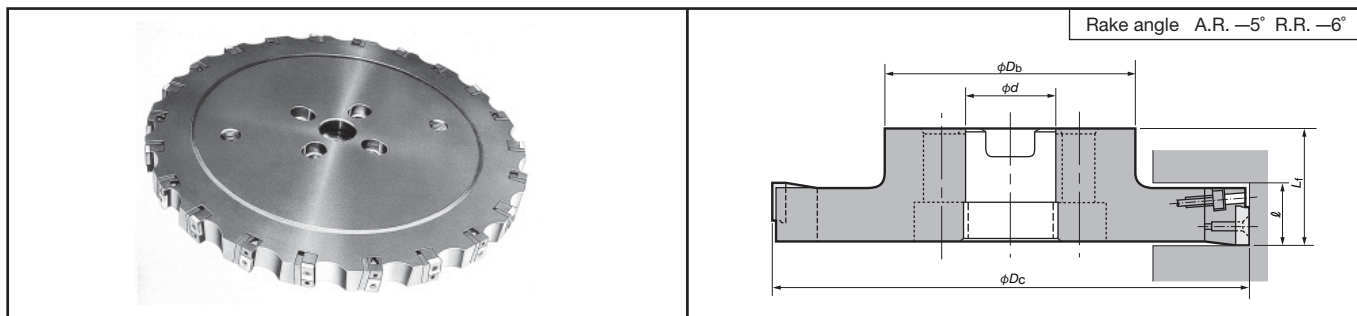




Slotting

For slotting of steels and cast irons



Cat. No.	Stock		No. of inserts	Dimensions (mm)						
	R	L		ϕD_c	ϕD_b	ϕd	ℓ (I)	ℓ (II)	L_f	
VSN125R/L25/30			6	125	70	31.75	25	30	50	
VSN160R/L25/30			8	160	100	50.8			47.625	60
VSN200R/L25/30			10	200	130					
VSN250R/L25/30			12	250	140					
VSN315R/L25/30			14	315	150					
VSN355R/L25/30			16	355	170					
VSN400R/L25/30			18	400	180					
VSN450R/L25/30			20	450	210					
VSN500R/L25/30			22	500	240					

(A example of order) VSN, D, R/L, $\ell \rightarrow$ VSN400R30,
 $\ell(I)$: Used ANEA542TN, $\ell(II)$: Used ANEA642TN

Notes: • All items are made to order.
 • Mounting details are same as TAC mills.

Inserts

ANEA 						
Type	Cat. No.	Accuracy	Dimensions (mm)	Honing	Grades	
			A		Uncoated	
I	ANEA542TN	E	15.875	With	UX30	TH10
	ANEA542FN			Without		
II	ANEA642TN		19.05	With	UX30	TH10
	ANEA642FN			Without		

Replacement parts

No.	Parts	I	II
①	Locator	LV525R/L	LV530R/L
②	Locator locking wedge	WV525R/L	WV530R/L
③	Insert fixing screw	CSTA-5	CSTA-5
④	Locator fixing screw	CM4 × 0.7 × 12	CM5 × 0.8 × 12
⑤	Wedge fixing screw	CM5 × 0.8 × 12	CM5 × 0.8 × 12
—	Wrench	T-15D	T-15D

Standard cutting conditions

Work materials	Insert grades	Cutting speed v_c (m/min)	Feed per tooth f_z (mm/tooth)
Mild steels	UX30	100~150	0.3~0.8
Carbon steels			0.3~0.6
Alloy steels		80~100	0.2~0.5
Cast irons	UX30, TH10	80~100	0.3~1.0

Notes: • Values of feed are at the center of the cutter.

• Because of staggered insert arrangement, effective number of edges is half of total number of inserts.

Practical example

Work materials : Mild steel (JIS SS400)

Tool : VSN450R31 (No. of inserts : 20)

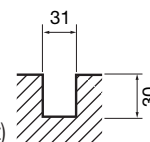
$v_c = 90 \text{ m/min}$

$v_f = 620 \text{ mm/min}$

$f_z = 1.0 \text{ mm/tooth}$

Power consumption : 22kW (Net)

Cutting efficiency : 26cm³/min/kW



- No. of revolutions (min⁻¹) = Cutting speed × 1000 ÷ 3.14 ÷ Cutter diameter
- Table feed (mm/min) = No. of revolutions × Feed per tooth × No. of inserts

● : Stocked in Japan.