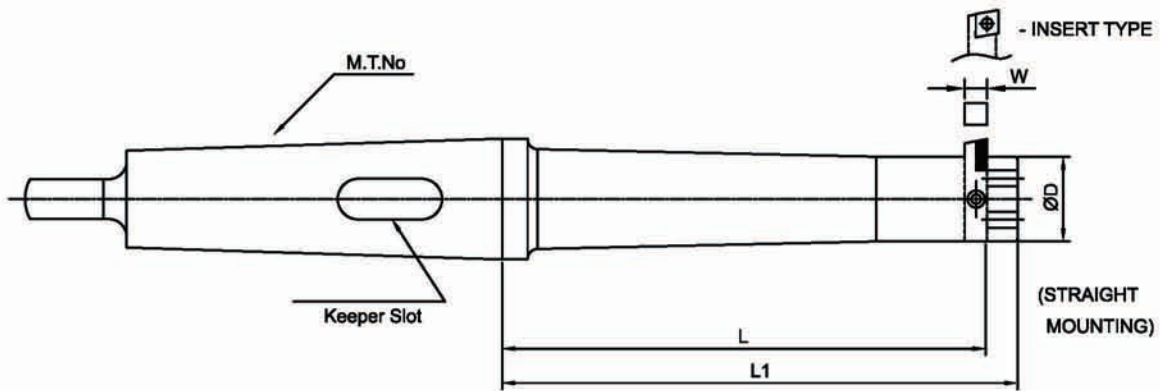


BORING BAR / BSA

Model No.	Boring Range		D	L	W	BRAZED TOOL	INDEXABLE TOOL	INSERT
	min.	max.						
MT3-BSA16-100	16	20	14	100	6	L-142-0606-16	L142-0606-04	CCGT04T104
MT3-BSA20-120	20	25	16	120	6			
MT3-BSA25-135	25	38	20	135	8	L142-0808-29	L142-0808-06	CCMT060204
MT3-BSA30-165	30	42	24	165	8	L142-0808-35	L142-0808-06	CCMT060204
MT3-BSA38-180	38	52	30	180	10	L142-1010-44	L142-1010-06	CCMT060204
MT3-BSA42-210	42	56	34	210	10			
MT4-BSA16-100	16	20	14	100	6	L-142-0606-16	L142-0606-04	CCGT04T104
MT4-BSA20-120	20	25	16	120	6			
MT4-BSA25-135	25	38	20	135	8	L142-0808-29	L142-0808-06	CCMT060204
MT4-BSA30-165	30	42	24	165	8	L142-0808-35	L142-0808-06	CCMT060204
MT4-BSA38-180	38	52	30	180	10	L142-1010-44	L142-1010-06	CCMT060204
MT4-BSA42-210	42	56	34	210	10			
MT5-BSA16-100	16	20	14	100	6	L-142-0606-16	L142-0606-04	CCGT04T104
MT5-BSA20-120	20	25	16	120	6			
MT5-BSA25-135	25	38	20	135	8	L142-0808-29	L142-0808-06	CCMT060204
MT5-BSA30-165	30	42	24	165	8	L142-0808-35	L142-0808-06	CCMT060204
MT5-BSA38-180	38	52	30	180	10	L142-1010-44	L142-1010-06	CCMT060204
MT5-BSA42-210	42	56	34	210	10			
MT5-BSA50-180	50	65	40	180	12	L142-1212-58	L142-1212-09	CCMT090304
MT5-BSA50-240	50	65	40	240	13			
MT5-BSA62-195	62	90	50	195	16	L142-1616-74	L142-1616-09	CCMT090304
MT5-BSA62-270	62	90	50	270	16			
MT5-BSA72-195	72	110	60	195	20	L142-2020-85	L142-2020-09	CCMT090304
MT5-BSA72-285	72	110	60	285	20			
MT5-BSA90-210	90	125	75	210	20	L142-2020-110	L142-2020-09	CCMT090304
MT5-BSA90-300	90	125	75	300	20			
MT5-BSA105-195	105	160	90	195	25	L142-2525-110	L142-2525-12	CCMT120408
MT5-BSA105-285	105	160	90	285	25			
MT6-BSA16-100	16	20	14	100	6	L-142-0606-16	L142-0606-04	CCGT04T104
MT6-BSA20-120	20	25	16	120	6			
MT6-BSA25-135	25	38	20	135	8	L142-0808-29	L142-0808-06	CCMT060204
MT6-BSA30-165	30	42	24	165	8	L142-0808-35	L142-0808-06	CCMT060204
MT6-BSA38-180	38	52	30	180	10	L142-1010-44	L142-1010-06	CCMT060204
MT6-BSA42-210	42	56	34	210	10			
MT6-BSA50-180	50	65	40	180	12	L142-1212-58	L142-1212-09	CCMT090304
MT6-BSA50-240	50	65	40	240	12			
MT6-BSA62-195	62	90	50	195	16	L142-1616-74	L142-1616-09	CCMT090304
MT6-BSA62-270	62	90	50	270	16			
MT6-BSA72-195	72	110	60	195	20	L142-2020-85	L142-2020-09	CCMT090304
MT6-BSA72-285	72	110	60	285	20			
MT6-BSA90-210	90	125	75	210	20	L142-2020-110	L142-2020-09	CCMT090304
MT6-BSA90-300	90	125	75	300	20			
MT6-BSA105-195	105	160	90	195	25	L142-2525-110	L142-2525-12	CCMT120408
MT6-BSA105-285	105	160	90	285	25			



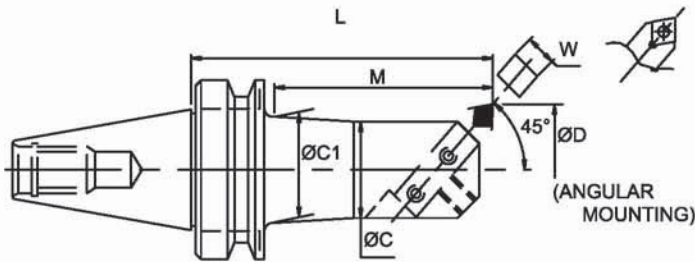
BORING BAR / BSB

Model.No.	Boring Range		D	L	L1	W	BRAZED TOOL	INDEXABLE TOOL	INSERT
	min	max							
MT3-BSB 16-100	16	20	14	100	110	6	L-142-0606-16	L142-0606-04	CCGT04T104
MT3-BSB 20-120	20	25	16	120	130	6			
MT3-BSB 25-135	25	38	20	135	145	8			
MT3-BSB 30-165	30	42	24	165	175	8	L141-0808-35	L141-0808-06	CCMT060204
MT3-BSB 38-180	38	52	30	180	190	10			
MT3-BSB 42-210	42	56	34	210	220	10			
MT3-BSB 50-180	50	65	40	180	190	12	L141-1212-60	L141-1212-09	CCMT090304
MT4-BSB 16-100	16	20	14	100	110	6			
MT4-BSB 20-120	20	25	16	120	130	6			
MT4-BSB 25-135	25	38	20	135	145	8	L141-0808-35	L141-0808-06	CCMT060204
MT4-BSB 30-165	30	42	24	165	175	8			
MT4-BSB 38-180	38	52	30	180	190	10			
MT4-BSB 42-210	42	56	34	210	220	10	L141-1010-50	L141-1010-06	CCMT060204
MT4-BSB 50-180	50	65	40	180	190	12			
MT4-BSB 50-240	50	65	40	240	250	12			
MT5-BSB 16-100	16	20	14	100	110	6	L-142-0606-16	L142-0606-04	CCGT04T104
MT5-BSB 20-120	20	25	16	120	130	6			
MT5-BSB 25-135	25	38	20	135	145	8			
MT5-BSB 30-165	30	42	24	165	175	8	L141-0808-35	L141-0808-06	CCMT060204
MT5-BSB 38-180	38	52	30	180	190	10			
MT5-BSB 42-210	42	56	34	210	220	10			
MT5-BSB 50-180	50	65	40	180	190	12	L141-1212-60	L141-1212-09	CCMT090304
MT5-BSB 50-240	50	65	40	240	250	12			
MT5-BSB 62-195	62	90	50	195	205	16			
MT5-BSB 62-270	62	90	50	270	280	16	L141-1616-80	L141-1616-09	CCMT090304
MT5-BSB 72-195	72	110	60	195	205	20			
MT5-BSB 72-285	72	110	60	285	295	20			
MT5-BSB 90-210	90	125	75	210	220	20	L141-2020-95	L141-2020-09	CCMT090304
MT5-BSB 90-300	90	125	75	300	310	20			
MT5-BSB 105-195	105	160	95	195	205	25			
MT5-BSB 105-285	105	160	95	285	295	25	L141-2525-140	L141-2525-12	CCMT120408
MT6-BSB 16-100	16	20	14	100	110	6			
MT6-BSB 20-120	20	25	16	120	130	6			
MT6-BSB 25-135	25	38	20	135	145	8	L-142-0606-16	L142-0606-04	CCGT04T104
MT6-BSB 30-165	30	42	24	165	175	8			
MT6-BSB 38-180	38	52	30	180	190	10			
MT6-BSB 42-210	42	56	34	210	220	10	L141-0808-35	L141-0808-06	CCMT060204
MT6-BSB 50-180	50	65	40	180	190	12			
MT6-BSB 50-240	50	65	40	240	250	12			
MT6-BSB 62-195	62	90	50	195	205	16	L141-1010-50	L141-1010-06	CCMT060204
MT6-BSB 62-270	62	90	50	270	280	16			
MT6-BSB 72-195	72	110	60	195	205	20			
MT6-BSB 72-285	72	110	60	285	295	20	L141-1212-60	L141-1212-09	CCMT090304
MT6-BSB 90-210	90	125	75	210	220	20			
MT6-BSB 90-300	90	125	75	300	310	20			
MT6-BSB 105-195	105	160	95	195	205	25	L141-1616-80	L141-1616-09	CCMT090304
MT6-BSB 105-285	105	160	95	285	295	25			
MT6-BSB 16-100	16	20	14	100	110	6			
MT6-BSB 20-120	20	25	16	120	130	6	L141-2020-95	L141-2020-09	CCMT090304
MT6-BSB 25-135	25	38	20	135	145	8			
MT6-BSB 30-165	30	42	24	165	175	8			
MT6-BSB 38-180	38	52	30	180	190	10	L141-2525-140	L141-2525-12	CCMT120408
MT6-BSB 42-210	42	56	34	210	220	10			
MT6-BSB 50-180	50	65	40	180	190	12			
MT6-BSB 50-240	50	65	40	240	250	12	L141-1010-50	L141-1010-06	CCMT060204
MT6-BSB 62-195	62	90	50	195	205	16			
MT6-BSB 62-270	62	90	50	270	280	16			
MT6-BSB 72-195	72	110	60	195	205	20	L141-1212-60	L141-1212-09	CCMT090304
MT6-BSB 72-285	72	110	60	285	295	20			
MT6-BSB 90-210	90	125	75	210	220	20			
MT6-BSB 90-300	90	125	75	300	310	20	L141-2020-110	L141-2020-09	CCMT090304
MT6-BSB 105-195	105	160	95	195	205	25			
MT6-BSB 105-285	105	160	95	285	295	25			



BORING BAR / BSA BT SHANK - TYPE A (Square / Round Shank Boring Tool)

BSA



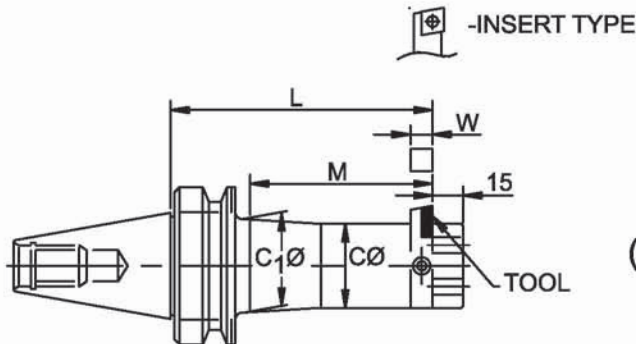
- INSERT TYPE



ORDER BY NO.	D Min~Max	L	C	C1	W	M	Brazed	Indexable	ISO insert	
BT30-BSA25-120	25~38	120	20	22	8	90	L142-0808-29	L142-0808-06	CCMT 060204	
BT30-BSA30-135	30~42	135	24	26		105	L142-0808-35	L142-0808-06	CCMT 060204	
BT30-BSA38-150	38~52	150	30	33		120	L142-1010-44	L142-1010-06	CCMT 060204	
BT35-BSA25-120	25~38	120	20	22	8	90	L142-0808-29	L142-0808-06	CCMT 060204	
BT35-BSA30-135	30~42	135	24	26		105	L142-0808-35	L142-0808-06	CCMT 060204	
BT35-BSA38-150	38~52	150	30	33		120	L142-1010-44	L142-1010-06	CCMT 060204	
BT35-BSA42-150	42~56		34	37	13	125	L142-1212-58	L142-1212-09	CCMT 090304	
BT35-BSA50-150	50~65		40	44		110	L142-1616-74	L142-1616-09	CCMT 090304	
BT35-BSA62-135	62~90	135	50	50		16	L142-2020-85	L142-2020-09	CCMT 090304	
BT35-BSA72-135	72~110		60	52	19	110	L142-2020-85	L142-2020-09	CCMT 090304	
BT40-BSA25-135	25~38		135	20	22	8	108	L142-0808-29	L142-0808-06	CCMT 060204
BT40-BSA30-165	30~42	165	24	26	138		L142-0808-35	L142-0808-06	CCMT 060204	
BT40-BSA38-180	38~52	180	30	33	10		153	L142-1010-44	L142-1010-06	CCMT 060204
BT40-BSA42-210	42~56	210	34	37		183	L142-1010-44	L142-1010-06	CCMT 060204	
BT40-BSA50-180	50~65	180	40	44		153	L142-1212-58	L142-1212-09	CCMT 090304	
BT40-BSA50-225		225			198	16	153	L142-1616-74	L142-1616-09	CCMT 090304
BT40-BSA62-180		62~90			180		50	56	213	L142-1616-74
BT40-BSA62-240	240	240	60	63	19		213	L142-2020-85	L142-2020-09	CCMT 090304
BT40-BSA72-180	72~110	180				153	L142-2020-85	L142-2020-09	CCMT 090304	
BT40-BSA72-240	240	240				213	L142-2020-85	L142-2020-09	CCMT 090304	
BT40-BSA90-180	90~125	180	75	24	153	L142-2020-110	L142-2020-09	CCMT 090304		
BT45-BSA25-135	25~38	135	20		8	95	L142-0808-29	L142-0808-06	CCMT 060204	
BT45-BSA30-165	38~42	165	24		26	125	L142-0808-35	L142-0808-06	CCMT 060204	
BT45-BSA38-180	38~52	180	30	33	10	140	L142-1010-44	L142-1010-06	CCMT 060204	
BT45-BSA42-210	42~56	210	34	37		170	L142-1010-44	L142-1010-06	CCMT 060204	
BT45-BSA50-180	50~65	180	40	44		140	L142-1212-58	L142-1212-09	CCMT 090304	
BT45-BSA50-225		225			185	16	155	L142-1616-74	L142-1616-09	CCMT 090304
BT45-BSA62-195		62~90			195		50	56	230	L142-1616-74
BT45-BSA62-270	270	270	60	66	19		230	L142-2020-85	L142-2020-09	CCMT 090304
BT45-BSA72-195	72~110	195				155	L142-2020-85	L142-2020-09	CCMT 090304	
BT45-BSA72-285	285	285				245	L142-2020-85	L142-2020-09	CCMT 090304	
BT45-BSA90-195	90~125	195	75	75	19	160	L142-2020-110	L142-2020-09	CCMT 090304	
BT45-BSA90-285		285		80		250	L142-2020-110	L142-2020-09	CCMT 090304	
BT50-BSA25-135		25~38		135		20	22	8	95	L142-0808-29
BT50-BSA30-165	30~42	165	24	26	125	L142-0808-35	L142-0808-06		CCMT 060204	
BT50-BSA38-180	38~52	180	30	33	10	140	L142-1010-44		L142-1010-06	CCMT 060204
BT50-BSA42-210	42~56	210	34	37		170	L142-1010-44	L142-1010-06	CCMT 060204	
BT50-BSA50-240	50~65	180	40	44		140	L142-1212-58	L142-1212-09	CCMT 090304	
BT50-BSA62-195		240			200	16	155	L142-1616-74	L142-1616-09	CCMT 090304
BT50-BSA62-195		62~90			195		50	56	230	L142-1616-74
BT50-BSA62-270	270	270	60	66	19		230	L142-2020-85	L142-2020-09	CCMT 090304
BT50-BSA72-195	72~110	195				155	L142-2020-85	L142-2020-09	CCMT 090304	
BT50-BSA72-285	285	285				245	L142-2020-85	L142-2020-09	CCMT 090304	
BT50-BSA90-210	90~125	210	75	80	19	170	L142-2020-85	L142-2020-09	CCMT 090304	
BT50-BSA90-300		300				260	L142-2020-85	L142-2020-09	CCMT 090304	

BORING BAR / BSB BT SHANK TYPE B (Square / Round Shank Boring Tool)

BSB



(Straight Mounting)

ORDER BY NO.	D Min ~ Max	L	C	C1	W	M	Tool	Indexable	ISO insert
BT30-BSB25-120	25~50	120	20	22	8	90	L141-0808-35	L141-0808-06	CCMT 060204
BT30-BSB38-150	38~70	150	30	33	10	120	L141-1010-50	L141-1010-06	CCMT 060204
BT30-BSB50-150	50~90	150	40	44	13	125	L141-1212-60	L141-1212-09	CCMT 090304
BT35-BSB25-120	25~50	120	20	22	8	90	L141-0808-35	L141-0808-06	CCMT 060204
BT35-BSB35-150	38~70	150	30	33	10	120	L141-1010-50	L141-1010-06	CCMT 060204
BT35-BSB50-150	50~90	150	40	44	13	125	L141-1212-60	L141-1212-09	CCMT 090304
BT35-BSB62-135	62~115	135	50	50	16	110	L141-1616-80	L141-1616-09	CCMT 090304
BT35-BSB72-135	72~135	135	60	52	19	110	L141-2020-95	L141-2020-09	CCMT 090304
BT40-BSB25-135	25~50	135	20	22	8	108	L141-0808-35	L141-0808-06	CCMT 060204
BT40-BSB38-180	38~70	180	30	33	10	153	L141-1010-50	L141-1010-06	CCMT 060204
BT40-BSB50-180	50~90	180	40	44	13	198	L141-1212-60	L141-1212-09	CCMT 090304
BT40-BSB50-225	50~90	225	40	44	13	198	L141-1212-60	L141-1212-09	CCMT 090304
BT40-BSB62-180	62~115	180	50	56	16	153	L141-1616-80	L141-1616-09	CCMT 090304
BT40-BSB62-225	62~115	225	50	56	16	198	L141-1616-80	L141-1616-09	CCMT 090304
BT40-BSB72-180	72~135	180	60	66	19	153	L141-2020-95	L141-2020-09	CCMT 090304
BT40-BSB72-225	72~135	225	60	66	19	198	L141-2020-95	L141-2020-09	CCMT 090304
BT40-BSB90-180	90~150	180	75	80	19	153	L141-2020-110	L141-2020-09	CCMT 090304
BT40-BSB90-225	90~150	225	75	80	19	153	L141-2020-110	L141-2020-09	CCMT 090304
BT45-BSB25-135	25~50	135	20	22	8	95	L141-0808-35	L141-0808-06	CCMT 060204
BT45-BSB38-180	38~70	180	30	32	10	140	L141-1010-50	L141-1010-06	CCMT 060204
BT45-BSB50-180	50~90	180	40	44	13	185	L141-1212-60	L141-1212-09	CCMT 090304
BT45-BSB50-225	50~90	225	40	44	13	185	L141-1212-60	L141-1212-09	CCMT 090304
BT45-BSB62-195	62~115	195	50	56	16	140	L141-1616-80	L141-1616-09	CCMT 090304
BT45-BSB62-270	62~115	270	50	56	16	230	L141-1616-80	L141-1616-09	CCMT 090304
BT45-BSB72-195	72~135	195	60	66	19	155	L141-2020-95	L141-2020-09	CCMT 090304
BT45-BSB72-285	72~135	285	60	66	19	245	L141-2020-95	L141-2020-09	CCMT 090304
BT45-BSB90-195	90~150	195	75	80	19	160	L141-2020-110	L141-2020-09	CCMT 090304
BT45-BSB90-285	90~150	285	75	80	19	250	L141-2020-110	L141-2020-09	CCMT 090304
BT45-BSB105-195	105~190	195	90	-	25	162	L141-2525-140	L141-2525-12	CCMT 120408
BT45-BSB105-285	105~190	285	90	-	25	252	L141-2525-140	L141-2525-12	CCMT 120408
BT50-BSB25-135	25~50	135	20	22	8	95	L141-0808-35	L141-0808-06	CCMT 060204
BT50-BSB30-180	38~70	180	30	32	10	140	L141-1010-50	L141-1010-06	CCMT 060204
BT50-BSB50-180	50~90	180	40	44	13	200	L141-1212-60	L141-1212-09	CCMT 090304
BT50-BSB50-240	50~90	240	40	44	13	200	L141-1212-60	L141-1212-09	CCMT 090304
BT50-BSB62-195	62~115	195	50	56	16	155	L141-1616-80	L141-1616-09	CCMT 090304
BT50-BSB62-270	62~115	270	50	56	16	230	L141-1616-80	L141-1616-09	CCMT 090304
BT50-BSB72-195	72~135	195	60	66	19	155	L141-2020-95	L141-2020-09	CCMT 090304
BT50-BSB72-285	72~135	285	60	66	19	245	L141-2020-95	L141-2020-09	CCMT 090304
BT50-BSB90-210	90~150	210	75	80	19	170	L141-2020-110	L141-2020-09	CCMT 090304
BT50-BSB90-300	90~150	300	75	80	19	260	L141-2020-110	L141-2020-09	CCMT 090304
BT50-BSB105-195	105~190	195	90	-	25	155	L141-2525-140	L141-2525-12	CCMT 120408
BT50-BSB105-285	105~190	285	90	94	25	245	L141-2525-140	L141-2525-12	CCMT 120408