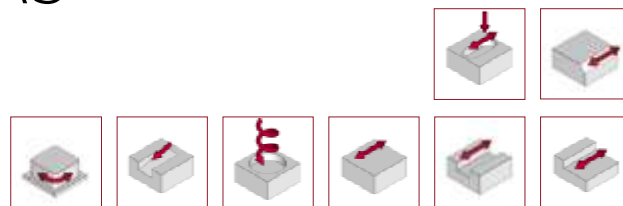
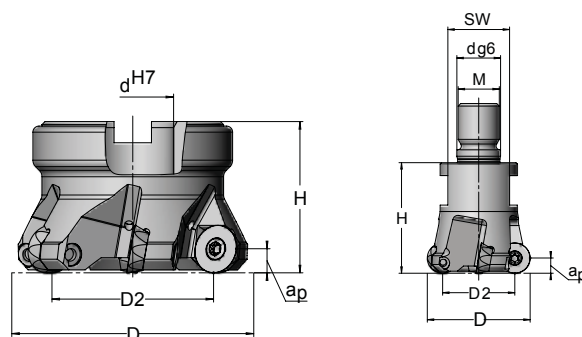


# COPY MILLING CUTTERS

## RO18



The RDGX indexable insert with facets prevents twisting and defines the fixation in the tool body  
 The axial and radial cutting angle guarantees a soft cut

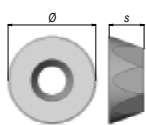


RO18 Screw-in milling cutters												
Article	D	D <sub>2</sub>	d <sub>g6</sub>	H	M	SW	z <sub>eff</sub>	a <sub>p</sub>	Ramp	lc	kg	INS
18R.2028.001	20	10	10.5	28	10	15	2	5.0	–	no	0.05	RD..10T3.N*
18R.2433.001	24	12	12.5	33	12	17	2	6.0	5°	no	0.09	RD..1204.N*
18R.3243.003	32	20	17.0	43	16	24	3	6.0	4°	no	0.21	RD..1204.N
18R.3243.004	32	22	17.0	43	16	24	4	5.0	4°	yes	0.22	RD..10T3.N
18R.4043.001	40	28	17.0	43	16	24	4	6.0	3°	no	0.25	RD..1204.N
18R.4043.002	40	28	17.0	43	16	24	3	6.0	3°	no	0.23	RD..1204.N

\* Note that the screw length required varies depending on the insert used

RO18 Plug-in milling cutters											
Article	D	D <sub>2</sub>	d <sup>H7</sup>	H	z <sub>eff</sub>	a <sub>p</sub>	Ramp	lc	kg	INS	
18R.5050.001	50	38	22	50	5	6.0	3°	yes	0.30	RD..1204.N	
18R.5050.002	50	40	22	50	5	5.0	3°	yes	0.31	RD..10T3.N	
18R.5250.001	52	40	22	50	5	6.0	3°	yes	0.35	RD..1204.N	
18R.5250.002	52	42	22	50	6	5.0	3°	yes	0.35	RD..10T3.N	
18R.6350.021	63	51	27	50	6	6.0	3°	yes	0.46	RD..1204.N	
18R.6350.001	63	47	27	50	5	8.0	3°	yes	0.42	RD..1605.N	
18R.6650.001	66	50	27	50	5	8.0	4°	yes	0.51	RD..1605.N	
18R.6650.005	66	56	27	50	8	5.0	4°	yes	0.51	RD..10T3.N	
18R.8050.002	80	64	27	50	6	8.0	3°	yes	0.96	RD..1605.N	
18R.1050.002	100	84	32	50	7	8.0	3°	yes	1.49	RD..1605.N	
18R.1263.001	125	109	40	63	8	8.0	2°	yes	2.91	RD..1605.N	

# INS SHAPE RD



RD						
AS	Ø			s		
8	10	12	16	T3	04	05
	10	12	16	3.97	4.76	5

Matching of machining parameters  
with the AV material groups

Article	Designation	Recomm. $a_p$ at 1/4 INS-Ø	Steel						
			A22	A21	A20	A19	A18	A17	A16
RD..10T3	RD.10T3.031.01 AV1055	$f_z$	0.75	0.65	0.60	0.55	0.50	0.40	0.35
		$v_c$	280-320	240-280	210-240	180-210	140-180	110-140	80-110
	RD.10T3.031.02 AV1055	$f_z$	0.65	0.60	0.55	0.50	0.45	0.35	0.25
		$v_c$	280-320	240-280	210-240	180-210	140-180	110-140	80-110
	RD.10T3.031.03 AV1055	$f_z$	-	-	-	-	-	0.30	0.25
		$v_c$	-	-	-	-	-	120-155	100-130
RD..1204..	RD.1204.031.02 SKY77	$f_z$	0.75	0.65	0.60	0.55	0.50	0.40	0.35
		$v_c$	280-320	240-280	210-240	180-210	140-180	110-140	80-110
	RD.1204.031.03 AV1055	$f_z$	-	-	-	-	0.45	0.35	0.30
		$v_c$	-	-	-	-	160-210	120-155	100-130
	RD.1204.031.04 AV1055	$f_z$	-	-	-	-	-	0.30	0.25
		$v_c$	-	-	-	-	-	120-155	100-130
RD..1605..	RD.1605.031.01 SKY77	$f_z$	0.65	0.60	0.55	0.50	0.45	0.35	0.25
		$v_c$	280-320	240-280	210-240	180-210	140-180	110-140	80-110
	RD.1605.031.02 AV1055	$f_z$	-	-	-	-	0.45	0.35	0.30
		$v_c$	-	-	-	-	160-210	120-155	100-130

Article	Designation	Recomm. $a_p$ at 1/4 INS-Ø	Cast iron					
			D21	D20	D19	D18	D17	D16
RD..10T3	RD.10T3.031.01 SKY77	$f_z$	0.50	0.45	0.40	0.40	0.35	0.25
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180
	RD.10T3.031.01 AV1055	$f_z$	0.70	0.55	0.50	0.45	0.45	0.30
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180
	RD.10T3.031.02 AV1055	$f_z$	0.50	0.45	0.40	0.40	0.35	0.25
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180
RD..1204..	RD.1204.001.02 SKY77	$f_z$	0.70	0.55	0.50	0.45	0.45	0.30
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180
	RD.1204.031.02 SKY77	$f_z$	0.70	0.55	0.50	0.45	0.45	0.30
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180
RD..1605..	RD.1605.001.02 SKY77	$f_z$	0.50	0.45	0.40	0.40	0.35	0.25
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180
	RD.1605.031.01 SKY77	$f_z$	0.50	0.45	0.40	0.40	0.35	0.25
		$v_c$	280-310	260-290	230-270	210-240	180-210	140-180

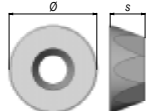
# INS SHAPE RD

RD						
AS	Ø			s		
8	10	12	16	T3	04	05
	10	12	16	3.97	4.76	5

Matching of machining parameters with the AV material groups

	Article	Designation	Recomm. a <sub>p</sub> at 1/4 INS-Ø	Stainless steels				NF metals		
				C12	C11	C10	C09	E82	E81	E80
RD..10T3	RD.10T3.031.02 AV1055	RDKT 10T3M0 SN-28	f <sub>z</sub>	-	-	-	-	1.00	0.85	0.50
			v <sub>c</sub>	-	-	-	-	650-1000	450-650	280-450
	RD.10T3.031.03 AV1055	RDKT 10T3M0 SN-30	f <sub>z</sub>	0.50	0.35	0.30	0.25	0.85	0.70	0.45
			v <sub>c</sub>	120-200	140-170	100-140	60-100	650-1000	450-650	280-450
RD..1204..	RD.1204.031.02 SKY77	RDKT 1204M0 SN-25	f <sub>z</sub>	0.50	-	-	-	1.00	0.65	0.55
			v <sub>c</sub>	100-150	-	-	-	650-1000	450-650	280-450
	RD.1204.031.03 AV1055	RDKT 1204M0 SN-28	f <sub>z</sub>	0.50	0.40	0.35	0.25	1.00	0.70	0.50
			v <sub>c</sub>	120-200	140-170	100-140	60-100	650-1000	450-650	280-450
	RD.1204.031.04 AV1055	RDKT 1204M0 EN-30	f <sub>z</sub>	0.50	0.35	0.30	0.25	0.85	0.70	0.45
			v <sub>c</sub>	120-200	140-170	100-140	60-100	650-1000	450-650	280-450
RD..1605..	RD.1605.031.01 SKY77	RDKT 1605M0 SN-23	f <sub>z</sub>	0.50	0.40	0.35	0.25	1.00	0.85	0.50
			v <sub>c</sub>	120-200	140-170	100-140	60-100	650-1000	450-650	280-450
	RD.1605.031.02 AV1055	RDKT 1605M0 SN-28	f <sub>z</sub>	0.50	0.40	0.35	0.25	1.00	0.70	0.50
			v <sub>c</sub>	120-200	140-170	100-140	60-100	650-1000	450-650	280-450

# INS SHAPE RD





RD						
AS	Ø			s		
8	10	12	16	T3	04	05
	10	12	16	3.97	4.76	5

Matching of machining parameters  
with the AV material groups

	Article	Designation	Recomm. $a_p$ at 1/4 INS-Ø	Titanium		
				S10	S09	S08
RD..10T3	RD.10T3.031.03 AV1055	RDKT 10T3M0 SN-30	$f_z$	0.35	0.30	0.25
			$v_c$	60-80	40-70	20-50
RD..1204..	RD.1204.031.03 AV1055	RDKT 1204M0 SN-28	$f_z$	0.45	0.35	–
			$v_c$	60-80	40-70	–
	RD.1204.031.04 AV1055	RDKT 1204M0 EN-30	$f_z$	0.35	0.30	0.25
			$v_c$	60-80	40-70	20-50
RD..1605..	RD.1605.031.02 AV1055	RDKT 1605M0 SN-28	$f_z$	0.45	0.35	–
			$v_c$	60-80	40-70	–

## Adaptation of $f_z$ at different $a_p$ values

INS	$a_p$	0,5	1	1,5	2	2,5	3	3,5	4	5	6	7	8
RD..10T3...	$f_z$	2.00	1.50	1.25	1.10	1.00	0.95	0.90	0.85	0.90	–	–	–
RD..1204...	$f_z$	2.10	1.50	1.30	1.15	1.10	1.00	0.95	0.90	0.85	0.85	–	–
RD..1605...	$f_z$	2.40	1.80	1.50	1.30	1.20	1.10	1.05	1.00	0.95	0.90	0.85	0.85

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

\* Note that the screw length required varies depending on the insert used