

DUM type



“ Under Cutter ”



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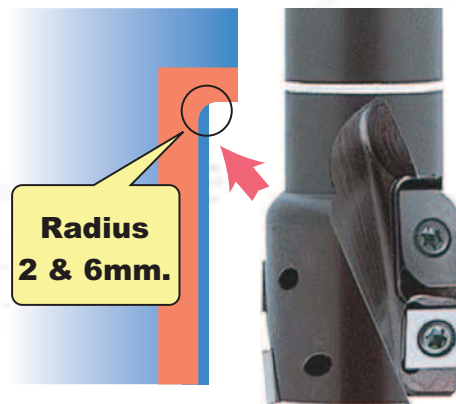
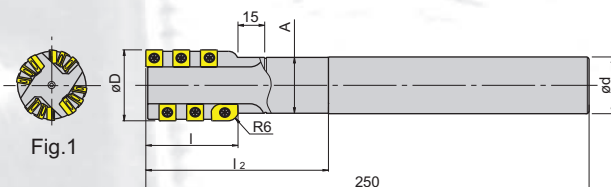


■ DUM End-Mill Type

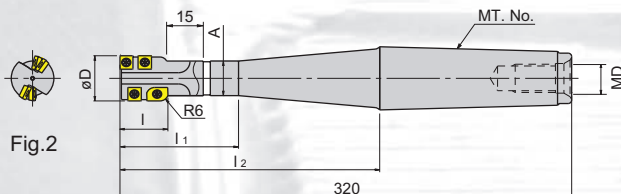
■ Features

1. Side relief cutting for blanking dies and shearing dies.
2. R6 corner radius increase the strength of dies and prevent the craching problem after hardening.

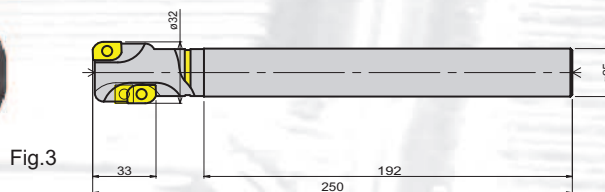
DUM-S Type (Straight Shank)



DUM-MT Type (Morse Taper)



DUM-W2R-W6R Type (Straight Shank)



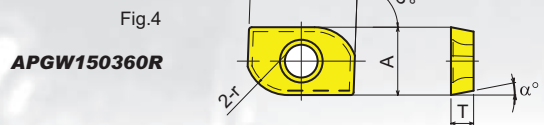
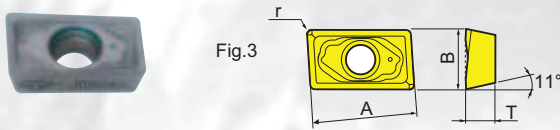
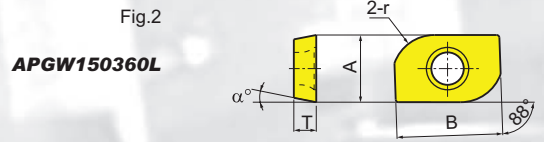
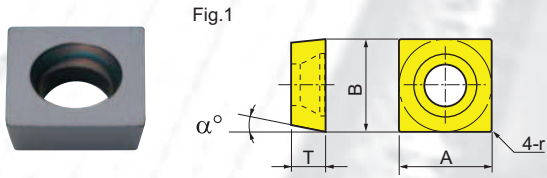
■ Body

Cat. No.	Stock	No. of inserts			Dimensions (mm)							Applicable inserts			Parts		Fig.					
		Top	Bottom	Side	øD	R	I	I ₁	I ₂	A	ød	MD	Top Insert	Bottom Insert	Side Insert	Clamp screw		Wrench				
NEW DUM25023S20-W2R	●	1	1	—	25	2	23.5	53.5	196.5	19	20	—	ZPMT13T320R	ZDMT13T320L	—	DSW-307	A-10SD	3				
DUM32034S25-6R	●	1		3			34	83		24.5								1				
DUM32050S25-6R Carbide shank	●	1	—	5	32		50	—	—	—	25							1				
DUM32184T-MT5	●	1		3			34	136	184	24.5	MT5	M20x2.5						2				
NEW DUM32033S25-W6R	●	1	1	1			33	58	192	25	25	—	APGW150360R	APGW150360L	SPGA090304	ESW-406 (3.1 N-m)	A15-SD	3				
DUM36038S32-6R	●	1		3	36		38	89	161	31												1
DUM36050S32-6R	●	1		5	6		50	101	149		32											1
DUM40040S32-6R	●	2		8	40		40	91	159													1
DUM40052S32-6R	●	2	—	10			52	103	147	31.5												1
NEW DUM50020S42-6R	●	2		2			20	70	180													1
DUM50036S42-6R	●	2		6	50		36	87	163								1					
DUM50050S42-6R	●	2		10			50	107	143	41	42						1					
NEW DUM50055S42-W6R	●	2	2	8			55.7	90	160				APGW150360L				3					



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■ Inserts



Cat. No.	Coated		Dimensions (mm)					Applicable holder		Fig.
	JC5015	JC5040	A	B	T	r	α°	Radius insert	Side insert	
SPGA090304		●	9.525	—	3.18	0.4	11	—	DUM	1
SPMA090304	●		9.525	—	3.18	0.4	11	—	DUM	1
APGW150360L	●	●	9.525	15.00	3.18	6.0	11	DUM	—	2
NEW APGW150360R		●	9.525	15.00	3.18	6.0	11	—	DUM	4
NEW ZDMT13T320L	●	●	7.938	13.30	3.97	2.0	11	DUM	—	3
NEW ZPMT13T320R	●	●	7.938	13.30	3.97	2.0	11	—	DUM	3

■ Cutting data for "UNDER CUTTER"

Relief cutting for shearing die

Side relief milling 	Work	Part name	Shearing die
		Material	Die steel (1.2379)
		Hardness	—
	Tool	Tool No.	DUM50050S42-6R
		Insert No.	JC5040
	Cutting conditions	Cutting speed	94 m/min (600 min ⁻¹)
		Feed speed	200-400 mm/min
		Ap	30 mm
		Ae	1.5 mm
		Coolant	Dry cut
Result	Machine	MC	
DUM-6R could cut 4 dies without chipping. Stable machining.			

■ Recommended cutting conditions for Under Cutter

Tool dia. øD (mm)	Work material (Material No.) D.O.C Cutting condition	Cast iron (GG, GGG)		Tool & die steel (1.2379)	
		Ap=1D, Ae=1mm	Ap=1D, Ae=2mm	Ap=1D, Ae=1mm	Ap=1D, Ae=2mm
25	N (min ⁻¹)	1000	-	900	-
	Vf (mm/min)	350	-	270	-
32	N (min ⁻¹)	800	650	600	-
	Vf (mm/min)	300	170	170	-
36	N (min ⁻¹)	700	570	620	530
	Vf (mm/min)	280	150	190	110
40	N (min ⁻¹)	800	640	720	560
	Vf (mm/min)	450	290	350	200
50	N (min ⁻¹)	700	570	640	510
	Vf (mm/min)	420	280	350	220