Cutting recommendations for the new HELIMILL inserts:
- The table below defines initial feed rates
- For initial cutting speeds refer to ISCAR's recommendations for carbide grades

Calculating cutting feed rate:
$f z = f z0 \times Kef \times Ks$ where
$f z0$ - Basic feed (Table 1),
Kef - Engagement factor (Table 2),
Ks - Stability factor (Table 3)

Table 1 - Basic feed, $f z0$, mm/tooth

ISO	Material		Material No.	$f z0$ for Insert Size/Geometry				
				APKT 1003PDR-HM-CS	APKR 1003...PDR-HP	ADKR 1505... PDR-HP	APKT 1003R8GT-FF	HP ANKT 0702R12GTFF
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C	1	0.12	-	-	0.90	0.70
		≥ 0.25 %C	2					
		< 0.55 %C	3					
		≥ 0.55 %C	4					
			5					
	Low alloy steel and cast steel		6	0.11	-	-	0.80	0.60
			7					
	(less than 5% of alloying elements)		8					
			9	0.10	-	-	0.70	0.50
	High alloyed steel, cast steel, and tool steel		10	0.10	-	-	0.70	0.50
			11					
	Stainless steel and cast steel		12	0.10	-	-	0.70	0.50
			13					
M	Stainless steel and cast steel		14	0.10	0.10	0.12	-	-
S	High temp. alloys	Fe based	31	0.10	0.09	0.10	-	-
			32					
		Ni or Co based	33					
			34					
			35					
	Titanium alloys		36	0.10	0.09	0.10	-	-
			37					
H	Hardened steel		38	-	-	-	0.40	0.30
			39	-	-	-	0.30	0.20
	Chilled cast iron		40	-	-	-	0.40	0.30
	Cast iron		41	-	-	-	0.40	0.30

Table 2 - Engagement factor Kef

ae/D	0.5…1	0.25 up to 0.5	High	Moderate
Ke	1	1.1	1	0.9

ae - Width of cut
D - cutting diameter