

When stepdown milling is performed by use of passes, the depth of cut per pass should not exceed the depth of cut as recommended in the ISCAR catalog.

Fig. 1- Generated profile for a depth of cut of up to 5mm

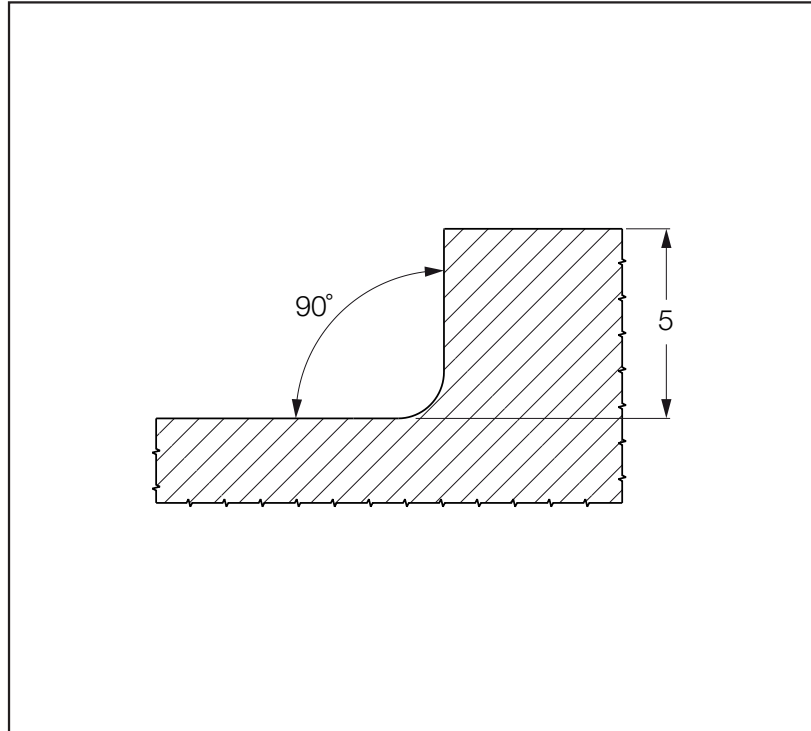
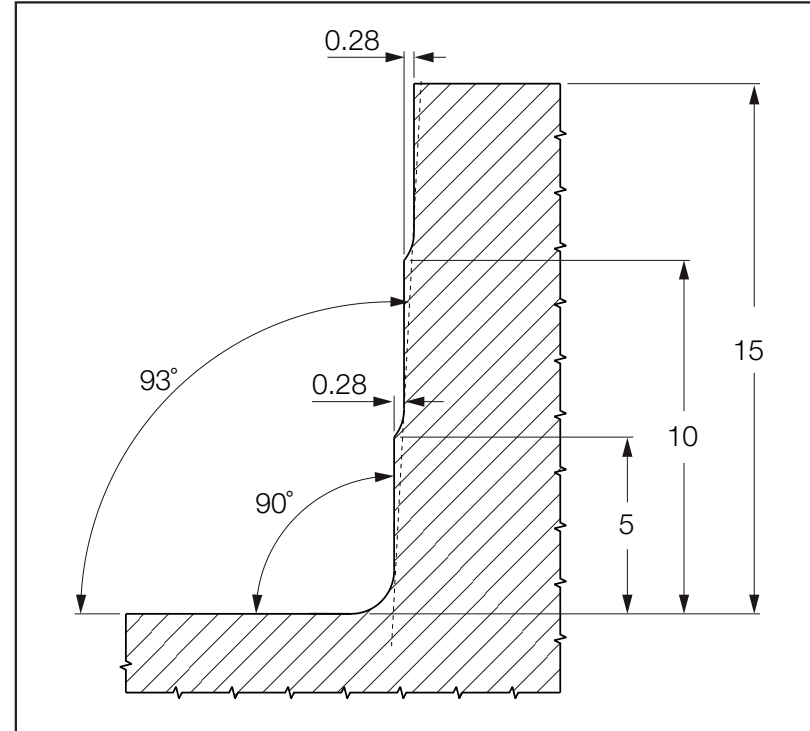


Fig. 2- Generated profile for a depth of cut in stepdown milling



**Starting feed per tooth  $F_z$  for S890 face mills with inserts S890 SZMU 08...**

ISO class DIN/ISO 513	Description	Workpiece material			$F_z$ , mm/tooth, for grades*					
		Typical representative		Hardness, HB	ISCAR mat. group**	IC 5100	IC810	IC808	IC845	IC5400
AISI/SAE/ASTM	DIN W.-Nr.									
<b>P</b>	Non-alloy steel	1020	1.044	130-180	1			0.1-0.25	0.1-0.25	0.1-0.25
	Alloy steel	4340	1.658	260-300	8			0.1-0.2	0.1-0.2	0.1-0.2
		4340	1.658	HRC 35-42*	9			0.1-0.2	0.1-0.2	0.1-0.2
	High alloy steel	H13	1.234	200-220	10			0.08-0.15	0.08-0.15	0.08-0.15
	Martensitic s.s	420	1.402	200	12			0.08-0.15	0.08-0.15	0.08-0.15
<b>M</b>	Austenitic s.s.	304L	1.431	200	14			0.1-0.15	0.1-0.15	0.1-0.15
		316L	1.440	140	14			0.1-0.15	0.1-0.15	0.1-0.15
<b>K</b>	Grey cast iron	Class 40	0.6025 (GG25)	250	16	0.15-0.25	0.15-0.25			
	Nodular cast iron	Class 65-45-12	0.7050 (GGG50)	200	17	0.12-0.2	0.12-0.2			
<b>H</b>	Hard steel and cast iron	H11	1.234	HRC 45-49	38.1			0.06-0.12	0.06-0.12	0.06-0.12
		P20	1.2330	HRC 50-55	38.2			0.05-0.1	0.05-0.1	0.05-0.1

\* Quenched and tempered

\*\* ISCAR material group in accordance with VDI 3323 standard