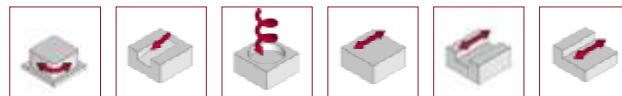
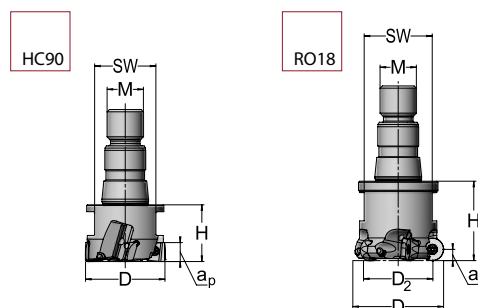


# TRILOC HC90 | RO18



Shoulder milling cutters HC90 and copy milling cutters RO18 as TRILOC variant – particularly stable connection for long overhangs  
 Extremely high radial run out precision  
 Extremely precise change accuracy  
 Also available with vibration dampening



### HC90 TRILOC Shoulder milling cutters

Article	D	H	M	SW	$Z_{eff}$	$a_p$	lc	kg	INS
04M.0225.150	28	25	12	19	3	8.0	yes	0.10	MO..1003.R
04M.0325.150	35	25	16	27	4	8.0	yes	0.22	MO..1003.R

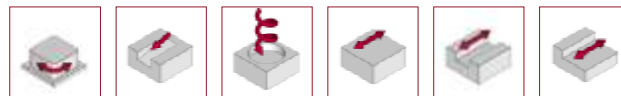
### RO18 TRILOC Copy milling cutters

Article	D	$D_2$	H	M	SW	$Z_{eff}$	$a_p$	Ramp	lc	kg	INS
18R.2520.011	25	15	20	12	19	3	5.0	5°	yes	0.07	RD..10T3.N
18R.3230.011	32	22	30	16	24	4	5.0	4°	yes	0.19	RD..10T3.N
18R.3535.011	35	25	35	16	27	4	5.0	3°	yes	0.26	RD..10T3.N
18R.4035.011	40	30	35	16	30	5	5.0	3°	yes	0.29	RD..10T3.N

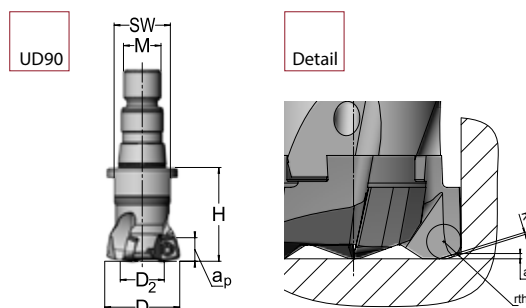
### RO18 | Adaptation of $f_z$ at different $a_p$ values

INS	$a_p$	0.5	1	1.5	2	2.5	3	3.5	4	5
RD..10T3...	$f_z$	2.00	1.50	1.25	1.10	1.00	0.95	0.90	0.85	0.90

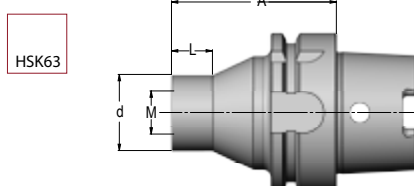
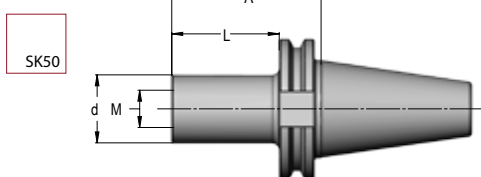
# TRILOC UD90



High feed milling cutters UD90 as TRILOC variant – particularly stable connection for long overhangs  
 Extremely high radial run out precision  
 Extremely precise change accuracy  
 Also available with vibration dampening

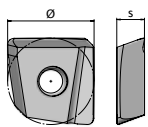


UD90 TRILOC High feed milling cutters													INS
Article	D	D <sub>2</sub>	H	M	SW	z <sub>eff</sub>	a <sub>p</sub>	r <sub>th</sub>	K	Ramp	lc	kg	
18U.3240.105	32	18.6	40	16	24	3	1.7	2.5	1.0	3.5°	yes	0.19	UD..10T3.R
18U.4040.105	40	26.6	40	16	30	4	1.7	2.5	1.0	2.5°	yes	0.27	UD..10T3.R

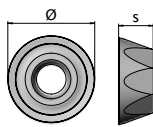


Tool holders SK and HSK for TRILOC HC90   RO18   UD90						
Tool holder	Article	d	L	M	A	kg
SK50	09C.5018.160	30	90	16	120	3.13
	09C.6314.125	30	95	12	130	1.20
HSK63	09C.6318.160	30	89	16	125	1.13
	09C.6318.165	30	114	16	150	1.26

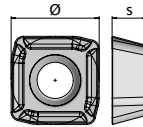
# INS SHAPE MO | RD | UD



MO		
AS	Ø	s
2	10	03
	10	3.6



RD		
AS	Ø	s
8	10	T3
	10	3.97



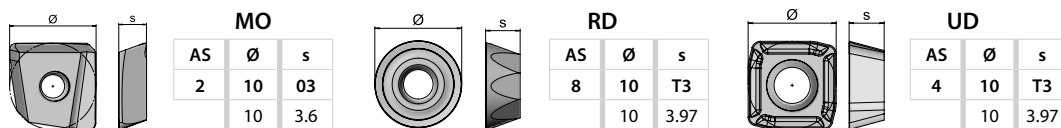
UD		
AS	Ø	s
4	10	T3
	10	3.97

Matching of machining parameters with the AV material groups

				Steel						
Article		Designation		A22	A21	A20	A19	A18	A17	A16
MO..1003..	MO.1003.031.04 SKY77	MOGU 100310 TR-28	$h_{max}$	0.18	0.16	0.15	0.13	0.12	0.11	0.08
			$v_c$	280-320	240-280	210-240	180-210	140-180	110-140	80-110
	MO.1003.031.04 AV1077	MOGU 100310 TR-28	$h_{max}$	-	-	-	-	0.12	0.11	0.08
			$v_c$	-	-	-	-	140-180	110-140	80-110
RD..10T3..	RD.10T3.031.03 AV1055	RDKT 10T3M0 SN-30	$f_z$	-	-	-	-	-	0.30	0.25
			$v_c$	-	-	-	-	-	120-155	100-130
	RD.10T3.031.02 AV1055	RDKT 10T3M0 SN-28	$f_z$	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.10T3.031.01 SKY77	RDKT 10T3M0 SN-25	$f_z$	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
UD.10T3..	UD.10T3.002.01 SKY77	UDGT 10T325 SR-25	$f_z$	1.40	1.30	1.20	1.20	1.20	0.90	0.65
			$v_c$	280-320	240-280	210-240	180-210	140-180	110-140	70-110
	UD.10T3.002.01 AV1077	UDGT 10T325 SR-25	$f_z$	1.40	1.30	1.20	1.20	1.20	0.90	0.65
			$v_c$	290-340	260-300	220-250	190-230	150-210	130-170	80-120
	UD.10T3.002.02 AV1044	UDGT 10T325 SR-28	$f_z$	-	-	1.20	1.20	1.20	0.90	0.65
			$v_c$	-	-	230-290	190-240	170-200	140-180	90-130
	UD.10T3.002.02 AV1055	UDGT 10T325 SR-28	$f_z$	-	-	-	1.20	1.20	0.90	0.65
			$v_c$	-	-	-	190-240	170-200	140-180	90-130

				Cast iron					
Article		Designation		D21	D20	D19	D18	D17	D16
MO..1003..	MO.1003.031.04 SKY77	MOGU 100310 TR-28	$h_{max}$	0.20	0.18	0.16	0.14	0.12	0.10
			$v_c$	240-280	200-240	170-200	150-190	120-160	120-150
RD..10T3..	RD.10T3.031.02 AV1055	RDKT 10T3M0 SN-28	$f_z$	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 SKY77	RDKT 10T3M0 SN-25	$f_z$	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
UD.10T3..	UD.10T3.002.01 SKY77	UDGT 10T325 SR-25	$f_z$	1.50	1.40	1.20	1.20	1.00	0.75
			$v_c$	290-340	260-310	240-280	210-240	180-210	140-180

# INS SHAPE MO | RD | UD



Matching of machining parameters  
with the AV material groups

Article	Designation		Stainless steels				NF metals				
			C12	C11	C10	C09	E82	E81	E80		
MO..1003..	MO.1003.031.04 SKY77	MOGU 100310 TR-28	$h_{max}$	0.10	0.10	-	-	0.25	0.21	0.17	
			$v_c$	120-200	100-150	-	-	650-1000	450-650	280-450	
	MO.1003.031.04 AV1077	MOGU 100310 TR-28	$h_{max}$	0.10	0.10	-	-	-	-	-	
			$v_c$	120-220	100-170	-	-	-	-	-	
RD..10T3..	RD.10T3.031.03 AV1055	RDKT 10T3M0 SN-30	$f_z$	0.50	0.35	0.30	0.25	0.85	0.70	0.45	
			$v_c$	120-200	140-170	100-140	60-100	650-1000	450-650	280-450	
	RD.10T3.031.01 SKY77	RDKT 10T3M0 SN-25	$f_z$	-	-	-	-	1.00	0.85	0.50	
			$v_c$	-	-	-	-	650-1000	450-650	280-450	
UD.10T3..	UD.10T3.002.01 SKY77	UDGT 10T325 SR-25	$f_z$	0.90	-	-	-	-	-	-	
			$v_c$	100-150	-	-	-	-	-	-	
	UD.10T3.002.01 AV1077	UDGT 10T325 SR-25	$f_z$	0.90	0.80	-	-	-	-	-	
			$v_c$	100-150	100-150	-	-	-	-	-	
	UD.10T3.002.02 AV1044	UDGT 10T325 SR-28	$f_z$	0.90	0.80	0.75	-	-	-	-	
			$v_c$	100-170	100-170	100-140	-	-	-	-	
		UD.10T3.002.02 AV1055	UDGT 10T325 SR-28	$f_z$	0.90	0.80	0.75	0.60	-	-	-
				$v_c$	100-200	100-170	100-140	60-100	-	-	-

Article	Designation		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
UD.10T3..	UD.10T3.002.02 AV1055	UDGT 10T325 SR-28	$f_z$	0.70	0.60	0.45
			$v_c$	60-80	40-70	20-50

INS		
MO..1003...	08B.0309.001	TX208
RD..10T3...	08B.0375.7991	TX208
UD..10T3...	08B.3509.7991	TX215