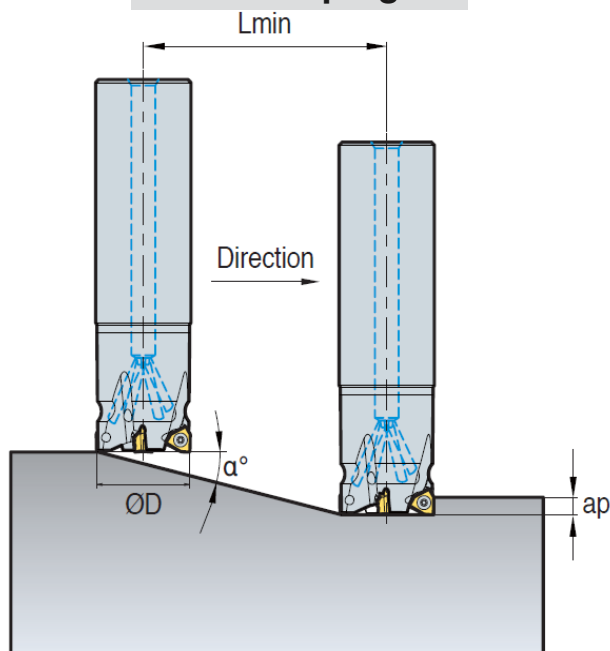


Technical Details

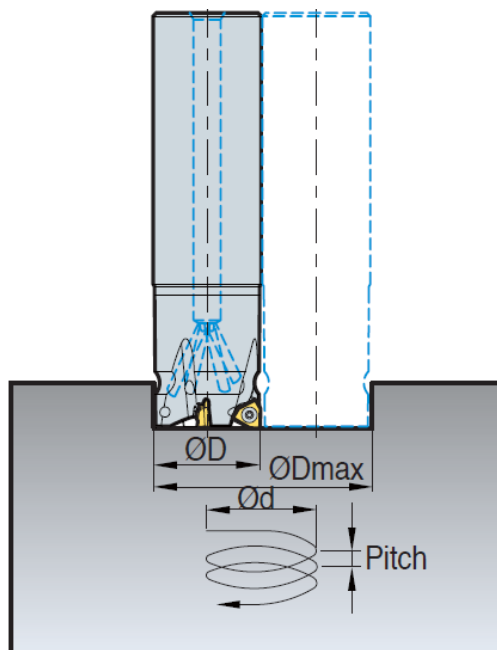


1. Ramping

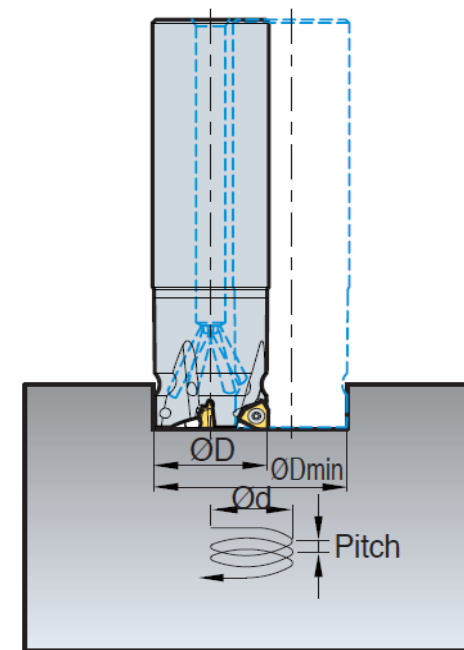


* In ramping and helical machining, use coolant and air. $L_{min} = ap / \tan(\alpha^\circ)$

2. Helical Cutting Blind Holes



3. Helical Cutting Through Holes



(mm)

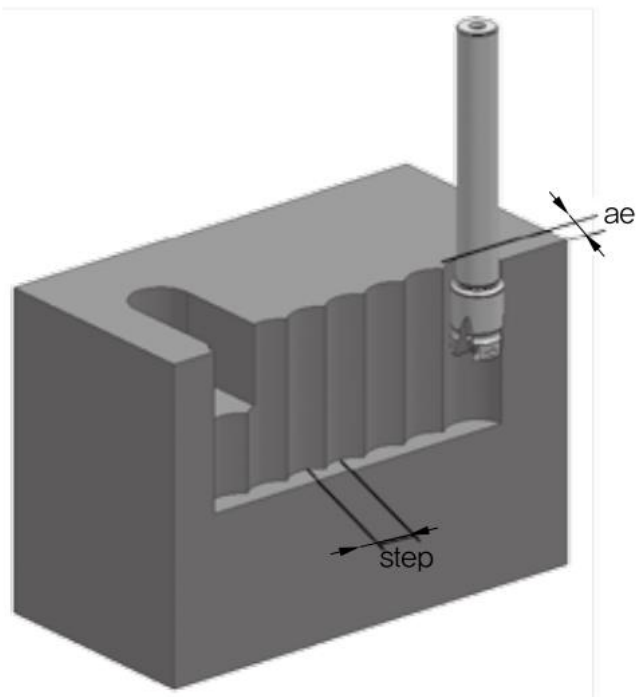
Part #	Tool Diameter ØD	ap	1. Ramping		2. Helical Cutting for Blind Holes				3. Helical Cutting for Through Holes	
			Max. Rake Angle α°	L min	Min Machining Dia. ØDmin	Maximum Pitch	Max Machining Dia. ØDmax	Maximum Pitch	Min Machining Dia.	Maximum Pitch
01-0440	20	5.5	15.5	19.8	36.5	5.5	38.5	5.5	33.0	5.5
01-0441	25	5.5	10.0	31.2	46.5	5.5	48.5	5.5	43.0	5.5
01-0442	32	5.5	6.5	48.3	60.5	5.5	62.5	5.5	59.0	5.5



Technical Details



4. Plunging

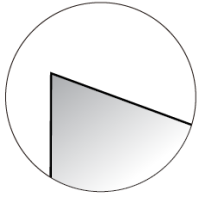
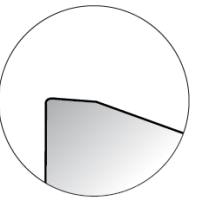
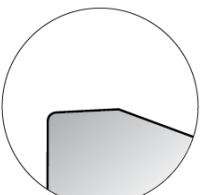


Max. ae	ae	Cutter Diameter (mm)		
		Ø20	Ø25	Ø32
		Max Step (mm)		
2.5	1	8.5	9.7	11.1
	2	12	13.5	15.4

* ae = radial depth of cut (mm)

Technical Details



Chip Breaker	Cutting Edge Shape	Recommended chip breaker and grade by work piece material (✓ 1st recommendation)									
		P				M		K		N	
		Low carbon steel Mild steel		High Carbon steel Alloy steel		Stainless steel		Cast iron		Non-ferrous metal	
		C.B.	Grades	C.B.	Grades	C.B.	Grades	C.B.	Grades	C.B.	Grades
-		-	-	-	-	-	-	-	-	✓	✓ HN25A
HS		-	✓ HP25	-	✓ HP25	✓	✓ HU30	✓	✓ HU30	-	-
			HU30		HU30		HU40		HU40		
MHS		✓	✓ HP25	✓	✓ HP25	-	-	-		-	-
			HU30		HU30				✓ HU30		