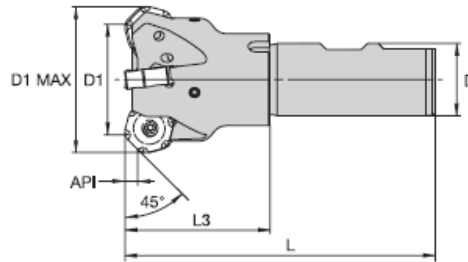




- 4,5mm depth-of-cut capability.
- 40mm diameter.
- Two geometries and five grades for use in most workpiece materials.
- Twelve cutting edges.
- Soft cutting action.

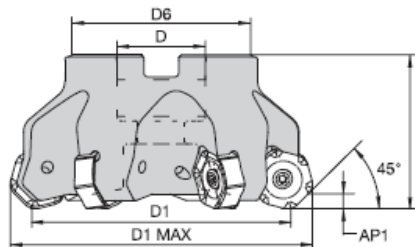


End Mills - Right Hand

D1	order number	catalog number	Z	D	D1 max	L3	L	Ap1 max	kg	Max RPM	Nm	insert screw
40	3324829	KSHR40D03R50B25SHN09	3	25	51	50	107	4,5	0,5	15800	3,5	193.492
40	3324830	KSHR40D04R50B25SHN09	4	25	51	50	107	4,5	0,5	15800	3,5	193.492



- 4,5mm depth-of-cut capability.
- Available in diameters from 40mm to 160mm.
- Through-coolant standard.
- Two geometries and five grades for use in most workpiece materials.
- Twelve cutting edges.
- Soft cutting action.



Shell Mills - Right Hand - Coarse Pitch

D1	order number	catalog number	Z	D	D1 max	D4	D6	L	Ap1 max	kg	Max RPM
50	3324831	KSHR50A04RS45HN09	4	22	61,0	—	38	40	4,5	0,3	12700
63	3325163	KSHR63A06RS45HN09	6	22	74,0	—	50	40	4,5	0,6	10100
80	3325165	KSHR80A06RS45HN09	6	27	91,0	—	60	50	4,5	1,1	7900
100	3325167	KSHR100B08RS45HN09	8	32	111,0	—	80	40	4,5	1,7	6300
125	3325169	KSHR125B10RS45HN09	10	40	135,9	—	90	63	4,5	2,8	5050
160	3325171	KSHR160C12RS45HN09	12	40	171,0	66,7	110	63	4,5	4,6	3900

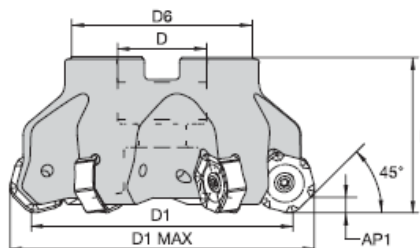
Spare Parts

D1	insert screw	Nm	Torx wrench	low-head cap screw	socket-head cap screw	coolant screw	coolant cap
50	193.492	3,5	170.025	129.025	—	MS2072CG	—
63	193.492	3,5	170.025	—	125.025	MS1234CG	—
80	193.492	3,5	170.025	—	125.230	MS2038CG	—
100	193.492	3,5	170.025	—	—	MS2189CG	—
125	193.492	3,5	170.025	—	—	420.200	470.232
160	193.492	3,5	170.025	—	—	420.200	470.233

Indexable Shell Mills



- 4,5mm depth-of-cut capability.
- Available in diameters from 40mm to 160mm.
- Through-coolant standard.
- Two geometries and five grades for use in most workpiece materials.
- Twelve cutting edges.
- Soft cutting action.



■ Shell Mills - Right Hand - Medium Pitch

D1	order number	catalog number	Z	D	D1 max	D4	D6	L	Ap1 max	kg	Max RPM
50	3324832	KSHR50A05RS45HN09	5	22	61,0	—	38	40	4,5	0,3	12700
63	3325164	KSHR63A07RS45HN09	7	22	74,0	—	50	40	4,5	0,6	10100
80	3325166	KSHR80A09RS45HN09	9	27	91,0	—	60	50	4,5	1,1	7900
100	3325168	KSHR100B11RS45HN09	11	32	111,0	—	80	50	4,5	1,7	6300
125	3325170	KSHR125B14RS45HN09	14	40	136,0	—	90	63	4,5	2,9	5050
160	3325172	KSHR160C16RS45HN09	16	40	171,0	66,7	110	63	4,5	4,7	3900

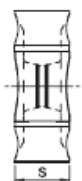
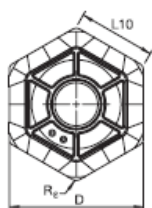
■ Spare Parts

D1	insert screw	Nm	Torx wrench	low-head cap screw	socket-head cap screw	coolant screw	coolant cap
50	193.492	3,5	170.025	129.025	—	MS2072CG	—
63	193.492	3,5	170.025	—	125.025	MS1234CG	—
80	193.492	3,5	170.025	—	125.230	MS2038CG	—
100	193.492	3,5	170.025	—	—	MS2189CG	—
125	193.492	3,5	170.025	—	—	420.200	470.232
160	193.492	3,5	170.025	—	—	420.200	470.233

Indexable Inserts for Dodeka HNGJ0905



HNGJ-LD



● first choice
○ alternate choice

H					
S		●	●		
N					
K	●	○	●	○	
M			●	○	
P		○	●	●	

catalog number	cutting edges	D	S	L10	Re	hm	KC520M	KC522M	KC725M	KC915M	KC935M
HNGJ0905ANENLD	12	15,88	5,56	9,00	1,2	0,10	●	●	●	●	●



HNGJ-GD



● first choice
○ alternate choice

H					
S		●	●		
N					
K	●	○	●	○	
M			●	○	
P		○	●	●	

catalog number	cutting edges	D	S	L10	Re	hm	KC520M	KC522M	KC725M	KC915M	KC935M
HNGJ0905ANSNGD	12	15,88	5,56	9,00	1,2	0,15		●	●	●	●

Recommended Starting Speeds [m/min]

45° approach angle

Material Group	KC520M			KC522M			KC725M			KC915M			KC935M		
P1							310	270	250				470	410	380
P2							190	180	160				290	260	240
P3							180	160	140				260	240	220
P4				120	110	100	130	120	110				200	180	160
P5				155	150	135	180	160	150				265	240	215
P6				100	80		110	90					160	140	
M1				180	160	150	200	180	160				310	270	250
M2				170	150	140	180	170	150				280	250	230
M3				120	110		140	120					210	180	
K1	320	290	260				200	180	160	440	400	350	310	280	250
K2	250	220	210	240	220	200	160	140	130	350	310	290	240	220	200
K3	210	190	170	200	180	170	130	120	110	290	260	240	200	180	170
N1															
N2															
S1				40	30		40	40							
S2				30	30		40	40							
S3				40	40		50	50							
S4				50	50		60	50							
H1															

FIRST choice starting speeds are in bold type.

The speed should be decreased as the average chip thickness increases.

Recommended Starting Feeds

45° Approach Angle Feed-Per-Tooth Compensation
(Radial Width-of-Cut Dependent)

