

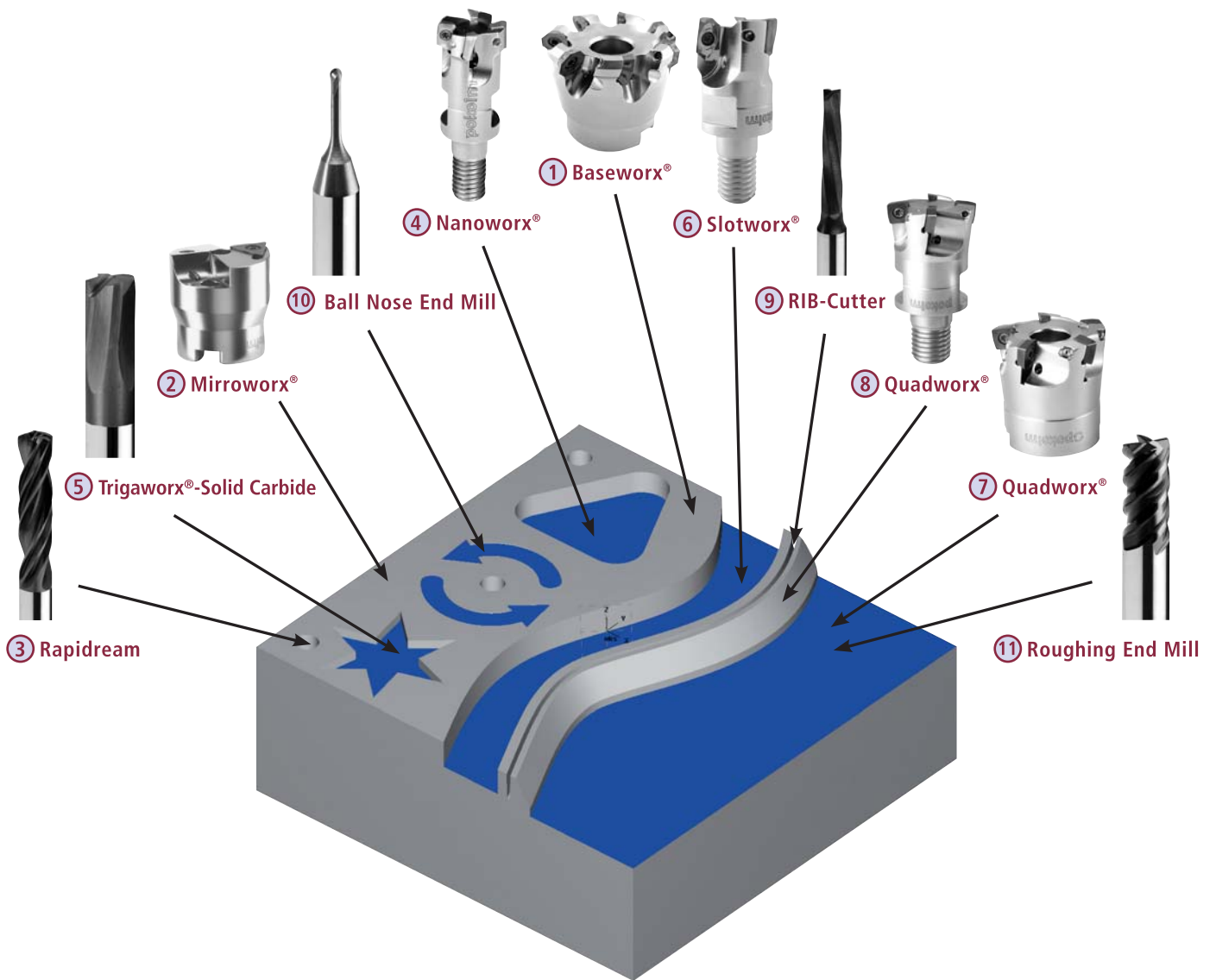
# LIVE DEMONSTRATION

Milling a 2.5 x D model with 10 different tools



## Machine details

Material: toolsteel 1.2312



Operation data: see reverse page

## Operation Data

Step 1:		Baseworx®			
strategy	roughing surface	Vc	m/min	250	
	one-way	n	1/min	1530	
milling cutter type	Baseworx®	fz	mm	0,39	
article number	5 52 388	Vf	mm/min	3000	
inserts	03 88 840	ap	mm	0,5	
diameter d1	52	ae	mm	35	
number of teeth	5				

Step 2:		Mirroworx®			
strategy	helix milling	Vc	m/min	461	
	surface	n	1/min	3500	
milling cutter type	Mirroworx®	fz	mm	1	
article number	2 42 384	Vf	mm/min	7000	
inserts	04 84 835	ap	mm	0.01	
diameter d1	42	ae	mm	25	
number of teeth	2				

Step 3:		Rapidream			
strategy	drilling	Vc	m/min	100	
milling cutter type	Rapidream	n	1/min	3200	
article number	035 100 415	fu	mm	0,31	
diameter d1	10	Vf	mm/min	1000	
number of teeth	2	drill. depth	mm	12	

Step 4:		Nanoworx®			
strategy	roughing: pocket	radius		0,8	
	z-constant	Vc	m/min	151	
	parallel to contour	n	1/min	3000	
milling cutter type	Nanoworx®	fz	mm	0,25	
article number	4 16 256	Vf	mm/min	3000	
diameter d1	16	ap	mm	0,5	
number of teeth	4	ae	mm	12	

Step 5:		Trigaworx®-Solid Carbide			
strategy	roughing pocket	radius		0,4	
	z-constant	Vc	m/min	~150	
	parallel to contour	n	1/min	12000	
milling cutter type	Trigaworx®	fz	mm	0,13	
article number	0374 55 042	Vf	mm/min	6000	
diameter d1	4	ap	mm	3	
number of teeth	4	ae	mm	0,15	

Step 6:		Slotworx®			
strategy	complete slot	radius		1	
	z-constant	Vc	m/min	180	
	finishing 1 <sup>st</sup> side	n	1/min	2300	
milling cutter type	Slotworx®	fz	mm	0,15	
article number	3 25 267	Vf	mm/min	1000	
diameter d1	25	ap	mm	2	
number of teeth	3	ae	mm	25	

Step 7:		Quadworx®			
strategy	roughing pocket	radius		1,5	
	z-constant	Vc	m/min	251	
	parallel to contour	n	1/min	3200	
milling cutter type	Quadworx®	fz	mm	0,83	
article number	3 25 248	Vf	mm/min	8000	
diameter d1	25	ap	mm	0,5	
number of teeth	3	ae	mm	15	

Step 8:		Quadworx®			
strategy	plunging down	radius		1,5	
	and pulling up	Vc	m/min	353	
milling cutter type	Quadworx®	n	1/min	4500	
article number	3 25 248	fz	mm	0,74	
inserts	03 48 842	Vf	mm/min	10000	
diameter d1	25	ap	mm	12	
number of teeth	3	ae	mm	1	

Step 9:		RIB-Cutter			
strategy	2 x d, ramping down	Vc	m/min	169	
milling cutter type	RIB-Cutter	n	1/min	17900	
article number	0816 46 0300	fz	mm	0,036	
diameter d1	3	Vf	mm/min	1300	
number of teeth	2	ap	mm	0,1	
radius	0,2	ae	mm	1,5	

Step 10:		Ball Nose End Mill			
strategy	finishing contour	Vc	m/min	55	
milling cutter type	Ball Nose End Mill	n	1/min	17500	
article number	1192 85 0101	fz	mm	0,037	
diameter d1	1	Vf	mm/min	1300	
number of teeth	2	ap	mm	0,15	
radius	0,5	ae	mm	0,05	

➔ Surface milling with roughing/slotting end mill 0380 56 120; n = 9600 / fz = 0,26 / ap = 15,5 / Vf = 10000

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