

MTS KEY PRODUCTS

U' Drills, Milling Cutters,
Chamfer Cutters
& Fine Boring Heads



Micro Tooling Systems India Pvt. Ltd



INTRODUCTION

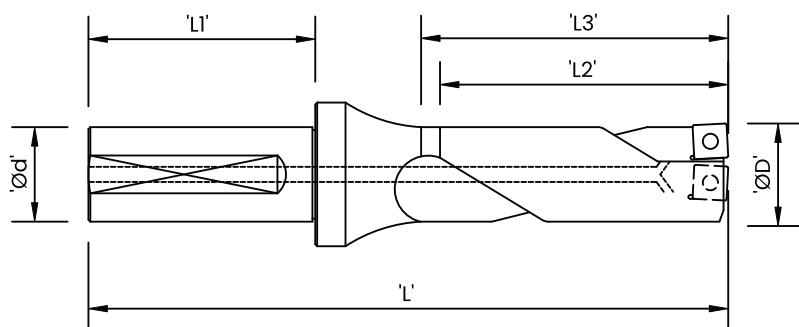
Micro Tooling Systems is one of the manufacturers of Indexable Insert Type Metal Cutting Tools, CNC Holding Tools, Custom Built Tailor made Tools & Design and manufacturers of Jigs & Fixtures with Fabrication established in the year 1988.

Our Prime Aim and Concern is to become pioneer in the field of Tooling Solutions to the spectrum of manufacturing Industries starting from General Manufacturing to Aero Space Applications. We have at our credit about 35 years of Field experience in Tooling Solutions and trying our best to improve upon at par with emerging new Technologies in the Machine Tools and manufacturing Technologies.

With this introduction, we seek your patronage for our services in Metal Cutting Tools. It shall be our endeavor to maintain the highest satisfaction in "QUALITY & DELIVERY".

CONTENTS

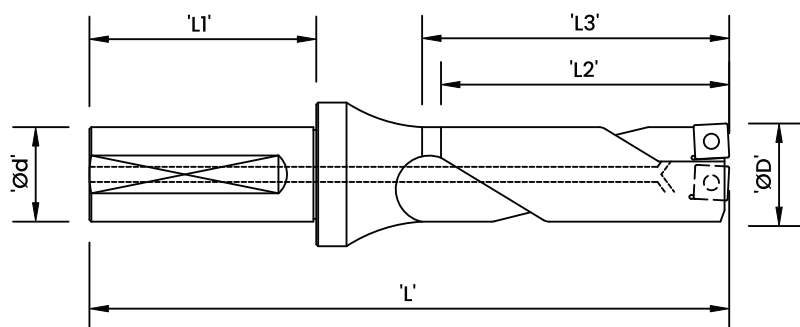
U Drills	1 - 4
High Feed & Face Milling Cutters	5
Fine Boring Heads	6
Front & Back Chamfer Cutters	7
Front Chamfer Cutters	8



Dx3

- Four edges are in 1 insert, effective, cost saving.
- Both inner and outer inserts are same.
- 'ØD' Tolerance ± 0.15

Part No.	'ØD'	'Ød'	'L'	'L1'	'L2'	'L3'	'Insert' (z=2)	Weight (KGS)
S20-Ø13-39L	13	20	111	50	39	44	SP..0502	0.18
S20-Ø13.5-43.5L	13.5	20	112.5	50	40.5	45.5	SP..0502	0.18
S20-Ø14-42L	14	20	114	50	42	47	SP..0502	0.20
S20-Ø14.5-43.5L	14.5	20	115.5	50	43.5	48.5	SP..0502	0.21
S20-Ø15-45L	15	20	117	50	45	50	SP..0502	0.21
S25-Ø15.5-46.5L	15.5	25	128.5	56	46.5	51.5	SP..0502	0.32
S25-Ø16-48L	16	25	130	56	48	53	SP..0602	0.31
S25-Ø16.5-49.5L	16.5	25	131.5	56	49.5	54.5	SP..0602	0.33
S25-Ø17-51L	17	25	133	56	51	56	SP..0602	0.32
S25-Ø17.5-52.5L	17.5	25	134.5	56	52.5	57.5	SP..0602	0.33
S25-Ø18-54L	18	25	136	56	54	59	SP..0602	0.34
S25-Ø18.5-55.5L	18.5	25	137.5	56	55.5	60.5	SP..0602	0.35
S25-Ø19-57L	19	25	139	56	57	62	SP..0602	0.35
S25-Ø19.5-58.5L	19.5	25	140.5	56	58.5	63.5	SP..0602	0.38
S25-Ø20-60L	20	25	142	56	60	65	SP..0602	0.37
S25-Ø20.5-61.5L	20.5	25	143.5	56	61.5	66.5	SP..0602	0.38
S25-Ø21-63L	21	25	145	56	63	68	SP..0602	0.38
S25-Ø21.5-64.5L	21.5	25	146.5	56	64.5	69.5	SP..0602	0.40
S25-Ø22-66L	22	25	148	56	66	71	SP..07T3	0.39
S32-Ø22.5-67.5L	22.5	32	155.5	60	67.5	72.5	SP..07T3	0.65
S32-Ø23-69L	23	32	157	60	69	74	SP..07T3	0.69
S32-Ø23.5-70.5L	23.5	32	158.5	60	70.5	75.5	SP..07T3	0.66
S32-Ø24-72L	24	32	160	60	72	77	SP..07T3	0.67
S32-Ø24.5-73.5L	24.5	32	161.5	60	73.5	78.5	SP..07T3	0.71
S32-Ø25-75L	25	32	163	60	75	80	SP..07T3	0.72
S32-Ø25.5-76.5L	25.5	32	164.5	60	76.5	81.5	SP..07T3	0.72
S32-Ø26-78L	26	32	166	60	78	83	SP..07T3	0.73
S32-Ø26.5-79.5L	26.5	32	167.5	60	79.5	84.5	SP..07T3	0.75

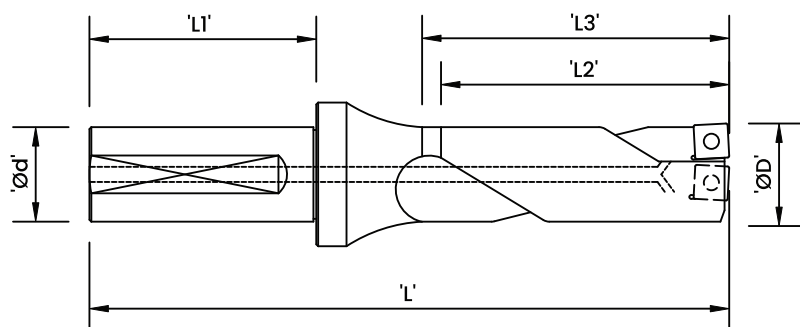


Dx3



- Four edges are in 1 insert, effective, cost saving.
- Both inner and outer inserts are same.
- ' $\varnothing D$ ' Tolerance ± 0.15

Part No.	' $\varnothing D$ '	' $\varnothing d$ '	'L'	'L1'	'L2'	'L3'	'Insert' (Z=2)	Weight (KGS)
S32-Ø27-81L	27	32	169	60	81	86	SP..07T3	0.75
S32-Ø27.5-82.5L	27.5	32	170.5	60	82.5	87.5	SP..07T3	0.76
S32-Ø28-84L	28	32	174	60	84	89	SP..0904	0.78
S32-Ø28.5-85.5L	28.5	32	175.5	60	85.5	90.5	SP..0904	0.80
S32-Ø29-87L	29	32	177	60	87	92	SP..0904	0.81
S32-Ø29.5-88.5L	29.5	32	178.5	60	88.5	93.5	SP..0904	0.82
S32-Ø30-90L	30	32	180	60	90	95	SP..0904	0.83
S32-Ø31-93L	31	32	183	60	93	98	SP..0904	0.88
S32-Ø32-96L	32	32	186	60	96	101	SP..0904	0.90
S32-Ø33-99L	33	32	189	60	99	104	SP..0904	0.93
S32-Ø34-102L	34	32	192	60	102	107	SP..1104	0.98
S32-Ø35-105L	35	32	195	60	105	110	SP..1104	0.99
S32-Ø36-108L	36	32	198	60	108	113	SP..1104	1.09
S32-Ø37-111L	37	32	201	60	111	116	SP..1104	1.08
S32-Ø38-114L	38	32	204	60	114	119	SP..1104	1.12
S32-Ø39-117L	39	32	207	60	117	122	SP..1104	1.22
S40-Ø40-120L	40	40	224	70	120	125	SP..1104	1.74
S40-Ø41-123L	41	40	227	70	123	128	SP..1104	1.79
S40-Ø42-126L	42	40	230	70	126	131	SP..1405	1.62
S40-Ø43-129L	43	40	233	70	129	134	SP..1405	1.70
S40-Ø44-132L	44	40	236	70	132	137	SP..1405	1.75
S40-Ø45-135L	45	40	239	70	135	140	SP..1405	1.84
S40-Ø46-138L	46	40	242	70	138	143	SP..1405	1.92
S40-Ø47-141L	47	40	245	70	141	146	SP..1405	1.97
S40-Ø48-144L	48	40	248	70	144	149	SP..1405	2.06
S40-Ø49-147L	49	40	251	70	147	152	SP..1405	2.12
S40-Ø50-150L	50	40	254	70	150	155	SP..1405	2.22

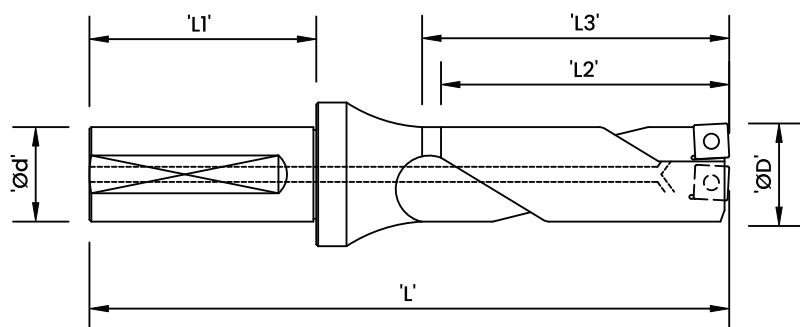


Dx4



- Four edges are in 1 insert, effective, cost saving.
- Both inner and outer inserts are same.
- ' $\varnothing D$ ' Tolerance ± 0.15

Part No.	' $\varnothing D$ '	' $\varnothing d$ '	'L'	'L1'	'L2'	'L3'	'Insert' (Z=2)	Weight (KGS)
S25-Ø13-52L	13	25	132	56	52	57	SP..0502	0.34
S25-Ø14-56L	14	25	136	56	56	61	SP..0502	0.34
S25-Ø15-60L	15	25	140	56	60	65	SP..0502	0.36
S25-Ø16-64L	16	25	146	56	64	69	SP..0602	0.37
S25-Ø17-68L	17	25	150	56	68	73	SP..0602	0.38
S25-Ø18-72L	18	25	154	56	72	77	SP..0602	0.40
S25-Ø19-76L	19	25	158	56	76	81	SP..0602	0.41
S25-Ø20-80L	20	25	162	56	80	85	SP..0602	0.43
S25-Ø21-84L	21	25	166	56	84	89	SP..0602	0.45
S25-Ø22-88L	22	25	170	56	88	93	SP..07T3	0.67
S32-Ø23-92L	23	32	180	60	92	97	SP..07T3	0.69
S32-Ø24-96L	24	32	184	60	96	101	SP..07T3	0.71
S32-Ø25-100L	25	32	188	60	100	105	SP..07T3	0.74
S32-Ø26-104L	26	32	192	60	104	109	SP..07T3	0.77
S32-Ø27-108L	27	32	196	60	108	113	SP..07T3	0.81
S32-Ø28-112L	28	32	202	60	112	117	SP..0904	0.86
S32-Ø29-116L	29	32	206	60	116	121	SP..0904	0.88
S32-Ø30-120L	30	32	210	60	120	125	SP..0904	0.94
S32-Ø31-124L	31	32	214	60	124	129	SP..0904	0.96
S32-Ø32-128L	32	32	218	60	128	133	SP..0904	1.01
S32-Ø33-132L	33	32	222	60	132	137	SP..0904	1.06
S32-Ø34-136L	34	32	226	60	136	141	SP..1104	1.07
S32-Ø35-140	35	32	230	60	140	145	SP..1104	1.12
S32-Ø36-144L	36	32	234	60	144	149	SP..1104	1.15
S32-Ø37-148L	37	32	238	60	148	153	SP..1104	1.21
S32-Ø38-152L	38	32	242	60	152	157	SP..1104	1.24
S32-Ø39-156L	39	32	246	60	156	161	SP..1104	1.33
S40-Ø40-160L	40	40	264	70	160	165	SP..1104	1.80



Dx4

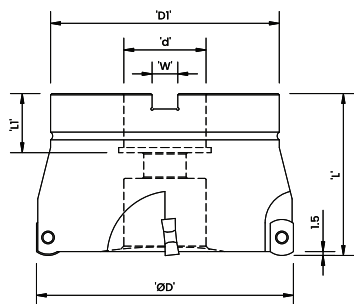


- Four edges are in 1 insert, effective, cost saving.
- Both inner and outer inserts are same.
- 'ØD' Tolerance ± 0.15

Part No.	'ØD'	'Ød'	'L'	'L1'	'L2'	'L3'	'Insert' (Z=2)	Weight (KGS)
S40-Ø41-164L	41	40	268	70	164	169	SP..1104	1.81
S40-Ø42-168L	42	40	272	70	168	173	SP..1405	1.83
S40-Ø43-172L	43	40	276	70	172	177	SP..1405	1.93
S40-Ø44-176L	44	40	280	70	176	181	SP..1405	2.00
S40-Ø45-180L	45	40	284	70	180	185	SP..1405	2.13
S40-Ø46-184L	46	40	288	70	184	189	SP..1405	2.20
S40-Ø47-188L	47	40	292	70	188	193	SP..1405	2.28
S40-Ø48-192L	48	40	296	70	192	197	SP..1405	2.38
S40-Ø49-196L	49	40	300	70	196	201	SP..1405	2.48
S40-Ø50-200L	50	40	304	70	200	205	SP..1405	2.61

Accessories

Insert	Insert Screw	Wrench	Torque (N.m)
SP..0502	S2001-3	T6	0.6
SP..0602	S2202-5	T7	0.9
SP..07T3	S2503-10	T8	1.2
SP..0904	S3506-1	T15	2.0
SP..1104	S4001-2	T15	3.0
SP..1405	S5002-6	T20	5.0

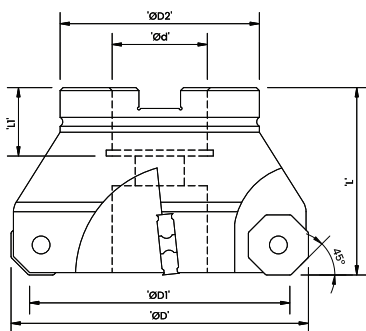


Insert : ENMX 0905 (4-Corner)

Part No.	'ØD'	'ØD1'	'Ød'	'L'	'L1'	No. of Insert'	'W'
Ø50-50L	50	42	22	50	18	4	10
Ø63-50L	63	48	22	50	18	6	10
Ø80-50L	80	56	27	50	20	8	12
Ø100-63L	100	78	32	63	23	10	14
Ø125-63L	125	89	40	63	27	12	15.9

Accessories

Insert	Insert Screw	Wrench
ENMX 0905	S3506-1	T15

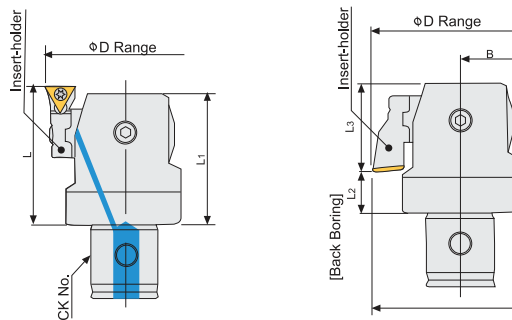


Insert : ONMU 080608 (16-Corner)
Cutting Angle : 45°

Part No.	'ØD'	'ØD1'	'ØD2'	'Ød'	'L'	'L1'	PCD	No of Insert'
Ø63-40L	75	63	49	22	40	18	--	5
Ø80-50L	92	80	58	27	50	20	--	6
Ø100-50L	112	100	67	32	50	23	--	7
Ø125-63L	137	125	87	40	63	26	66.7	8
Ø160-63L	172	160	107	40	63	26	66.7	10
Ø200-63L	212	200	130	60	63	26	101.6	12
Ø315-63L	327	315	220	60	63	26	101.6	16

Accessories

Insert	Insert Screw	Wrench
ONMU 080608	S5002-6	T20



Boring Range Ø20~Ø203

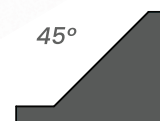
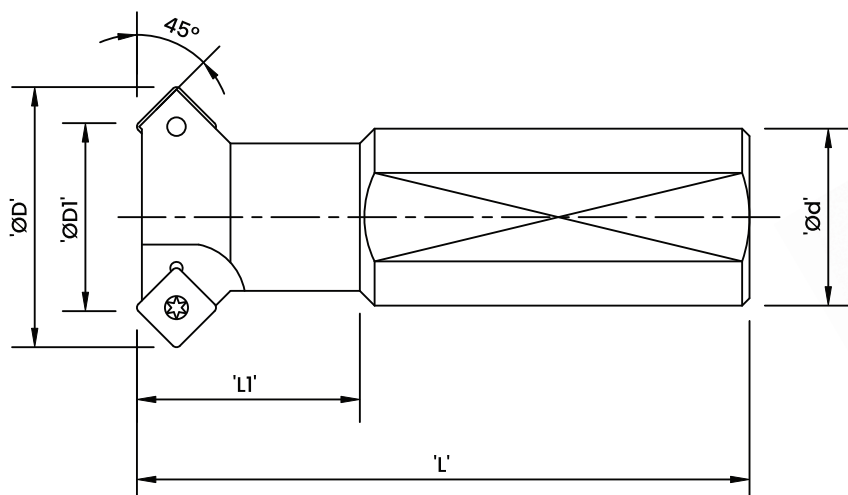
ITEM CODE	CK No.	Insert-holder	Boring			Back Boring				Insert		
			ØD Range	L	L1	ØD Range	L2	L3	B			
GEWN 20- 36CKB1	1	GENH1-1	20~26	32.5	29.5	—	10.5	19	10	TP0802		
		GENH1-2	25~31			30~31						
		GENH1-3	30~36			30~36						
GEWN 25- 47CKB2	2	GENH2-1	25~33	35.5	32.5	—	11.5	21	12.5		TP0802	
		GENH2-2	32~40			36~40						
		GENH2-3	39~47			39~47						
GEWN 32- 60CKB3	3	GENH3-1	32~42	40	35	—	10	25	16			TP0802
		GENH3-2	41~51			46~51						
		GENH3-3	50~60			50~60						
GEWN 41- 74CKB4	4	GENH4-1	41~54	47	43	—	14	29	20	TC1102		
		GENH4-2	50~63			53~63						
		GENH4-3	61~74			61~74						
GEWN 53- 95CKB5	5	GENH5-1	53~70	57	53	62~70	19	34	25.5		TC1102	
		GENH5-2	65~82			65~82						
		GENH5-3	78~95			78~95						
GEWN 68- 150CKB6	6	GENH6-1	68~100	71	67.2	80~100	22	45.2	32.5			TC1102
		GENH6-2	94~126			94~126						
		GENH6-3	118~150			118~150						
GEWN 100- 203CKB6	6	GENH6-1	100~153	71	67.2	112~153	22	45.2	45.5	TC1102		
		GENH6-2	126~179			126~179						
		GENH6-3	150~203			150~203						

1. TP08, RO.2, TC11 RO.4
2. GENH○-1, GENH○-2, GENH○-3
3. Vmax=1200m/min



GENH GENH Insert-holder

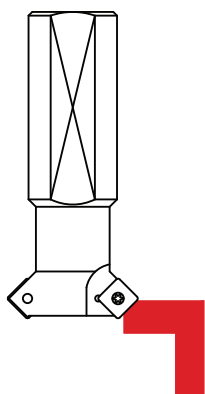
ITEM CODE	TYPE	Boring Head No.	ITEM CODE	TYPE	Boring Head No.
GENH1-1	 Insert-TP0802 (S2001-3)	GEWN20-36CKB1	GENH4-1	 Insert-TC1102 (S2503-3)	GEWN41-74CKB4
GENH1-2			GENH4-2		
GENH1-3			GENH4-3		
GENH2-1		GEWN25-47CKB2	GENH5-1		GEWN53-95CKB5
GENH2-2			GENH5-2		
GENH2-3			GENH5-3		
GENH3-1		GEWN32-60CKB3	GENH6-1		GEWN68-150CKB6 GEWN100-203CKB6
GENH3-2			GENH6-2		
GENH3-3			GENH6-3		



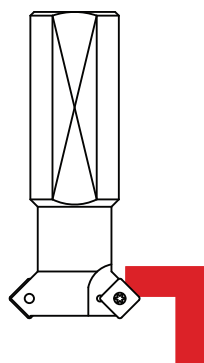
Part No.	'ØD1'	'ØD'	'Ød'	Chamfer 'Ø'		'L'	'L1'	'Flutes'	'Insert' (Z=2)
				Min	Max				
S16-Ø16-27L	16	28.8	16	17.2	28.4	80	27	2	SP..0904
S25-Ø25-40L	25	37.8	25	26.2	37.4	100	40	2	SP..0904
S32-Ø32-50L	32	44.8	32	33.2	44.4	110	50	3	SP..0904
S32-Ø40-60L	40	52.8	32	41.2	52.4	120	60	4	SP..0904
S32-Ø50-80L	50	65	32	51.0	66.0	150	80	4	SP..1104

Accessories

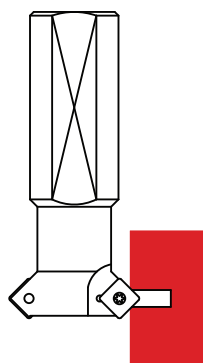
Insert	Insert Screw	Wrench
SP..0904	S3506-1	T15
SP..1104	S4001-2	T15



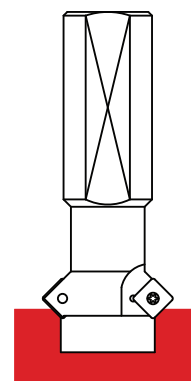
Front Chamfering



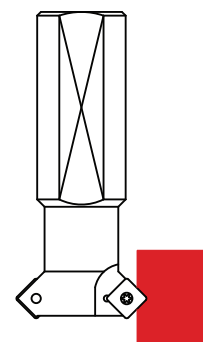
Back Chamfering



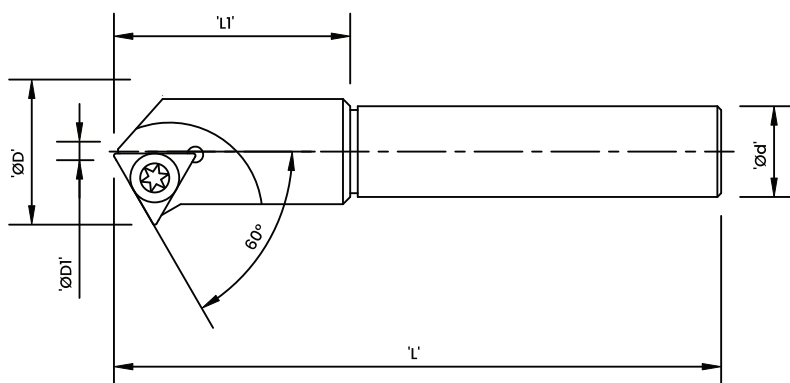
Simultaneous front and back chamfer



Chamfer on Slot

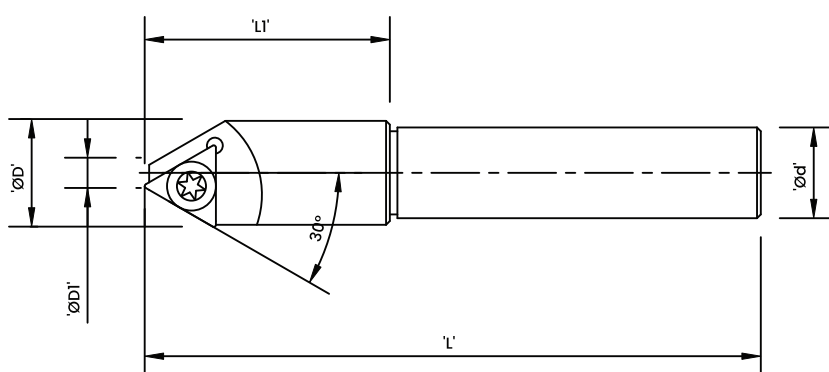


V- Grooving



Angle - 60°

Part No.	'ØD'	'ØD1'	'Ød'	'L'	'L1'	'Flutes'	'Insert' (Z=2)
S12-Ø15-30L	15	4	12	110	30	1	TCMT 0902..
S16-Ø18-30L	18	4	16	130	30	1	TCMT 1102..
S20-Ø25-30L	25	5	20	130	30	1	TCMT 16T3..



Angle - 30°

Part No.	'ØD'	'ØD1'	'Ød'	'L'	'L1'	'Flutes'	'Insert' (Z=2)
S12-Ø11-30L	11	4	12	110	30	1	TCMT 0902..
S16-Ø13-30L	13	4	16	130	30	1	TCMT 1102..
S20-Ø18-30L	18	5	20	130	30	1	TCMT 16T3..

Accessories

Insert	Insert Screw	Wrench
TCMT 0902..	S2202-1	T06
TCMT 1102..	S2503-9	T08
TCMT 16T3..	S4001-2	T15



MTS-S25-E.M Ø25



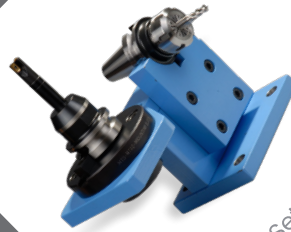
Twin Edge Boring Heads



Special Wrench for Pullstud



Tool Boy



Multi-type Setting stand



Micro Tooling Systems India Pvt. Ltd

(Mfrs of CNC Cutting Tools & Holders)

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