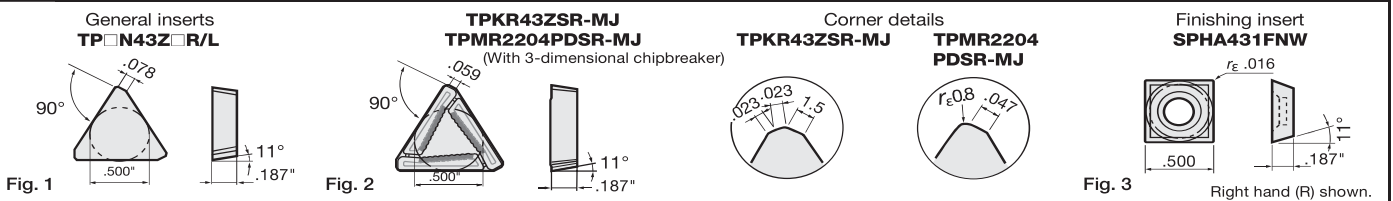


Inserts (TSP4000RIAU)



Type	Cat. No.	ISO Cat. No. (Metric)	Accuracy	Honing	Grades										Figure	
					Coated					Cermets		Uncoated				
					T3130	T1115	AH330	AH120	AH130	AH140	GH330	NS740	N308	UX30	TH10	
General	TPAN43ZTR	TPAN2204PPTR	A	With												Fig. 1
	TPAN43ZFR	TPAN2204PPFR	A	Without												
	TPCN43ZTR	TPCN2204PPTR	C	With								●				
	TPCN43ZFR	TPCN2204PPFR	C	Without												
	TPEN43ZTRCR	TPEN2204PPTR	E	With												
	TPEN43ZFR	TPEN2204PPTR-16	E	Without												
	TPKN43ZTR	TPKN2204PPTR	K	With	●	●	●	●	●	○	○	●	○	●		
	TPKN43ZFR	TPKN2204PPFR	K	Without											●	
	TPKR43ZSR-MJ	TPKR2204PDSR-MJ	M	With	●							●				
	TPMR2204PDSR-MJ	TPMR2204PDSR-MJ	M	Without							○					
Finishing	SPHA431FNW	SPHB120404FN-W	H	Without										●	Fig. 3	

Standard cutting conditions

TSP4000RIAU

Work materials	Grades	Roughing (Depth of cut ap: > 1.5 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)
Cast irons	T1115	330 ~ 650	.004 ~ .008	330 ~ 650	.004 ~ .010
Ductile cast irons	TH10 · UX30	260 ~ 425		260 ~ 425	
Mild steels Unhardened steels (< 180 HB)	AH120 · GH330	330 ~ 800	.004 ~ .010	425 ~ 820	.004 ~ .012
	T3130	425 ~ 980		590 ~ 980	
	UX30	330 ~ 590		425 ~ 650	
	NS740 · N308	425 ~ 650		500 ~ 800	
Carbon steels Alloy steels (< 300 HB)	AH120 · GH330	330 ~ 590	.004 ~ .010	500 ~ 650	.004 ~ .011
	T3130	425 ~ 650		425 ~ 650	
	UX30	260 ~ 425		330 ~ 500	
	NS740 · N308	330 ~ 500		500 ~ 650	
Die steels (< 30 HRC)	T3130 · AH120 · GH330	330 ~ 500	.004 ~ .007	330 ~ 500	.004 ~ .008
	UX30	260 ~ 425		260 ~ 425	
Stainless steels (< 9.84 HB)	AH130 · AH140	500 ~ 650	.006 ~ .009	650 ~ 750	.006 ~ .010
	AH120	500 ~ 750		650 ~ 820	

Standard cutting conditions for Metal-Jack (MJ) inserts TPM/KR

TSP4000RIAU

Work materials	Feed per tooth f_z (ipt) (Roughing [Depth of cut: > 0.59 in])	
	K: TPKR43ZSR-MJ	M: TPMR2204PDSR-MJ
Mild steels-Unhardened steels (< 180 HB)	.004 ~ .009	.004 ~ .016
Carbon steels · Alloy steels (< 300 HB)	.004 ~ .008	.004 ~ .014
Die steels (< 30 HRC)	.004 ~ .007	.004 ~ .010

- Notes:
- Dry cutting is recommended for above materials.
 - When wet machining mild steels, carbon steels and alloy steels, use T3130 at lower cutting conditions.

- : Stocked items.
- : Stocked in Japan

Most unmarked items are available on a RFQ basis, contact your sales rep for more information.