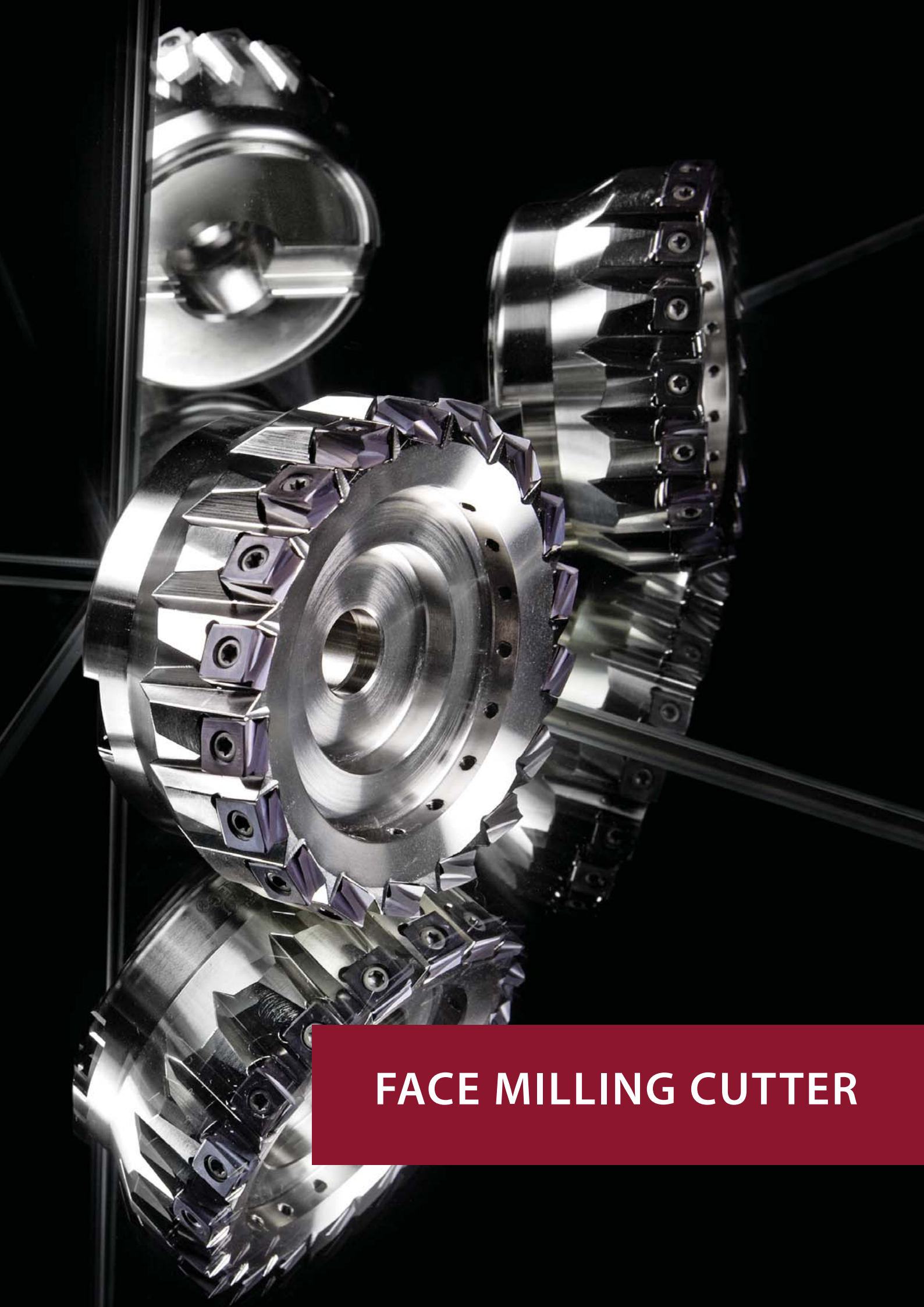
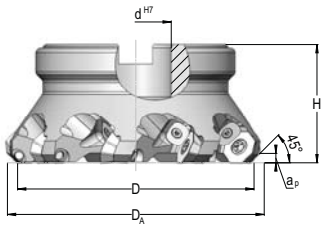


FACE MILLING CUTTER

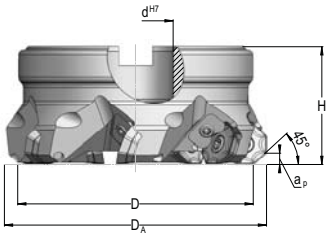
Avantop KC1.1/KC2.2

< universally applicable for cast iron and steel
< very good surface quality by plain cutting
< additional security due to the wedge system

Avantop KC1.1



Avantop KC2.2



Avantop KC1.1

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	ic	Kg	insert
03O.5043.020	50	58,8	43	22	6	3,5	yes	no	0,32	OF..1505.N
03O.6340.020	63	71,9	40	22	7	3,5	yes	yes	0,57	OF..1505.N
03O.8050.020	80	88,9	50	27	8	3,5	yes	yes	0,98	OF..1505.N
03O.1050.020	100	108,9	50	32	9	3,5	yes	no	1,75	OF..1505.N
03O.1263.020	125	133,9	63	40	11	3,5	yes	no	3,31	OF..1505.N
03O.1663.020	160	168,9	63	40	13	3,5	yes	no	4,79	OF..1505.N

set wedge			
08Z.0000.063	08K.1108.001	08Z.0000.010	TX220

Avantop KC2.2

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	ic	Kg	insert
03O.6340.010	63	74,2	40	22	5	5,0	yes	yes	0,56	OF..2006.N
03O.8050.012	80	91,3	50	27	6	5,0	yes	yes	1,14	OF..2006.N
03O.1050.010	100	111,0	50	32	7	5,0	yes	yes	2,21	OF..2006.N
03O.1263.010	125	136,3	63	40	8	5,0	yes	no	2,94	OF..2006.N
03O.1663.010	160	171,3	63	40	10	5,0	yes	no	5,02	OF..2006.N
03O.2063.010	200	211,3	63	60	12	5,0	yes	no	7,21	OF..2006.N

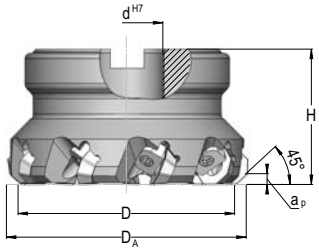
set wedge			
08Z.0000.134	08K.1008.003	08Z.0000.231	TX220

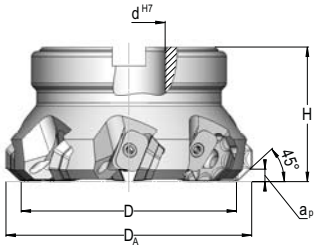
Avantop VC1.1/VC2.2

Avantop VC1.1

Avantop VC2.2

< economic efficiency especially with casting applications
< high material removal because of fine insert pitch
< easy indexing due to the wedge system





Avantop VC1.1

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	ic	Kg	insert
03O.5040.080	50	58,6	40	22	6	3,5	yes	no	0,42	OF..1505.N*
03O.6340.080	63	71,6	40	22	7	3,5	yes	no	0,61	OF..1505.N*
03O.8050.080	80	88,6	50	27	9	3,5	yes	no	1,48	OF..1505.N*
03O.1050.080	100	108,6	50	32	11	3,5	yes	no	2,34	OF..1505.N*
03O.1263.080	125	133,6	63	40	14	3,5	yes	no	3,55	OF..1505.N*

* without centre bore

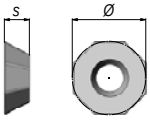
set wedge			
08Z.0000.128	08K.1205.001	08Z.0000.093	TX215

Avantop VC2.2

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	ic	Kg	insert
03O.6340.040	63	74,3	40	22	6	5,0	yes	yes	0,65	OF..2006.N*
03O.8050.240	80	91,3	50	27	7	5,0	yes	yes	1,31	OF..2006.N*
03O.1050.240	100	111,3	50	32	9	5,0	yes	yes	2,20	OF..2006.N*
03O.1263.240	125	136,3	63	40	11	5,0	yes	no	3,45	OF..2006.N*
03O.1663.240	160	171,3	63	40	14	5,0	yes	no	5,20	OF..2006.N*
03O.2063.240	200	211,3	63	60	18	5,0	yes	no	7,43	OF..2006.N*

* without centre bore

set wedge				tool
08Z.0000.126	08K.1908.001	08Z.0000.093	TX215	03O.6340.040
08Z.0000.146	08K.1610.002	08Z.0000.242	TX225	



insert	incircle diameter	insert thickness
	ø 15 = 14,70	S 05 = 5,00
	ø 20 = 19,90	S 06 = 6,00

Allocation from machining parameters of AV material groups

	article	AS	grade		cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
OF..1505..	OFEW1505M000132SN25S	8	CAN²26	h_{max}	0,65	0,55	0,45						
				v_c	400	360	340						
	OFEW1505M000130SN28S		NERO²77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4		
				v_c	360	320	280	340	320	280	280		
	OFEW1505M000131TN28S		SKY77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4	0,4	0,35
				v_c	240	210	180	240	230	210	180	180	160
	OFEW1505M000140TN25		SKY77	h_{max}	0,65	0,55	0,45	0,55	0,5	0,45			
				v_c	240	210	180	240	230	210			
	OFEW1505M000141TN30		DELPH43	h_{max}							0,3	0,25	0,25
				v_c							160	150	140
	OFER1505M003206SN28S*		NERO²77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4		
				v_c	360	320	280	340	320	280	280		
	OFER1505M003207TN28S*		SKY77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4	0,4	0,35
				v_c	240	210	180	240	230	210	180	180	160
	OFER1505M003208SN25S*		CAN²26	h_{max}	0,65	0,55	0,45						
				v_c	400	360	340						
OF..2006..	OFEW2006M000132SN25S	8	CAN²26	h_{max}	0,65	0,55	0,45						
				v_c	400	360	340						
	OFEW2006M000130SN28S		NERO²77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4		
				v_c	360	320	280	340	320	280	280		
	OFEW2006M000131TN28S		SKY77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4	0,4	0,35
				v_c	240	210	180	240	230	210	180	180	160
	OFEW2006M000140TN23		SKY77	h_{max}	0,65	0,55	0,45	0,55	0,5	0,45			
				v_c	240	210	180	240	230	210			
	OFEW2006M000141TN30		DELPH43	h_{max}							0,3	0,25	0,25
				v_c							160	150	140
	OFER2006M003108SN28S*		NERO² 77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4		
				v_c	360	320	280	340	320	280	280		
	OFER2006M003109TN28S*		SKY77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4	0,4	0,35
				v_c	240	210	180	240	230	210	180	180	160
	OFER2006M003110SN25S*		CAN²26	h_{max}	0,65	0,55	0,45						
				v_c	400	360	340						

* without centre bore for VC

Allocation from machining parameters of AV material groups

	article	AS	grade		stainless steel C11	C10	C09
OF..1505..	OFEW1505M000132SN25S	8	CAN²26	h_{max}			
				v_c			
	OFEW1505M000130SN28S		NERO²77	h_{max}			
				v_c			
	OFEW1505M000131TN28S		SKY77	h_{max}			
				v_c			
	OFEW1505M000140TN25		SKY77	h_{max}			
				v_c			
	OFEW1505M000141TN30		DELPH43	h_{max}	0,25	0,2	0,15
				v_c	140-100	120-90	110-80
	OFER1505M003206SN28S*		NERO²77	h_{max}			
				v_c			
	OFER1505M003207TN28S*		SKY77	h_{max}			
				v_c			
	OFER1505M003208SN25S*		CAN²26	h_{max}			
				v_c			
OF..2006..	OFEW2006M000132SN25S	8	CAN²26	h_{max}			
				v_c			
	OFEW2006M000130SN28S		NERO²77	h_{max}			
				v_c			
	OFEW2006M000131TN28S		SKY77	h_{max}			
				v_c			
	OFEW2006M000140TN23		SKY77	h_{max}			
				v_c			
	OFEW2006M000141TN30		DELPH43	h_{max}	0,25	0,2	0,15
				v_c	140-100	120-90	110-80
	OFER2006M003108SN28S*		NERO²77	h_{max}			
				v_c			
	OFER2006M003109TN28S*		SKY77	h_{max}			
				v_c			
	OFER2006M003110SN25S*		CAN²26	h_{max}			
				v_c			

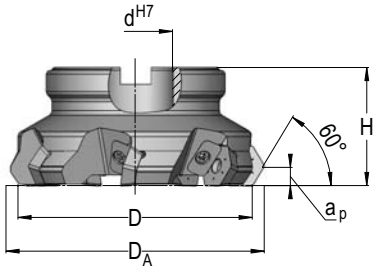
* without centre bore for VC

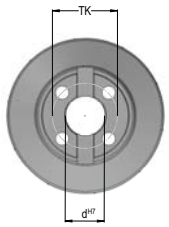
insert		
OF..1505.N	08B.4511.7991	TX220
OF..2006.N	08B.0513.7991	TX220

» Assembly instructions page 115

Face milling cutter HE60

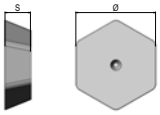
< suitable for roughing and finishing with the same 6 cutting edge HE-insert
< large depth of cut
< easy indexing due to the wedge system





Face milling cutter HE60

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	TK	ic	Kg	insert
03H.1263.001	125	137,8	63	40	7	10	yes	▪	no	3,23	HE..2207.N
03H.1663.001	160	172,8	63	40	9	10	yes	66,7	no	5,26	HE..2207.N
03H.2063.001	200	212,8	63	60	11	10	yes	101,6	no	8,57	HE..2207.N



insert	incircle diameter	insert thickness
	ø 22 = 22,00	S 07 = 7,00

Allocation from machining parameters of AV material groups

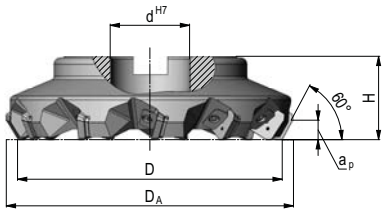
	article	AS	grade		cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
HE..2207..	HEHW2207M000202SN28	6	SKY77	h_{max}	0,7	0,55	0,4	0,7	0,6				
				v_c	240	220	200	240	200				
			NERO²77	h_{max}	0,7	0,55	0,4	0,7	0,6				
				v_c	320	300	280	320	300				
			CAN²77	h_{max}	0,7	0,55	0,4						
				v_c	350	320	300						
	HEHW2207M000204SN23		SKY77	h_{max}	0,8	0,65	0,4	0,7	0,6	0,5			
				v_c	240	200	180	240	200	180			
			NERO²77	h_{max}	0,8	0,65	0,4	0,7	0,6	0,5			
				v_c	280	240	210	280	240	220			
	HEHT2207M000301SN28		SKY77	h_{max}				0,7	0,6	0,5	0,4	0,3	
				v_c				240	200	180	160	140	
			NERO²77	h_{max}				0,7	0,6	0,5	0,4	0,3	
				v_c				320	300	220	180	160	

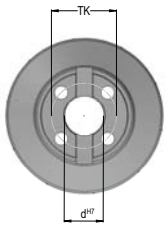
set wedge			
08Z.0000.145	08K.2010.001	08Z.0000.242	TX225

» Assembly instructions page 115

Face milling cutter SE60

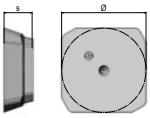
< substantial depth of cut – up to 14 mm for maximum Q
< minimal power consumption, maximum machining performance





Face milling cutter SE60

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	TK	ic	Kg	insert
03S.1263.130	125	142,5	63	40	6	14	yes	▪	no	4,20	SE..2408.R
03S.1663.130	160	177,5	63	40	8	14	yes	66,7	no	5,40	SE..2408.R
03S.2063.130	200	217,5	63	60	11	14	yes	101,6	no	8,81	SE..2408.R



insert	incircle diameter	insert thickness
	ø 24 = 24,00	S 08 = 8,00

Allocation from machining parameters of AV material groups

	article	AS	grade		cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
SE..2408..	SEHN24082000205SR23	4	SKY77	h_{max}	0,7	0,55	0,4	0,7	0,5				
				v_c	240	220	200	240	220				
			NERO^{2}77	h_{max}	0,7	0,55	0,4	0,7	0,5				
				v_c	320	300	280	280	240				
	SEHN24085000206SR23	4	SKY77	h_{max}	0,7	0,55	0,4	0,7	0,5				
				v_c	240	220	200	240	220				
			CAN^{2}77	h_{max}	0,7	0,55	0,4	0,7	0,5				
				v_c	320	300	280	280	240				

set wedge			
08Z.0000.145	08K.2010.001	08Z.0000.242	TX225

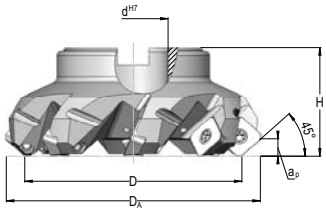
» Assembly instructions page 115

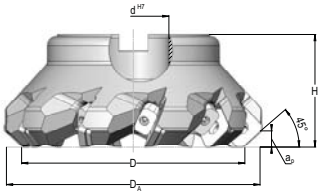
Face milling cutter SE45/SX45

Face milling cutter SE45

Face milling cutter SX45

< suitable for roughing and finishing with the same insert
< large depth of cut
< SE45: Long-chipping materials
< SX45: Multi-toothed design





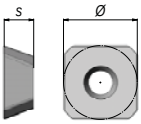
Face milling cutter SE45

article	D	D_A	H	d^{H7}	z_{eff}	a_p	ic	Kg	insert
03S.8050.005	80	96,9	50	27	6	8,4	yes	1,19	SE..1506.N
03S.1050.005	100	117,0	50	32	8	8,4	yes	1,70	SE..1506.N
03S.1263.008	125	142,0	63	40	8	8,4	yes	2,98	SE..1506.N
03S.1663.007	160	177,2	63	40	12	8,4	no	4,93	SE..1506.N
03S.2063.008	200	217,4	63	60	14	8,4	no	6,94	SE..1506.N

Face milling cutter SX45

article	D	D_A	H	d^{H7}	z_{eff}	a_p	wedge	ic	Kg	insert
03S.1263.031	125	145,2	63	40	10	8,8	yes	yes	3,87	SX..1906.N
03S.1663.032	160	180,4	63	40	12	8,8	yes	yes	5,99	SX..1906.N
03S.1663.031	160	180,2	63	40	16	8,8	yes	no	6,15	SX..1906.N

set wedge SX45			
08Z.0000.126	08K.1908.001	08Z.0000.093	TX215



insert	incircle diameter	insert thickness
	ø 15 = 15,88	S 06 = 6,35
	ø 19 = 19,00	

Allocation from machining parameters of AV material groups

	article	AS	grade		cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
SE..1506..	SEHW1506AF00221SN25	4	SKY77	h_{max}	0,65	0,55	0,45	0,55	0,5	0,45	0,45		
				v_c	240	210	180	240	230	210	180		
	SEHW1506AF00222TN28		SKY77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4	0,4	0,4	0,35
				v_c	240	210	180	240	230	210	180	180	160
SX..1906..	SXMW1906AF00221SN25	4	SKY77	h_{max}	0,6	0,5	0,4	0,5	0,45	0,4			
				v_c	240	210	180	240	230	210			
			$CAN^2 26$	h_{max}	0,6	0,5	0,4						
				v_c	400	360	340						
	SXMW1906AF00222TN28		SKY77	h_{max}	0,55	0,45	0,35	0,45	0,4	0,4			
				v_c	240	210	180	240	230	210			

insert		
SE..1506.N	08B.4511.7991	TX220

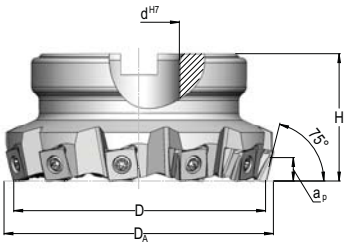
» Assembly instructions page 115

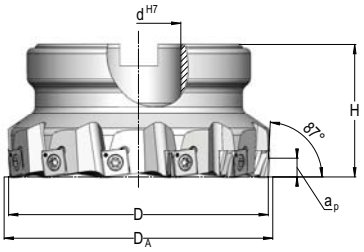
Signavant SN75/SN87

< for machining cast iron with extremely soft cut
< economic machining through eight cutting edge tangential SNHX insert
< large depth of cut allows high volumes of metal removal
< high process reliability

Signavant SN75

Signavant SN87+





Signavant SN75

article	D	D_A	H	d^{H7}	z_{eff}	a_p	ic	Kg	insert
03S.0850.090	80	85,8	50	27	9	5,5	no	1,20	SN..1208.L
03S.1050.090	100	105,8	50	32	11	5,5	no	2,03	SN..1208.L
03S.1263.090	125	130,8	63	40	14	5,5	no	3,05	SN..1208.L
03S.1663.090	160	165,8	63	60	17	5,5	no	4,68	SN..1208.L
03S.2063.090	200	205,8	63	60	20	5,5	no	8,73	SN..1208.L

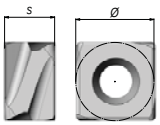
Signavant SN87

article	D	D_A	H	d^{H7}	z_{eff}	a_p	ic	Kg	insert
03S.0540.100	50	51,4	40	22	7	5,0	no	0,39	SN..1006.L
03S.0640.100	63	64,4	40	22	8	5,0	no	0,58	SN..1006.L
03S.0850.100	80	81,4	50	27	10	5,0	no	1,13	SN..1006.L
03S.0850.111	80	81,6	50	27	8	7,0	no	1,12	SN..1208.L
03S.1050.100	100	101,4	50	32	12	5,0	no	1,80	SN..1006.L
03S.1050.111	100	101,6	50	32	10	7,0	no	1,82	SN..1208.L
03S.1263.100	125	126,4	63	40	14	5,0	no	2,93	SN..1006.L
03S.1263.111	125	126,6	63	40	12	7,0	no	2,97	SN..1208.L
03S.1663.100	160	161,4	63	40	20	5,0	no	4,72	SN..1006.L
03S.1663.111	160	161,6	63	40	16	7,0	no	4,71	SN..1208.L

Signavant SN87+

article	D	D_A	H	d^{H7}	z_{eff}	a_p	ic	Kg	insert
03S.4040.101	40	41,4	40	16	5	5,0	yes	0,25	SN..1006.L*
03S.0640.101	63	64,4	40	22	10	5,0	no	0,58	SN..1006.L
03S.0850.101	80	81,4	50	27	15	5,0	no	1,16	SN..1006.L
03S.0850.190	80	81,6	50	27	9	7,0	no	1,15	SN..1208.L
03S.1050.101	100	101,4	50	32	18	5,0	no	1,88	SN..1006.L
03S.1263.101	125	126,4	63	40	23	5,0	no	3,02	SN..1006.L

* attention to different screw lengths



insert	incircle diameter		insert thickness	
	ø 10 =	10,00	S 06 =	6,00
	ø 12 =	12,50	S 08 =	8,00

Allocation from machining parameters of AV material groups

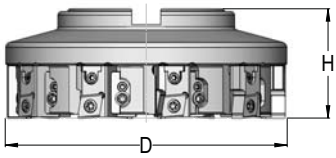
	article	AS	grade		cast iron		
					D20	D18	D17
SN..1006..	SNHX10060800304SL28	8	NERO26	h_{max}	0,25	0,2	0,18
				v_c	260	240	220
			CAN^{2}26	h_{max}	0,25	0,2	0,18
				v_c	380	360	340
	SNHX10060800303TL28		SKY77	h_{max}	0,25	0,2	0,18
				v_c	240	230	220
	SNKY10060801801TL23	8	SKY26	h_{max}	0,25	0,2	0,18
				v_c	240	230	220
			CAN^{2}26	h_{max}	0,25	0,2	0,18
				v_c	380	360	340
	SN.1006.018.02 SL28		CAN^{2}26	h_{max}	0,25	0,2	0,18
				v_c	380	360	340
SN..1208.. (for SN75)	SNHX12080800305SL25	8	NERO26	h_{max}	0,32	0,28	0,24
				v_c	260	240	220
			CAN^{2}26	h_{max}	0,32	0,28	0,24
				v_c	400	380	360
SN..1208.. (for SN87)	SNHX12081200701TL25	8	SKY77	h_{max}	0,32	0,28	0,24
				v_c	240	230	220
			NERO26	h_{max}	0,32	0,28	0,24
				v_c	260	240	220
			CAN^{2}26	h_{max}	0,32	0,28	0,24
				v_c	400	380	360

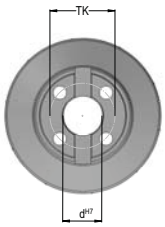
insert		
SN..1006.L*	08B.3511.7991	TX215
SN..1006.L	08B.3514.7991	TX215
SN..1208.L	08B.0416.7991	TX215

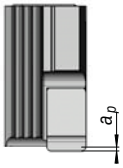
* attention to different screw lengths

Finavant EK90

< finishing cutter for best surface quality and flatness
< supreme surface quality due to the sophisticated cutting edge geometry of EN08 indexable inserts
< exact fit of the cartridge in the cutter body
< easy set-up





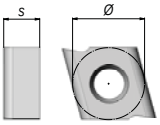


Finavant EK90

article	D	H	d^{H7}	TK	z_{eff}	a_p	ic	Kg	cartridge
04E.0650.140	63	50	22	▪	5	0,1 - 0,3	yes	0,87	K-EN08
04E.0850.140	80	50	27	▪	6	0,1 - 0,3	yes	1,45	K-EN08
04E.1060.001	100	62	32	▪	6	0,1 - 0,3	no	2,50	K-EN12
04E.1060.005	100	62	32	▪	6	0,1 - 0,3	no	2,46	K-EN08-g
04E.1260.001	125	62	40	▪	8	0,1 - 0,3	no	3,90	K-EN12
04E.1260.005	125	62	40	▪	8	0,1 - 0,3	no	3,84	K-EN08-g
04E.1660.001	160	62	40	66,7	10	0,1 - 0,3	no	5,73	K-EN12
04E.1660.005	160	62	40	66,7	10	0,1 - 0,3	no	5,67	K-EN08-g

cartridge EK90	complete set*	insert
K-EN08	08Z.0000.303	EN..08T3.L
K-EN08-g	08Z.0000.301	EN..08T3.L
K-EN12	08Z.0000.302	EN..1208.L

* complete set consists of cartridge and all attachment and assembly parts



insert	incircle diameter	insert thickness
	ø 08 = 8,00	S T3 = 4,00
	ø 12 = 12,70	S 08 = 8,00

Allocation from machining parameters of AV material groups

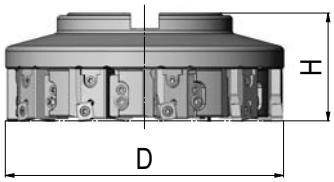
	article	AS	grade		cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
EN..08T3..	ENFQ08T31006304EL33S	2	SKY77	h_{max}	3,0								
				v_c	10 - 400 - vibration depending / surface depending								
			NERO26	h_{max}	3,0								
				v_c	10 - 400 - vibration depending / surface depending								
EN..1208..	ENFQ12080804104EL33S	2	SKY77	h_{max}	5,0								
				v_c	10 - 400 - vibration depending / surface depending								
			NERO26	h_{max}	5,0								
				v_c	10 - 400 - vibration depending / surface depending								

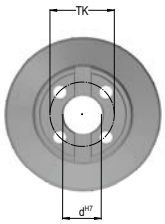
insert		
EN..08T3.L	08B.0375.7991	TX208
EN..08T3.L für K-EN08-g	08B.0309.7991	TX208
EN..1208.L	08B.0516.7991	TX220

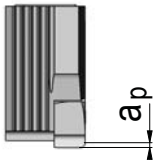
» Assembly instructions page 116

Finavant SK90

< best surface quality and flatness
< extremely high tooth feed rate and 4-cutting edge SN indexable insert
< exact fit of the cartridge in the cutter body
< easy set-up





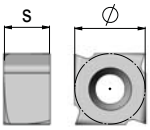


Finavant SK90

article	D	H	d^{H7}	TK	z_{eff}	a_p	ic	Kg	cartridge
04E.1060.010	100	62	32	▪	6	0,1 - 0,3	no	2,47	K-SN10
04E.1260.010	125	62	40	▪	8	0,1 - 0,3	no	3,86	K-SN10
04E.1660.010	160	62	40	66,7	10	0,1 - 0,3	no	5,70	K-SN10

cartridge SK90	complete set*	insert
K-SN10	08Z.0000.304	SN.1006.042.01

* complete set consists of cartridge and all attachment and assembly parts



insert	incircle diameter	insert thickness
	ø 10 = 10,00	S 06 = 6,40

Allocation from machining parameters of AV material groups

					cast iron			steel					
	article	AS	grade		D20	D18	D17	A22	A20	A18	A16	B15	B14
SN..1006..	SN.1006.042.01 EL33S	4	SKY77	h_{max}	3,0								
				v_c	10 - 400 - vibration depending / surface depending								

insert		
SN.1006.042.01	08B.3511.7991	TX215

» Assembly instructions page 116

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017.1607.001
Ø160x7x40