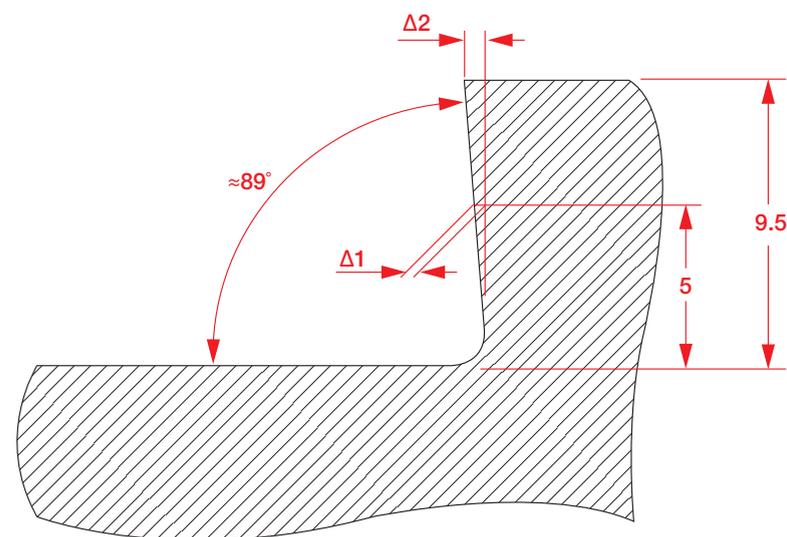


T890HT ELN/FLN-13 milling cutters are intended mainly for rough face milling near square shoulder, due to their 90° cutting-edge angle.

The depth of cut should not exceed the maximum catalog depth of cut.

The deviation of a generated shoulder profile, which is a function of a cutter diameter and a depth of cut, may be estimated with the use of the following sketch and table:

Cutter Diameter, mm	$\Delta 1$, mm	$\Delta 2$, mm
32	0.04	0.09
40	0.06	0.12
50		
63		
80	0.08	0.16
100	0.09	0.18
125		
160		



The cutters in 32 and 40 mm diameters are not recommended for machining shoulders by stepdown milling.

Machining recommendations for T890HT-13 cutters

Workpiece Material						Carbide grade	Depth of cut [mm]	Cutting speed [m/min]	Feed per tooth [mm/tooth]	Coolant
ISO class DIN/ISO 513	Description	ISCAR mat. group*	Hardness, HB	Typical representative						
				AISI/SAE/ASTM	DIN W.-Nr.					
P	Non-alloyed steel	1-5	130-180	1020	1.040	IC830	1.0-9.5	140-170	0.12-0.20	Dry/Wet
						IC5400		140-180	0.12-0.18	Dry
						IC808		150-180	0.12-0.18	Dry
	Low alloy steel	6-8	260-300	4340	1.658	IC830	1.0-9.5	120-150	0.12-0.16	Dry/Wet
						IC808		130-160	0.10-0.14	Dry
						IC5400		150-170	0.10-0.13	Dry
		9	HRC 35-42**	3135	1.571	IC845	1.0-4.5	120-150	0.12-0.18	Dry/Wet
						IC830	1.0-9.5	100-130	0.12-0.15	Dry/Wet
						IC808		120-150	0.10-0.13	Dry
	Ferritic/martensitic stainless steel	12-13	200	420	1.402	IC5400		1.0-4.5	130-160	0.10-0.12
						IC845	1.0-4.5	120-150	0.12-0.15	Dry/Wet
						IC830	1.0-9.5	100-120	0.10-0.15	Dry/Wet
IC808	100-130	0.10-0.13	Dry							
IC5500	1.0-4.5	110-150	0.10-0.15	Dry						
K	Grey cast Iron	15-16	250	Class 40	0.6025 (GG25)	IC810	1.0-9.5	200-250	0.10-0.20	Dry
	Nodular cast Iron	17-18	200	Class 65-45-12	0.7050 (GGG50)	IC810		180-200	0.10-0.20	

* ISCAR material group in accordance with VDI 3323 standard

** Quenched and tempered

For machining in unstable conditions, the recommended cutting data should be reduced by 20-30%

IC830 is a general purpose grade and it may be considered as the first-choice grade

IC845 is recommended for milling at relatively small depths of cut and for interrupted cutting applications

IC5500 is intended mainly for milling ferritic and martensitic stainless steel at increased speed