

## Variable Angle Processing!

- 0°~90° Angle adjustment can be easily and securely made



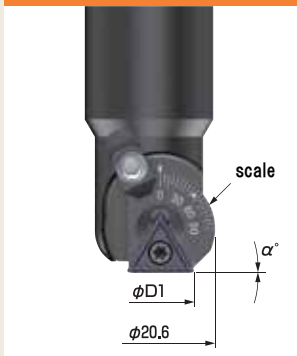
### Bore Chamfering



### Corner Chamfering



※in the case of an angle less than 45°  
※ $\alpha^\circ < 45^\circ \cdots \phi D1 > \phi D1$



Clamp piece  
CL-2SI

Wrench  
K-2

locator  
ML-T11I

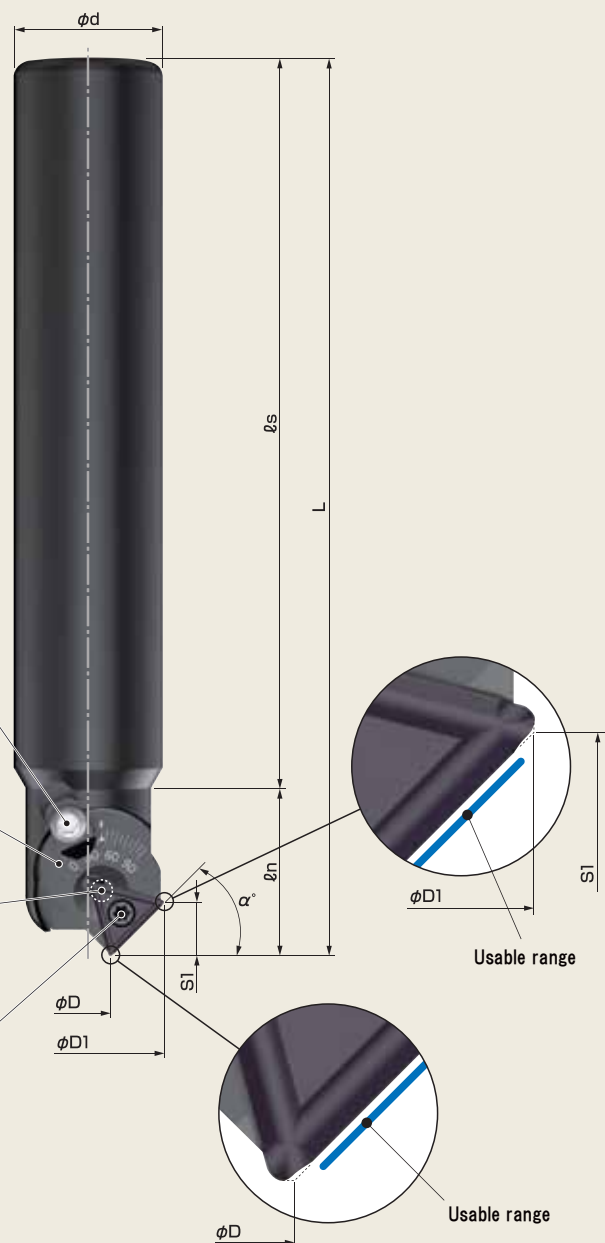
※5° scale

Screw  
BB3-4

Wrench  
K-2

Clamp Screw  
L-13

Wrench  
N-5



## Body

Model. No.	blades	Dimensions (mm)						
		$\phi D$	$\phi D1$	$\phi d$	S1	L ※1	$\ell s$	$\ell n$ ※3
MAM20-19TI	1	※2	※2	20	※2	(120)	97.1	(22.6)

● Insert is not equipped as standard accessory. Please purchase it separately  
● Clamp screw, screw, wrench and locator are supplied as standard accessories

※1... Dimensions vary depending on the angle.

※2... Please refer to angle dimension table (P-34)

※3... It is the dimension when the scale is set to 45 degrees.

## Insert

Figure	Model.No.	Material	Blade Shape	Coating	Usable corner	Quantity per box
	TPET110204 ZA10N	Carbide K10	Sharp edge	None	3	3
	TPET110204 AC15N	Fine particles Carbide	Honing edge	AlCrN	3	3

## Cutting Conditions

TPET110204			
Material Model		ZA10N	AC15N
Material	Feed per blade (fz)	Cutting speed (m/min)	
General steel	0.05~0.15		100~150
Alloy steel	0.05~0.15		100~150
Stainless steel	0.05~0.15		80~120
Aluminum, resin, brass	0.08~0.2	150~400	
Cast steel	0.05~0.15		100~150

● Coolant will be recommended

## Processing Example

[C3 Chamfering]

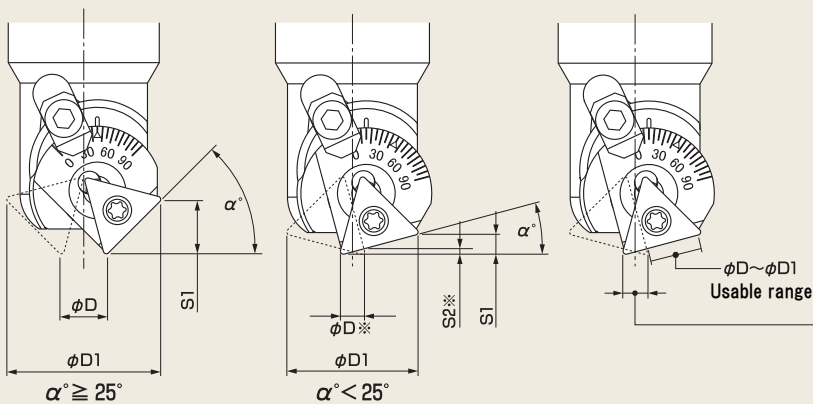
■ Body : MAM20-19T1

■ Insert : TPET110204 AC15N

- Material ..... SUS304
- Rotation Speed ..... 1,000r.p.m.
- Table feed ..... 100mm/min
- Depth of Cut ..... C3
- Cutting Oil ..... Yes

**Result**

Good!  
No secondary burrs and, No chattering after processing



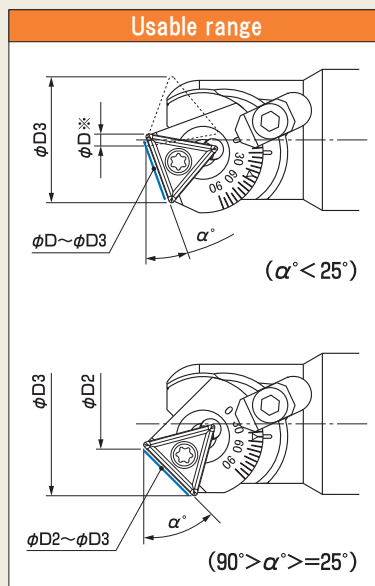
Angle Dimension Table 1

Angle	Dimensions (mm)					
	Usable range φD~φD3		φD1	S1	S2※	ℓn
α°	φD※	φD3				
5°	φ5.64	φ13.46	φ15.11	0.87	0.46	21.50
10°	φ4.41	φ14.55	φ16.12	1.73	0.70	21.84
15°	φ3.13	φ15.56	φ17.04	2.58	0.72	22.13
20°	φ1.79	φ16.48	φ17.87	3.41	0.48	22.35

Please note the blade back interference in the case of an angle less than 25°

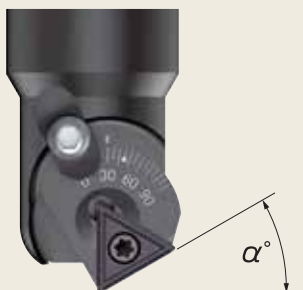
Angle Dimension Table 2

α°	Dimensions (mm)					
	φD	φD1	Usable range φD2~φD3		S1	ℓn
			φD2	φD3		
0°	φ6.81	φ14.01	φ6.81	φ12.29	—	21.10
25°	φ0.55	φ18.60	φ1.55	φ17.3	4.21	22.53
30°	φ1.98	φ19.21	φ2.96	φ18.01	4.98	22.64
35°	φ3.42	φ19.72	φ4.38	φ18.62	5.71	22.69
40°	φ4.87	φ20.11	φ5.8	φ19.11	6.39	22.67
45°	φ6.31	φ20.37	φ7.2	φ19.48	7.03	22.60
50°	φ7.73	φ20.52	φ8.57	φ19.74	7.62	22.47
55°	φ9.13	φ20.54	φ9.9	φ19.87	8.15	22.27
60°	φ10.49	φ20.44	φ11.18	φ19.87	8.62	22.02
65°	φ11.81	φ20.22	φ12.41	φ19.76	9.02	21.71
70°	φ13.06	φ19.88	φ13.57	φ19.52	9.36	21.35
75°	φ14.26	φ19.42	φ14.66	φ19.15	9.63	20.94
80°	φ15.38	φ18.85	φ15.66	φ18.67	9.83	20.47
85°	φ16.42	φ18.16	φ16.57	φ18.08	9.96	19.97
90°	—	φ17.38	—	φ17.38	10.01	19.42

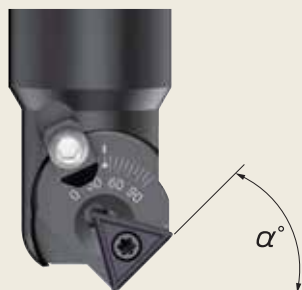


## Scale display

[30°]



[45°]



[60°]

