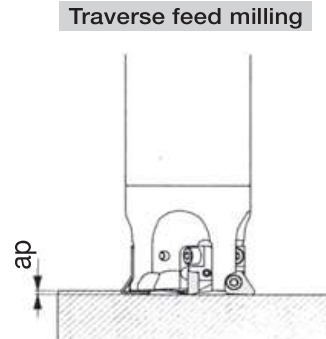
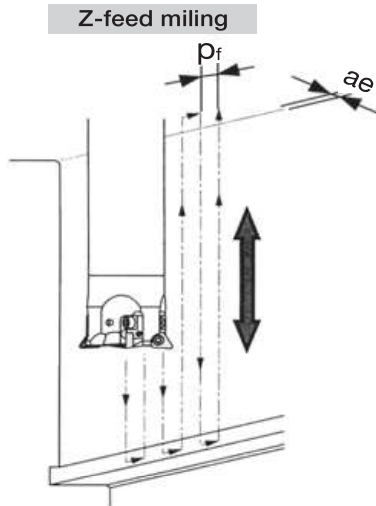


TZF11

Standard cutting conditions

Work materials	Grades	Cutting speed Vc (SFM)	Feed per tooth fz (in/t)
Carbon steels, Alloy steels (< 300 HB)	NS530	(150 ~ 400)	(.002 ~ .008)
	AH740	(150 ~ 350)	
Cast irons (JIS FC 250 etc.)	AH740	(200 ~ 500)	(.002 ~ .008)
Ductile cast irons (JIS FCD600 etc.)	AH740	(150 ~ 350)	
Prehardened steels, Hard materials (40-55 HRC)	AH740	(330 ~ 650)	(.002 ~ .006)



Z-feed milling		Traverse feed milling
Pick feed p_f (in)	Radial depth of cut a_e (in)	Depth of cut a_p (in)
.020 ~ .039	~ .020	~ .020

- Dry cutting (or air blow) at a depth of cut up a_e to .012 in (allowable max. .020 in) and a pick feed p_f from .039 to .020 in is recommended.
 - TZF11 type cutters are not designed to adjust dynamic balance. Therefore, when the tool's overhang ratio (cutter diameter-to-length) exceeds 6:1, special care should be taken with the revolution speed. (At first, start the machining at 50 % of the speed shown in the table of the standard cutting conditions, and then gradually increase the speed whilst confirming safety.)
 - To produce highly accurate surface finish, use the cutter on a machine with sufficient rigidity.
- **Cautionary points in use**
- Use the cutter for finish milling of vertical wall surfaces requiring long tool-overhang of $L/D > 6$.
 - Radial cutting edge run-out should be adjusted within .0004 in.
 - In addition to Z-feed milling, TZF11 type cutters can be also used for traverse feed milling. ($a_p \leq .020$ in)