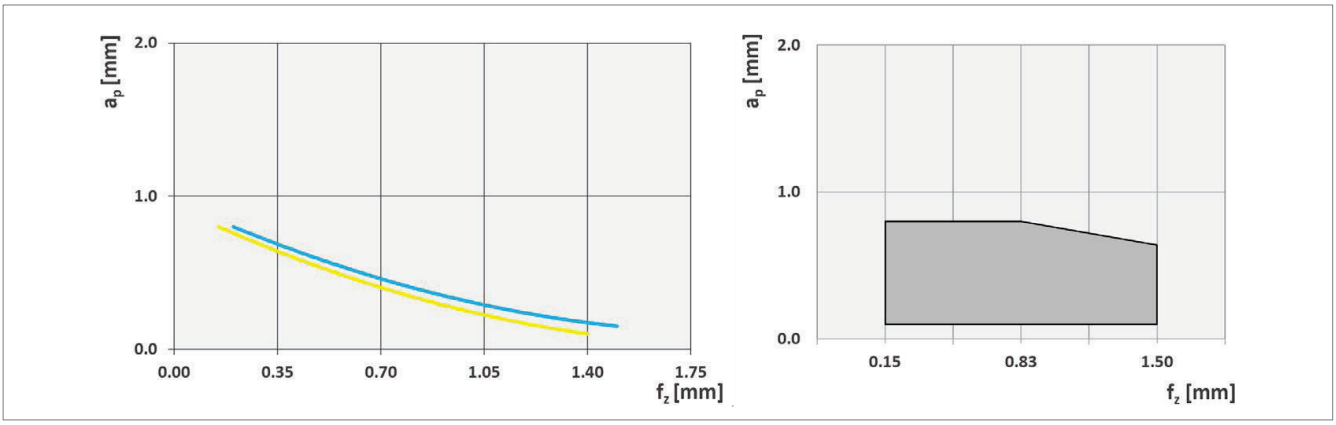
Insert	Designation	Chipbreaker	Material number	Available
	XPLT 070305SR-PC PMK30C	**...-PC**	12193481	•
	XPLT 070305SR-PC PM35P	**...-PC**	12193482	•
	XPLT 070305ER-MC MP40P	**...-MC**	14652649	•
	XPLT 070305ER-MC SM35C	**...-MC**	11869773	•
	XPLT 070305ER-MC S35C	**...-MC**	11869775	•

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	PC	PMK30C PM35P	220 – 60	0.2 – 1.5	0.8 – 0.15
M	Stainless steel	MC	MP40P SM35C S35C	200 – 60	0.15 – 1.4	0.8 – 0.1

Available range HFC10 – XDLT

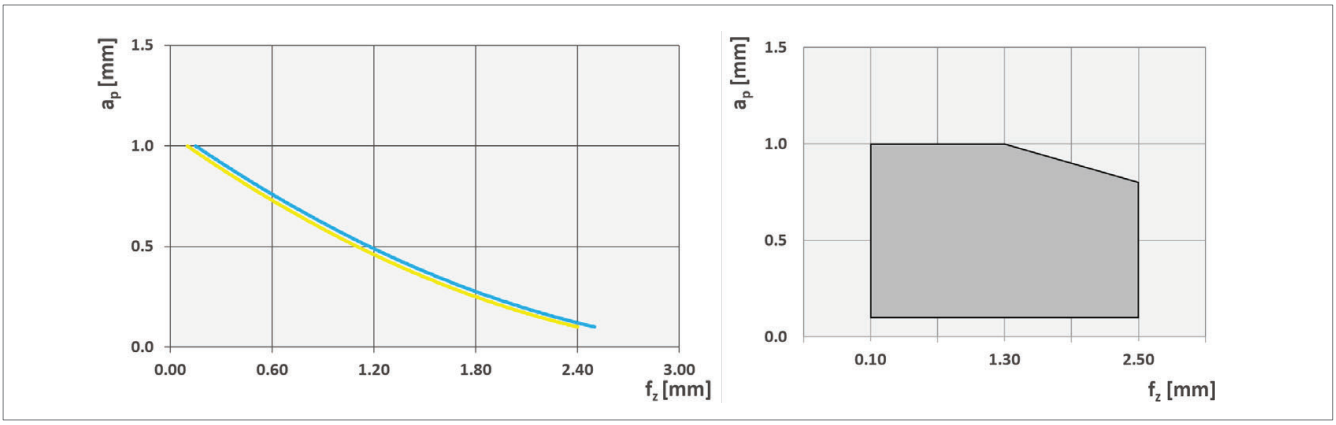
Insert	Designation	Chipbreaker	Material number	Available
	XDLT 10T308SR-PC PMK30C	**...-PC**	12193485	●
	XDLT 10T308SR-PC PM35P	**...-PC**	12193487	●
	XDLT 10T308ER-MC MP40P	**...-MC**	14652626	●
	XDLT 10T308ER-MC SM35C	**...-MC**	11940752	●
	XDLT 10T308ER-MC S35C	**...-MC**	11940753	●

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	PC	PMK30C PM35P	220 – 60	0.15 – 2.5	1 – 0.1
M	Stainless steel	MC	MP40P SM35C S35C	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

-PC

-MC

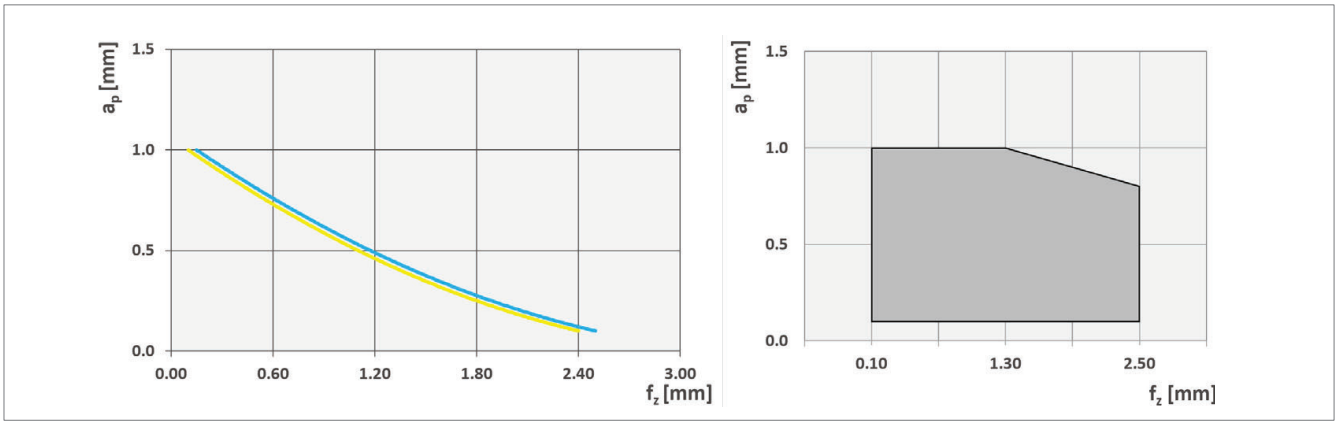
Insert	Designation	Chipbreaker	Material number	Available
	XDLX 10T308SR-PC PMK30C	**...-PC**	12308829	•
	XDLX 10T308SR-PC PM35P	**...-PC**	12248334	•
	XDLX 10T308SR-MC MP40P	**...-MC**	14652628	•
	XDLX 10T308SR-MC SM35C	**...-MC**	12188504	•

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	PC	PMK30C PM35P	220 – 60	0.15 – 2.5	1 – 0.1
M	Stainless steel	MC	MP40P SM35C S35C	200 – 60	0.1 – 2.4	1 – 0.1

Available range HFC13

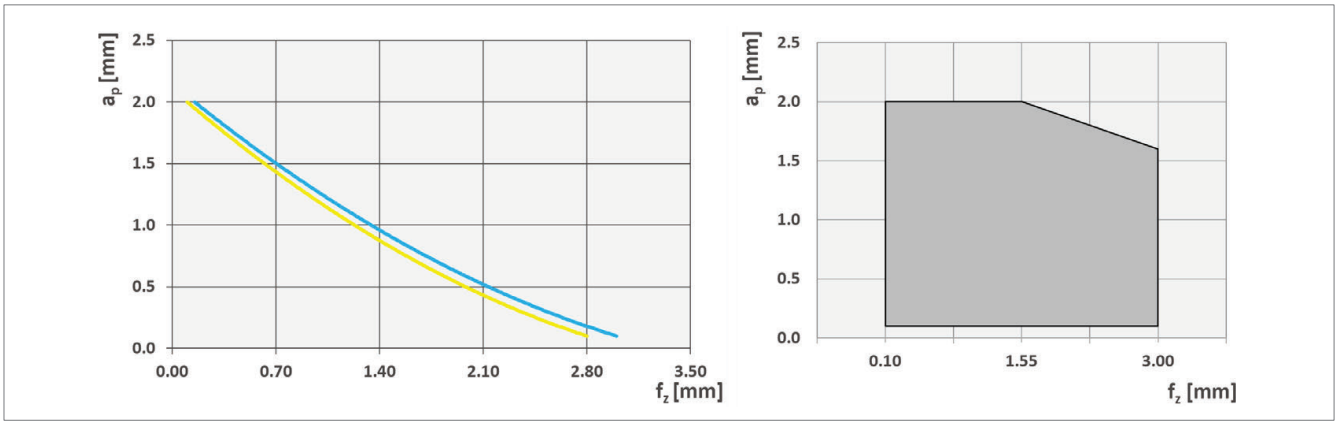
Insert	Designation	Chipbreaker	Material number	Available
	XOLT 130410SR-PC PMK30C	**...-PC**	12193499	●
	XOLT 130410SR-PC PM35P	**...-PC**	12193508	●
	XOLT 130410ER-MC MP40P	**...-MC**	14652630	●
	XOLT 130410ER-MC SM35C	**...-MC**	11940763	●
	XOLT 130410ER-MC S35C	**...-MC**	11940765	●

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	PC	PMK30C PM35P	220 – 60	0.15 – 3	2 – 0.1
M	Stainless steel	MC	MP40P SM35C S35C	200 – 60	0.1 – 2.8	2 – 0.1

Available range HFC13 - Cool

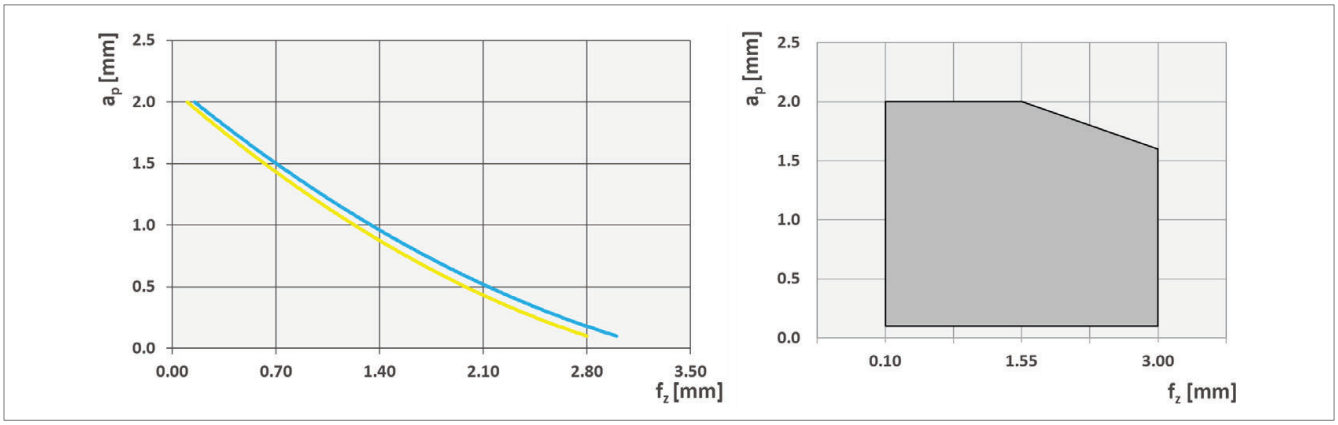
Insert	NEW	Designation	Chipbreaker	Material number	Available
		XOLT 130410ER-COOL-MC S35C	**...-MC**	12645469	●
		XOLT 130410ER-COOL-MC SM35C	**...-MC**	12645989	●
		XOLT 130410ER-COOL-MC MP40P	**...-MC**	12645995	●

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	PC	PMK30C PM35P	220 – 60	0.15 – 3	2 – 0.1
M	Stainless steel	MC	MP40P SM35C S35C	200 – 60	0.1 – 2.8	2 – 0.1