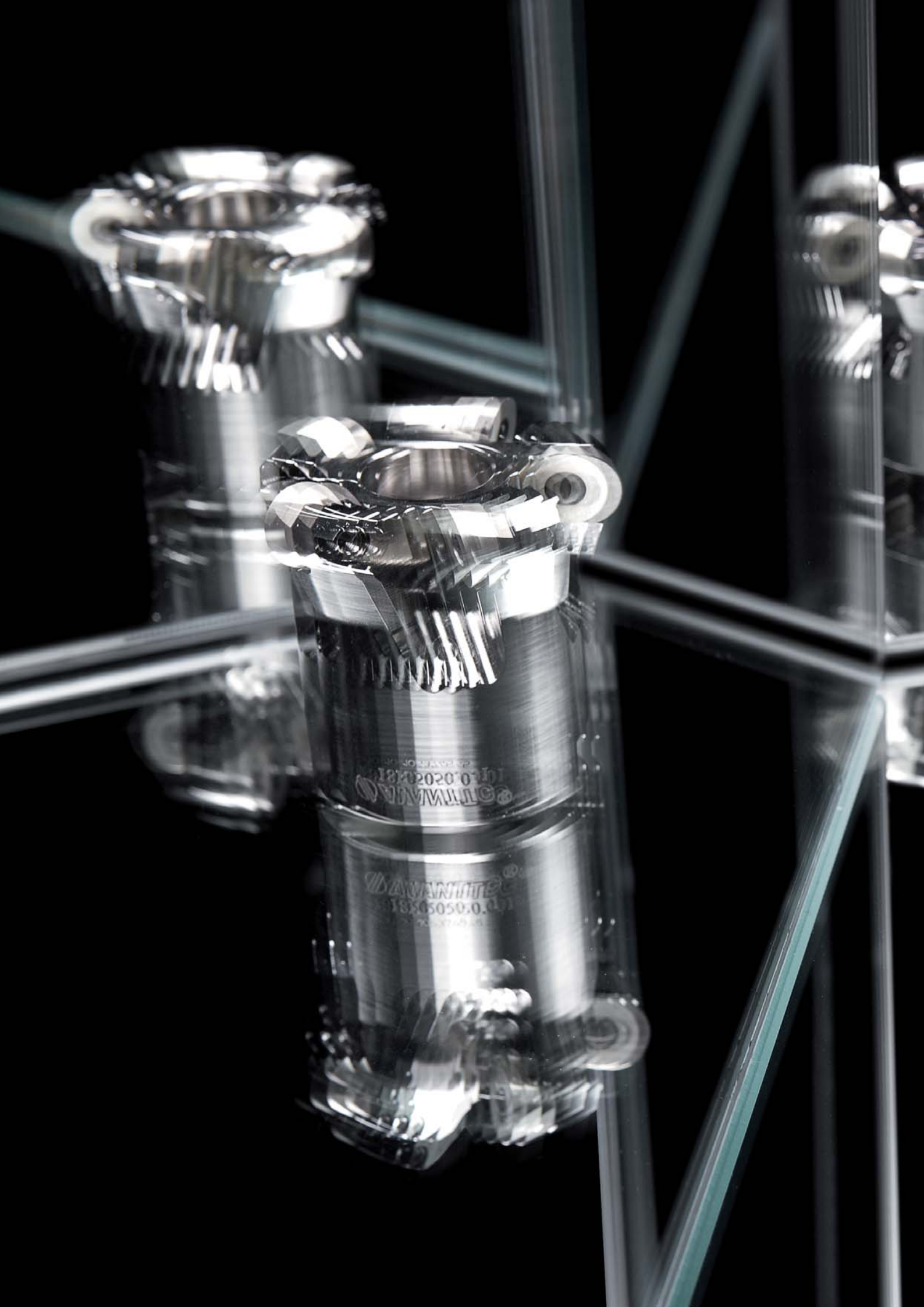
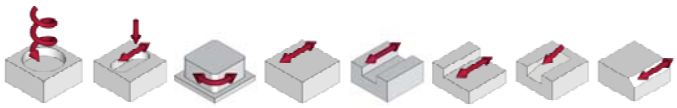
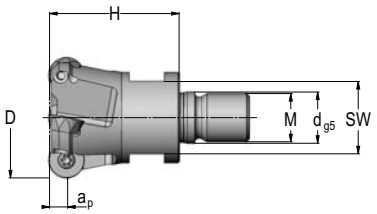


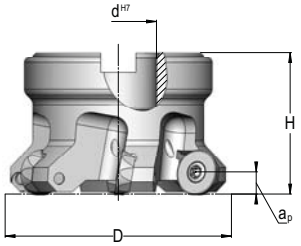
COPY MILLING CUTTER

Copy milling cutter RO18



< RDGX insert with facets prevents twisting and defines position while indexing
< axial and radial cutting edges guarantee a soft cut
< starting from Ø 20 mm





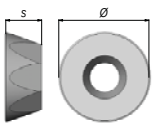
Copy milling cutter RO18 with thread

article	D	H	d_{g5}	M	SW	z_{eff}	a_p	ramp	ic	Kg	insert
18R.2028.001	20	28	10,5	10	15	2	5,0	▪	no	0,21	RD..10T3.N*
18R.2433.001	24	33	12,5	12	17	2	6,0	5,0°	no	0,21	RD..1204.N*
18R.3243.003	32	43	17,0	16	24	3	6,0	4,0°	no	0,21	RD..1204.N
18R.3243.004	32	43	17,0	16	24	4	5,0	4,0°	yes	0,22	RD..10T3.N
18R.4043.001	40	43	17,0	16	24	4	6,0	3,0°	no	0,25	RD..1204.N
18R.4043.002	40	43	17,0	16	24	3	6,0	3,0°	no	0,23	RD..1204.N

* attention to different screw lengths

Copy milling cutter RO18 cutter head

article	D	H	d^{H7}	z_{eff}	a_p	ramp	ic	Kg	insert
18R.5050.001	50	50	22	5	6,0	3,0°	yes	0,30	RD..1204.N
18R.5050.002	50	50	22	5	5,0	3,0°	yes	0,31	RD..10T3.N
18R.5250.001	52	50	22	5	6,0	3,0°	yes	0,35	RD..1204.N
18R.5250.002	52	50	22	6	5,0	3,0°	yes	0,35	RD..10T3.N
18R.6350.001	63	50	27	5	8,0	3,0°	yes	0,42	RD..1605.N
18R.6650.001	66	50	27	5	8,0	4,0°	yes	0,51	RD..1605.N
18R.6650.005	66	50	27	8	5,0	4,0°	yes	0,51	RD..10T3.N
18R.8050.002	80	50	27	6	8,0	3,0°	yes	0,96	RD..1605.N
18R.1050.002	100	50	32	7	8,0	3,0°	yes	1,49	RD..1605.N
18R.1263.001	125	63	40	8	8,0	2,0°	yes	2,91	RD..1605.N



insert	incircle diameter		insert thickness	
	ø 10 =	10,00	S T3 =	3,97
	ø 12 =	12,00	S 04 =	4,76
	ø 16 =	16,00	S 05 =	5,00

Allocation from machining parameters of AV material groups

	article	AS	grade	a_p at 1/4 from insert-Ø	cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
RD..10T3..	RDGX10T3M000210SN25	8	NERO^{2}43	f_z	0,5	0,35	0,3	0,4	0,35	0,3	0,25		
				v_c	280	260	250	280	260	250	240		
	RDGX10T3M000211TN28		SKY26	f_z	0,4	0,3	0,25						
				v_c	240	230	210						
	RDGX10T3M000214SN30		NERO^{2}43	f_z				0,3	0,3	0,25	0,25	0,2	0,2
				v_c				260	250	230	220	200	180
RD..1204..	RDGX1204M000110SN25	8	NERO^{2}43	f_z	0,5	0,35	0,3	0,45	0,4	0,35	0,3		
				v_c	280	260	250	280	260	250	240		
	RDGX1204M000111TN28		SKY26	f_z	0,4	0,3	0,25						
				v_c	240	230	210						
	RDGX1204M000114SN30		NERO^{2}43	f_z				0,3	0,3	0,25	0,25	0,2	0,2
				v_c				260	250	230	220	200	180
	RDGX1204M000113EN33		ICE43	f_z				0,25	0,25	0,2	0,2	0,15	0,15
				v_c				260	250	230	220	200	180
RD..1605..	RDGX1605M000110SN25	8	NERO^{2}43	f_z	0,5	0,35	0,3	0,5	0,45	0,4	0,35		
				v_c	280	260	250	280	260	250	240		
	RDGX1605M000111TN28		SKY26	f_z	0,4	0,3	0,25						
				v_c	240	230	210						
	RDGX1605M000114SN30		NERO^{2}43	f_z				0,3	0,3	0,25	0,25	0,2	0,2
				v_c				260	250	230	220	200	180

Allocation from machining parameters of AV material groups

	article	AS	grade	a_p at 1/4 from insert-Ø	stainless steel			titanium	aluminium
					C11	C10	C09	C08	E80
RD..10T3..	RDGX10T3M000210SN25	8	NERO^{2}43	f_z					
				v_c					
	RDGX10T3M000211TN28		SKY26	f_z					
				v_c					
	RDGX10T3M000214SN30		NERO^{2}43	f_z	0,2	0,15	0,1	0,1	0,3
				v_c	130	120	110	60-70	250-650
RD..1204..	RDGX1204M000110SN25	8	NERO^{2}43	f_z					
				v_c					
	RDGX1204M000111TN28		SKY26	f_z					
				v_c					
	RDGX1204M000114SN30		NERO^{2}43	f_z	0,2	0,15	0,1	0,1	0,35
				v_c	130	120	110	60-70	250-650
	RDGX1204M000113EN33		ICE43	f_z	0,2	0,15	0,1		0,35
				v_c	10	110	100		250-650
RD..1605..	RDGX1605M000110SN25	8	NERO^{2}43	f_z					
				v_c					
	RDGX1605M000111TN28		SKY26	f_z					
				v_c					
	RDGX1605M000114SN30		NERO^{2}43	f_z	0,2	0,15	0,1	0,1	0,35
				v_c	130	120	110	60-70	250-650

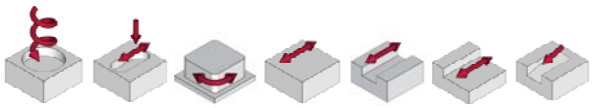
f_z adjustment at different a_p values												
a_p	0,5	1	1,5	2	2,5	3	3,5	4	5	6	7	8
RD 10	2,00	1,50	1,25	1,10	1,00	0,95	0,90	0,85	0,90			
RD 12	2,10	1,50	1,30	1,15	1,10	1,00	0,95	0,90	0,85	0,85		
RD 16	2,40	1,80	1,50	1,30	1,20	1,10	1,05	1,00	0,95	0,90	0,85	0,85

insert		
RD..10T3.N	08B.0375.7991	TX208
RD..10T3.N*	08B.0363.7991	TX208
RD..1204.N	08B.3509.7991	TX215
RD..1204.N*	08B.3578.7991	TX215
RD..1605.N	08B.0513.7991	TX220

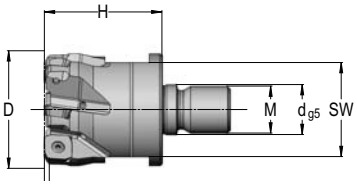
* attention to different screw lengths

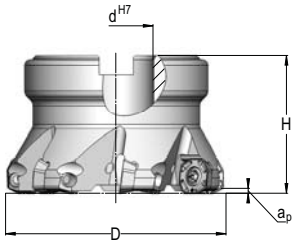
» Technical information for ramp page 109
» Technical information for f_z adjustment page 109

Primavant UP90



< HPC-milling cutter for highest rate of metal removal
< 4 edge insert UE allows 90 degree shoulder machining
< ideal for pocket milling





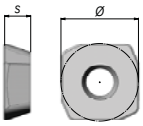
Primavant UP90 with thread

article	D	H	d_{g5}	M	SW	z_{eff}	a_p	ramp	wedge	ic	Kg	insert
18U.3240.031	32	40	17	16	22	4	1,0	4,0°	no	yes	0,19	UE..0903.R
18U.3540.032	35	40	17	16	27	4	1,0	4,0°	no	yes	0,21	UE..0903.R
18U.4040.032	40	40	17	16	32	5	1,0	3,0°	no	yes	0,31	UE..0903.R
18U.4040.041	40	40	17	16	32	4	2,0	4,0°	no	yes	0,29	UE..1204.R

Primavant UP90 cutter head

article	D	H	d^{H7}	z_{eff}	a_p	ramp	wedge	ic	Kg	insert
18U.5050.031	50	50	22	7	1,0	3,5°	no	yes	0,41	UE..0903.R
18U.5050.041	50	50	22	5	2,0	4,0°	no	yes	0,38	UE..1204.R
18U.6350.031	63	50	22	7	1,0	2,0°	no	yes	0,73	UE..0903.R
18U.6350.041	63	50	22	6	2,0	2,5°	no	yes	0,65	UE..1204.R
18U.8050.041	80	50	27	7	2,0	1,8°	no	yes	1,04	UE..1204.R
18U.1050.052	100	50	32	9	2,0	▪	no	yes	1,57	UE..1204.R
18U.1050.001	100	50	32	7	2,5	▪	yes	no	1,59	UE..1506.R
18U.1263.001	125	63	40	8	2,5	▪	yes	no	2,64	UE..1506.R
18U.1663.001	160	63	40	10	2,5	▪	yes	no	4,54	UE..1506.R

set wedge				insert
08Z.0000.127	08K.0808.001	08Z.0000.010	TX208	UE..0903/UE..1204
08Z.0000.063	08K.1108.001	08Z.0000.010	TX220	UE..1506



insert	incircle diameter		insert thickness	
	ø 09 =	9,52	S 03 =	3,20
	ø 12 =	12,70	S 04 =	4,76
	ø 15 =	15,90	S 06 =	6,35

Allocation from machining parameters of AV material groups

	article	AS	grade		cast iron			steel					
					D20	D18	D17	A22	A20	A18	A16	B15	B14
UE..0903..	UEGW09031001610SR25	4	NERO^{2}77	f_z	1,8	1,5	1	1,8	1,8	1,5	1,5	1,2	
				v_c	280	260	250	280	260	250	240	220	
	UEGW09031001611TR28	4	NERO^{2}77	f_z	1,6	1,3	0,8	1,6	1,6	1,3	1,3	1	
				v_c	280	260	250	280	260	250	240	220	
			ICE^{2}43	f_z	1,6	1,3	0,8	1,6	1,6	1,3	1,3	1	
				v_c	260	250	230	260	250	230	220	200	
	UEGT09031021601TR25		SKY77	f_z	1,8	1,5	1	1,8	1,8	1,5	1,5	1,2	1
				v_c	260	250	240	260	250	240	220	200	180
			NERO^{2}43	f_z	1,8	1,5	1	1,8	1,8	1,5	1,5	1,2	1
				v_c	280	260	250	280	260	250	240	220	200
UE..1204..	UEGW12041001610SR25	4	NERO^{2}77	f_z	2	1,6	1	2	2	1,5	1,5	1,2	1
				v_c	280	260	250	280	260	250	240	220	200
	UEGW12041001611TR28		NERO^{2}77	f_z	1,8	1,4	0,8	1,8	1,8	1,4	1,4	1	0,8
				v_c	280	260	250	280	260	250	240	220	200
			ICE^{2}43	f_z	1,8	1,4	0,8	1,8	1,8	1,4	1,4	1	0,8
				v_c	260	250	230	260	250	230	220	200	180
	UEGT12041021601TR25		SKY77	f_z	1,8	1,5	1	1,8	1,8	1,5	1,5	1,2	1
				v_c	260	250	240	260	250	240	220	200	180
			NERO^{2}43	f_z	1,8	1,5	1	1,8	1,8	1,5	1,5	1,2	1
				v_c	280	260	250	280	260	250	240	220	200
UE..1506..	UEGW15061001410SR25	4	NERO^{2}77	f_z	2,5	2	1,5	2,5	2,5	2	2	1,5	1,2
				v_c	280	260	250	280	260	250	240	220	200
	UEGW15061001411TR28		NERO^{2}77	f_z	2	1,6	1	2	2	1,5	1,5	1,2	1
				v_c	280	260	250	280	260	250	240	220	200
			ICE^{2}77	f_z	2	1,6	1	2	2	1,5	1,5	1,2	1
				v_c	260	250	230	260	250	230	220	200	180

insert		
UE..0903.R	08B.0364.7991	TX208
UE..1204.R	08B.0411.7991	TX215
UE..1506.R	08B.4511.7991	TX220

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» Information for "theoretical corner radius" Primavant UP90 page 110