

Replacement parts

No.	Parts	Part Cat. No.	
		TSE4003RIAU TSE4004RIAU	TSE4005RIAU ~ TSE4012RIAU
①	Locator	LE403R/L	LE405R/L
②	Insert locking wedge	WF330N	WF500R
③	Wedge fixing screw	FDS-8S	FDS-8S
④	Locator fixing screw	CM4×0.7×14	CM4×0.7×14
-	T-handle wrench	TP-4	TP-4

Standard cutting conditions

Work materials	Grades	Roughing (Depth of cut ap: > 0.59 in)		Finishing (Depth of cut ap: .012 ~ .028 in)	
		Cutting speed v_c (SFM)	Feed per tooth f_z (ipt)	Cutting speed v_c (SFM)	Feed per tooth f_z (ipt)
Mild steels Unhardened steels (< 180 HB)	AH330	425 ~ 1200	.004 ~ .008	150 ~ 400	.004 ~ .009
	AH120 • GH330	425 ~ 750		500 ~ 800	
	T3130	425 ~ 980	.004 ~ .009	590 ~ 980	.004 ~ .010
	NS740 • N308	425 ~ 650	.004 ~ .007	500 ~ 800	.004 ~ .008
	UX30 • AH140	330 ~ 590	.004 ~ .008	425 ~ 650	.004 ~ .009
Carbon steels Alloy steels (< 300 HB)	AH330	330 ~ 900	.004 ~ .007	150 ~ 320	.004 ~ .008
	AH120 • GH330	330 ~ 590		500 ~ 650	
	T3130	425 ~ 900	.004 ~ .008	425 ~ 650	.004 ~ .009
	AH140	260 ~ 425	.004 ~ .007	330 ~ 650	.004 ~ .007
	NS740 • N308	330 ~ 500	.004 ~ .006	500 ~ 650	.004 ~ .007
Stainless steels (< 9.84 HB)	UX30	260 ~ 425	.004 ~ .007	330 ~ 500	.004 ~ .008
	AH130 • AH140	260 ~ 590	.004 ~ .008	330 ~ 650	.004 ~ .010
Die steels (< 30 HRC)	AH120	500 ~ 650	.004 ~ .007	650 ~ 820	
	AH330	330 ~ 800	.004 ~ .006	330 ~ 800	
	T3130 • AH120 • GH330	330 ~ 500		330 ~ 500	
UX30	260 ~ 425	260 ~ 425			
Cast irons Ductile cast irons	T1115	330 ~ 650	.004 ~ .008	330 ~ 650	.004 ~ .010
	TH10	260 ~ 425		260 ~ 425	
Aluminum alloys (Si < 13%)	TH10	650 ~ 3300	.002 ~ .010	350 ~ 1000	.004 ~ .010
	DX140		.002 ~ .006		
Copper alloys	TH10	650 ~ 1650	.004 ~ .006	650 ~ 1650	.004 ~ .008

Note: • Dry cutting is recommended for all materials except for aluminum alloys.

• Maximum depth of cut for TECN43ZFR-DIA is .138 in.

• When wet machining mild steels, carbon steels and alloy steels, use T3130 at lower cutting conditions.

- RPM (min^{-1}) = Cutting speed \times 1000 \div 3.14 \div Cutter diameter
- Table feed (in/min) = RPM \times Feed per tooth \times No. of inserts