

Shape A: Cylindrical



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SA41 B51-SA41L2 B51-SA41L3 B51-SA61 B51-SA63 B51-SA42 B51-SA42L2 B51-SA42L3	B52-SA41 B52-SA41L2 B52-SA41L3 B52-SA61 B52-SA63 B52-SA42 B52-SA42L2 B52-SA42L3		SA-41 SA-41L2 SA-41L3 SA-61 SA-63 SA-42 SA-42L2 SA-42L3	1/16 1/16 1/16 1/16 3/32 3/32 3/32 3/32	1/8 1/8 1/8 3/32 3/32 1/8 1/8 1/8	1/4 1/4 1/4 1/4 3/8 7/16 7/16 7/16
B51-SA11 B51-SA43 B51-SA43L2 B51-SA43L3 B51-SA12 B51-SA52 B51-SA13	B52-SA11 B52-SA43 B52-SA43L2 B52-SA43L3 B52-SA12 B52-SA52 B52-SA13		SA-11 SA-43 SA-43L2 SA-43L3 SA-12 SA-52 SA-13	1/8 1/8 1/8 1/8 1/8 5/32 5/32	1/4 1/8 1/8 1/8 1/4 1/8 1/4	1/2 9/16 9/16 9/16 5/8 1/2 5/8
B51-SA81 B51-SA53 B51-SA14 B51-SA51 B51-SA1 B51-SA1L B51-SA1L6	B52-SA81 B52-SA53 B52-SA14 B52-SA51 B52-SA1 B52-SA1L B52-SA1L6	B53-SA1NF	SA-81 SA-53 SA-14 SA-51 SA-1 SA-1L SA-1L6 SA-1NF	3/16 3/16 3/16 1/4 1/4 1/4 1/4 1/4	3/16 1/8 1/4 1/8 1/4 1/4 1/4 1/4	5/8 1/2 5/8 1/2 5/8 1 1/2 3/4
B51-SA2 B51-SA3 B51-SA3L B51-SA3L6 B51-SA3X	B52-SA2 B52-SA3 B52-SA3L B52-SA3L6 B52-SA3X	B53-SA3NF	SA-2 SA-3 SA-3L SA-3L6 SA-3NF SA-3X	5/16 3/8 3/8 3/8 3/8 3/8	1/4	3/4 3/4 1 3/4 3/4 1-1/2
B51-SA4 B51-SA5 B51-SA5L6 B51-SA6	B52-SA4 B52-SA5 B52-SA5L6 B52-SA6	B53-SA5NF B53-SA6NF	SA-4 SA-5 SA-5L6 SA-5NF SA-6 SA-6NF	7/16 1/2 1/2 1/2 5/8 5/8	1/4	1
B51-SA16 B51-SA7 B51-SA9	B52-SA16 B52-SA7 B52-SA9	B53-SA7NF	SA-16 SA-7 SA-7NF SA-9	3/4 3/4 3/4 1	1/4 1/4 1/4 1/4	3/4 1 1 1



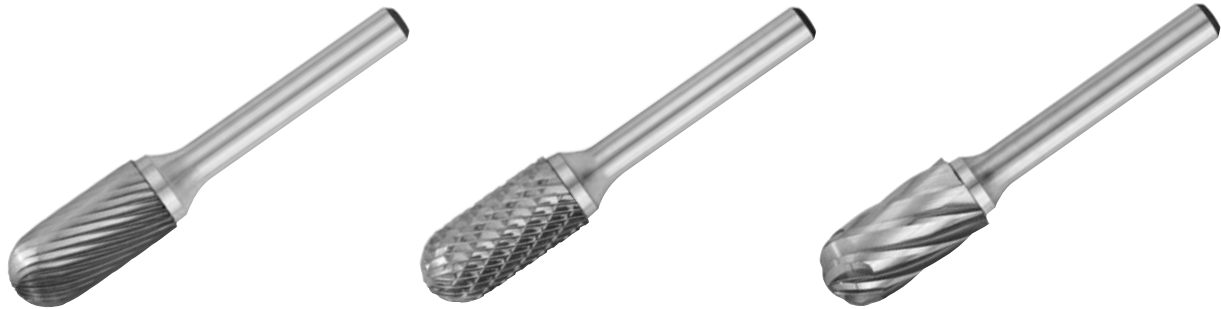
Shape B: Cylindrical - End Cut



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SB41 B51-SB41L2 B51-SB41L3 B51-SB42 B51-SB42L2 B51-SB42L3	B52-SB41 B52-SB41L2 B52-SB41L3 B52-SB42 B52-SB42L2 B52-SB42L3		SB- 41 SB-41L2 SB-41L3 SB-42 SB-42L2 SB-42L3	1/16 1/16 1/16 3/32 3/32 3/32	1/8	1/4 1/4 1/4 7/16 7/16 7/16
B51-SB11 B51-SB12 B51-SB43 B51-SB43L2 B51-SB43L3 B51-SB13 B51-SB14	B52-SB11 B52-SB12 B52-SB43 B52-SB43L2 B52-SB43L3 B52-SB13 B52-SB14		SB-11 SB-12 SB-43 SB-43L2 SB-43L3 SB-13 SB-14	1/8 1/8 1/8 1/8 1/8 5/32 3/16	1/4 1/4 1/8 1/8 1/8 1/4 1/4	1/2 5/8 9/16 9/16 9/16 5/8 5/8
B51-SB51 B51-SB1 B51-SB1L B51-SB2	B52-SB51 B52-SB1 B52-SB1L B52-SB2	B53-SB1NF	SB-51 SB-1 SB-1L SB-1NF SB-2	1/4 1/4 1/4 1/4 5/16	1/8 1/4 1/4 1/4 1/4	1/2 5/8 1 3/4 3/4
B51-SB3 B51-SB3L B51-SB3X B51-SB4	B52-SB3 B52-SB3L B52-SB3X B52-SB4	B53-SB3NF	SB-3 SB-3L SB-3NF SB-3X SB-4	3/8 3/8 3/8 3/8 7/16	1/4	3/4 1 1 1-1/2 1
B51-SB5 B51-SB6	B52-SB5 B52-SB6	B53-SB5NF B53-SB6NF	SB-5 SB-5NF SB-6 SB-6NF	1/2 1/2 5/8 5/8	1/4	1
B51-SB16 B51-SB7 B51-SB9	B52-SB16 B52-SB7 B52-SB9	B53-SB7NF	SB-16 SB-7 SB-7NF SB-9	3/4 3/4 3/4 1	1/4 1/4 1/4 1/4	3/4 1 1 1



Shape C: Cylindrical - Radius End



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SC61 B51-SC41 B51-SC11 B51-SC42 B51-SC42L2 B51-SC42L3 B51-SC12	B52-SC61 B52-SC41 B52-SC11 B52-SC42 B52-SC42L2 B52-SC42L3 B52-SC12		SC-61 SC-41 SC-11 SC-42 SC-42L2 SC-42L3 SC-12	3/32 3/32 1/8 1/8 1/8 1/8 1/8	3/32 1/8 1/4 1/8 1/8 1/8 1/4	3/8 7/16 1/2 9/16 9/16 9/16 5/8
B51-SC52 B51-SC13 B51-SC81 B51-SC53 B51-SC14	B52-SC52 B52-SC13 B52-SC81 B52-SC53 B52-SC14		SC-52 SC-13 SC-81 SC-53 SC-14	5/32 5/32 3/16 3/16 3/16	1/8 1/4 3/16 1/8 1/4	1/2 5/8 5/8 1/2 5/8
B51-SC51 B51-SC1 B51-SC1L B51-SC1L6 B51-SC2	B52-SC51 B52-SC1 B52-SC1L B52-SC1L6 B52-SC2	 B53-SC1NF	SC-51 SC-1 SC-1L SC-1L6 SC-1NF SC-2	1/4 1/4 1/4 1/4 1/4 5/16	1/8 1/4 1/4 1/4 1/4 1/4	1/2 5/8 1 1/2 3/4 3/4
B51-SC3 B51-SC3L B51-SC3L6 B51-SC3X B51-SC4	B52-SC3 B52-SC3L B52-SC3L6 B52-SC3X B52-SC4	 B53-SC3NF	SC-3 SC-3L SC-3L6 SC-3NF SC-3X SC-4	3/8 3/8 3/8 3/8 3/8 7/16	 1/4 	3/4 1 3/4 3/4 1-1/2 1
B51-SC5 B51-SC5L6 B51-SC6	B52-SC5 B52-SC5L6 B52-SC6	 B53-SC5NF B53-SC6NF	SC-5 SC-5L6 SC-5NF SC-6 SC-6NF	1/2 1/2 1/2 5/8 5/8	 1/4 	 1
B51-SC15 B51-SC16 B51-SC7 B51-SC9	B52-SC15 B52-SC16 B52-SC7 B52-SC9	 B53-SC7NF	SC-15 SC-16 SC-7 SC-7NF SC-9	3/4 3/4 3/4 3/4 1	 1/4 	1/2 3/4 1 1 1



Shape D: Ball



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SD41 B51-SD61 B51-SD11 B51-SD42 B51-SD42L2 B51-SD42L3	B52-SD41 B52-SD61 B52-SD11 B52-SD42 B52-SD42L2 B52-SD42L3		SD-41 SD-61 SD-11 SD-42 SD-42L2 SD-42L3	3/32 3/32 1/8 1/8 1/8 1/8	1/8 3/32 1/4 1/8 1/8 1/8	3/32 3/32 3/32 1/8 1/8 1/8
B51-SD52 B51-SD14 B51-SD81 B51-SD53 B51-SD1 B51-SD1L6 B51-SD51	B52-SD52 B52-SD14 B52-SD81 B52-SD53 B52-SD1 B52-SD1L6 B52-SD51	B53-SD1NF	SD-52 SD-14 SD-81 SD-53 SD-1 SD-1L6 SD-1NF SD-51	5/32 3/16 3/16 3/16 1/4 1/4 1/4 1/4	1/8 1/4 3/16 1/8 1/4 1/4 1/4 1/8	5/32 1/8 5/32 5/32 7/32 7/32 7/32 7/32
B51-SD2 B51-SD3 B51-SD3L6 B51-SD4	B52-SD2 B52-SD3 B52-SD3L6 B52-SD4	B53-SD3NF	SD-2 SD-3 SD-3L6 SD-3NF SD-4	5/16 3/8 3/8 3/8 7/16	1/4	1/4 5/16 5/16 5/16 3/8
B51-SD5 B51-SD5L6 B51-SD6	B52-SD5 B52-SD5L6 B52-SD6	B53-SD5NF B53-SD6NF	SD-5 SD-5L6 SD-5NF SD-6 SD-6NF	1/2 1/2 1/2 5/8 5/8	1/4	7/16 7/16 7/16 9/16 9/16
B51-SD7 B51-SD9	B52-SD7 B52-SD9	B53-SD7NF	SD-7 SD-7NF SD-9	3/4 3/4 1	1/4	11/16 11/16 15/16

Shape E: Oval



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SE61 B51-SE41 B51-SE41L2 B51-SE41L3	B52-SE61 B52-SE41 B52-SE41L2 B52-SE41L3		SE-61 SE-41 SE-41L2 SE-41L3	3/32 1/8 1/8 1/8	3/32 1/8 1/8 1/8	1/8 7/32 7/32 7/32
B51-SE81 B51-SE53 B51-SE11 B51-SE1 B51-SE1L6 B51-SE51	B52-SE81 B52-SE53 B52-SE11 B52-SE1 B52-SE1L6 B52-SE51		SE-81 SE-53 SE-11 SE-1 SE-1L6 SE-51	3/16 3/16 3/16 1/4 1/4 1/4	3/16 1/8 1/4 1/4 1/4 1/8	9/32 9/32 5/16 3/8 3/8 3/8
B51-SE3 B51-SE3L6 B51-SE5 B51-SE5L6	B52-SE3 B52-SE3L6 B52-SE5 B52-SE5L6	B53-SE3NF B53-SE5NF	SE-3 SE-3L6 SE-3NF SE-5 SE-5L6 SE-5NF	3/8 3/8 3/8 1/2 1/2 1/2	 1/4	5/8 5/8 5/8 7/8 7/8 7/8
B51-SE6 B51-SE7	B52-SE6 B52-SE7	B53-SE6NF B53-SE7NF	SE-6 SE-6NF SE-7 SE-7NF	5/8 5/8 3/4 3/4	 1/4	 1

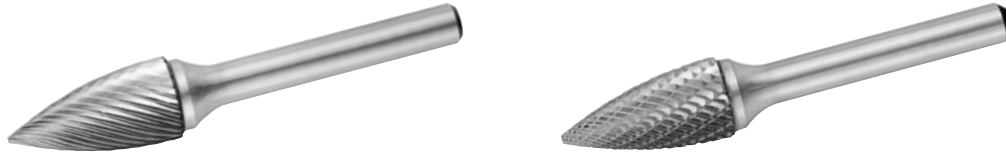
Shape F: Tree - Radius End



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SF61 B51-SF41 B51-SF11 B51-SF42 B51-SF42L2 B51-SF42L3	B52-SF61 B52-SF41 B52-SF11 B52-SF42 B52-SF42L2 B52-SF42L3		SF-61 SF-41 SF-11 SF-42 SF-42L2 SF-42L3	3/32 1/8 1/8 1/8 1/8 1/8	3/32 1/8 1/4 1/8 1/8 1/8	1/4 1/4 1/2 1/2 1/2 1/2
B51-SF81 B51-SF53 B51-SF51 B51-SF1 B51-SF1L6	B52-SF81 B52-SF53 B52-SF51 B52-SF1 B52-SF1L6	B53-SF1NF	SF-81 SF-53 SF-51 SF-1 SF-1L6 SF-1NF	3/16 3/16 1/4 1/4 1/4 1/4	3/16 1/8 1/8 1/4 1/4 1/4	1/2 1/2 1/2 3/4 1/2 3/4
B51-SF3 B51-SF3L6 B51-SF4 B51-SF13 B51-SF5 B51-SF5L6	B52-SF3 B52-SF3L6 B52-SF4 B52-SF13 B52-SF5 B52-SF5L6	B53-SF3NF B53-SF5NF	SF-3 SF-3L6 SF-3NF SF-4 SF-13 SF-5 SF-5L6 SF-5NF	3/8 3/8 3/8 7/16 1/2 1/2 1/2 1/2	1/4	3/4 3/4 3/4 1 3/4 1 1 1
B51-SF6 B51-SF7 B51-SF14 B51-SF15	B52-SF6 B52-SF7 B52-SF14 B52-SF15	B53-SF6NF B53-SF14NF	SF-6 SF-6NF SF-7 SF-14 SF-14NF SF-15	5/8 5/8 3/4 3/4 3/4 3/4	1/4	1 1 1 1-1/4 1-1/4 1-1/2

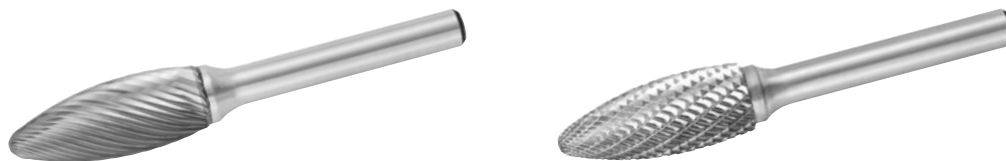


Shape G & H



Shape G: Tree - Pointed End

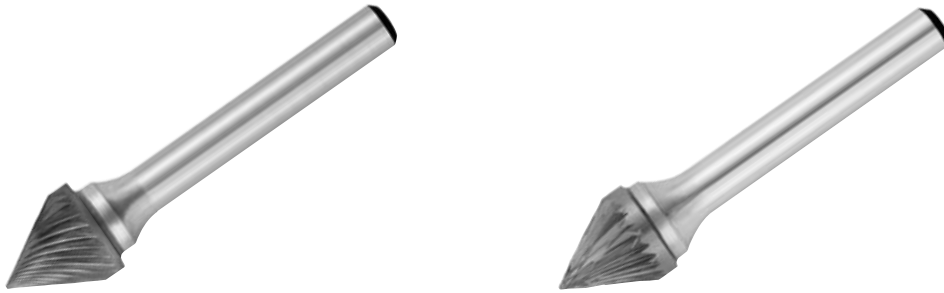
SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SG61	B52-SG61	SG-61	3/32	3/32	1/4
B51-SG41	B52-SG41	SG-41	1/8	1/8	1/4
B51-SG42	B52-SG42	SG-42	1/8	1/8	5/16
B51-SG43	B52-SG43	SG-43	1/8	1/8	3/8
B51-SG44	B52-SG44	SG-44	1/8	1/8	1/2
B51-SG44L2	B52-SG44L2	SG-44L2	1/8	1/8	1/2
B51-SG44L3	B52-SG44L3	SG-44L3	1/8	1/8	1/2
B51-SG81	B52-SG81	SG-81	3/16	3/16	1/2
B51-SG53	B52-SG53	SG-53	3/16	1/8	1/2
B51-SG1	B52-SG1	SG-1	1/4	1/4	5/8
B51-SG1L6	B52-SG1L6	SG-1L6	1/4	1/4	1/2
B51-SG51	B52-SG51	SG-51	1/4	1/8	1/2
B51-SG2	B52-SG2	SG-2	5/16	1/4	3/4
B51-SG3	B51-SG3	SG-3	3/8	1/4	3/4
B51-SG3L6	B51-SG3L6	SG-3L6	3/8		3/4
B51-SG13	B51-SG13	SG-13	1/2		3/4
B51-SG5	B51-SG5	SG-5	1/2		1
B51-SG5L6	B51-SG5L6	SG-5L6	1/2		1
B51-SG6	B51-SG6	SG-6	5/8		1
B51-SG7	B51-SG7	SG-7	3/4		1
B51-SG15	B51-SG15	SG-15	3/4		1-1/2



Shape H: Flame

SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SH41	B52-SH41	SH-41	1/8	1/8	1/4
B51-SH41L2	B52-SH41L2	SH-41L2	1/8	1/8	1/4
B51-SH41L3	B52-SH41L3	SH-41L3	1/8	1/8	1/4
B51-SH53	B52-SH53	SH-53	3/16	1/8	3/8
B51-SH1	B52-SH1	SH-1	1/4	1/4	5/8
B51-SH2	B52-SH2	SH-2	5/16	1/4	3/4
B51-SH2L6	B52-SH2L6	SH-2L6	5/16		3/4
B51-SH5	B52-SH5	SH-5	1/2		1-1/4
B51-SH5L6	B52-SH5L6	SH-5L6	1/2		1-1/4
B51-SH6	B52-SH6	SH-6	5/8		1-7/16
B51-SH7	B52-SH7	SH-7	3/4		1-5/8

Shape J & K



Shape J: 60° Cone

SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SJ42	B52-SJ42	SJ-42	1/8	1/8	3/32
B51-SJ1	B52-SJ1	SJ-1	1/4	1/4	3/16
B51-SJ3	B52-SJ3	SJ-3	3/8	1/4	5/16
B51-SJ5	B52-SJ5	SJ-5	1/2	1/4	7/16
B51-SJ6	B52-SJ6	SJ-6	5/8	1/4	9/16
B51-SJ7	B52-SJ7	SJ-7	3/4	1/4	11/16
B51-SJ9	B52-SJ9	SJ-9	1	1/4	15/16



Shape K: 90° Cone

SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT
B51-SK42	B52-SK42	SK-42	1/8	1/8	1/16
B51-SK1	B52-SK1	SK-1	1/4	1/4	1/8
B51-SK3	B52-SK3	SK-3	3/8	1/4	3/16
B51-SK5	B52-SK5	SK-5	1/2	1/4	1/4
B51-SK6	B52-SK6	SK-6	5/8	1/4	5/16
B51-SK7	B52-SK7	SK-7	3/4	1/4	3/8
B51-SK9	B52-SK9	SK-9	1	1/4	1/2



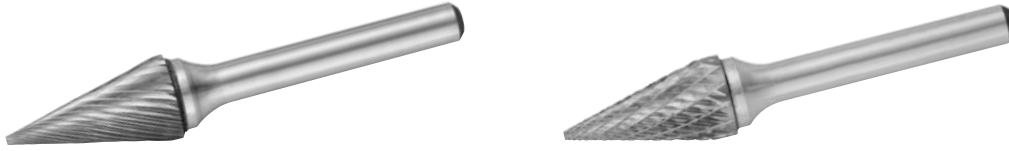
Shape L: Taper - Radius End



SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	NON-FERROUS TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT	INCLUDED OF CUT
B51-SL41 B51-SL42 B51-SL42L2 B51-SL42L3	B52-SL41 B52-SL42 B52-SL42L2 B52-SL42L3		SL-41 SL-42 SL-42L2 SL-42L3	1/8	1/8	3/8 1/2 1/2 1/2	8°
B51-SL81 B51-SL53 B51-SL1 B51-SL1L6 B51-SL2	B52-SL81 B52-SL53 B52-SL1 B52-SL1L6 B52-SL2		SL-81 SL-53 SL-1 SL-1L6 SL-2	3/16 3/16 1/4 1/4 5/16	3/16 1/8 1/4 1/4 1/4	7/16 1/2 5/8 5/8 7/8	14°
B51-SL3 B51-SL3L6 B51-SL4 B51-SL4L6	B52-SL3 B52-SL3L6 B52-SL4 B52-SL4L6	B53-SL3NF B53-SL4NF	SL-3 SL-3L6 SL-3NF SL-4 SL-4L6 SL-4NF	3/8 3/8 3/8 1/2 1/2 1/2	1/4	1-1/16 1-1/16 1-1/16 1-1/8 1-1/8 1-1/8	14°
B51-SL5 B51-SL6 B51-SL7	B52-SL5 B52-SL6 B52-SL7	B53-SL5NF B53-SL6NF B53-SL7NF	SL-5 SL-5NF SL-6 SL-6NF SL-7 SL-7NF	5/8 5/8 5/8 5/8 3/4 3/4	1/4	1-3/16 1-3/16 1-5/16 1-5/16 1-1/2 1-1/2	14°

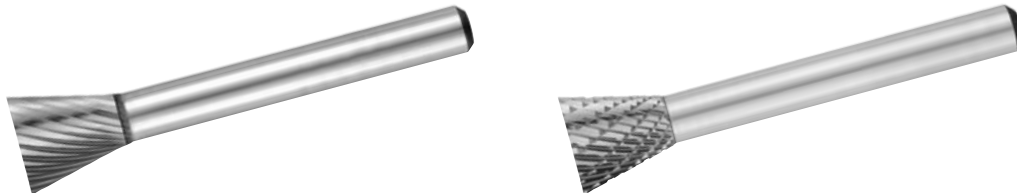


Shape M & N



Shape M: Cone - Pointed End

SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT	INCLUDED OF CUT
B51-SM61	B52-SM61	SM-61	3/32	3/32	1/4	10°
B51-SM41	B52-SM41	SM-41	1/8	1/8	11/32	12°
B51-SM42	B52-SM42	SM-42	1/8	1/8	7/16	14°
B51-SM42L2	B52-SM42L2	SM-42L2	1/8	1/8	7/16	14°
B51-SM42L3	B52-SM42L3	SM-42L3	1/8	1/8	7/16	14°
B51-SM43	B52-SM43	SM-43	1/8	1/8	5/8	7°
B51-SM53	B52-SM53	SM-53	3/16	1/8	1/2	16°
B51-SM1	B52-SM1	SM-1	1/4	1/4	1/2	22°
B51-SM51	B52-SM51	SM-51	1/4	1/8	1/2	22°
B51-SM2	B52-SM2	SM-2	1/4	1/4	3/4	14°
B51-SM3	B52-SM3	SM-3	1/4	1/4	1	10°
B51-SM4	B52-SM4	SM-4	3/8	1/4	5/8	28°
B51-SM5	B52-SM5	SM-5	1/2	1/4	4/8	28°
B51-SM6	B52-SM6	SM-6	5/8	1/4	1	31°



Shape N: Cone - Inverted

SINGLE CUT TOOL NO.	DOUBLE CUT TOOL NO.	SHAPE NUMBER	CUTTING DIAMETER	SHANK DIAMETER	LENGTH OF CUT	INCLUDED OF CUT
B51-SN41	B52-SN41	SN-41	3/32	1/8	1/8	10°
B51-SN61	B52-SN61	SN-61	3/32	3/32	1/8	
B51-SN42	B52-SN42	SN-42	1/8	1/8	3/16	
B51-SN81	B52-SN81	SN-81	3/16	3/16	1/4	
B51-SN53	B52-SN53	SN-53	3/16	1/8	1/4	
B51-SN51	B52-SN51	SN-51	1/4	1/8	1/4	10°
B51-SN1	B52-SN1	SN-1	1/4	1/4	5/16	10°
B51-SN2	B52-SN2	SN-2	3/8	1/4	3/8	13°
B51-SN4	B52-SN4	SN-4	1/2	1/4	1/2	28°
B51-SN6	B52-SN6	SN-6	5/8	1/4	3/4	18°
B51-SN7	B52-SN7	SN-7	3/4	1/4	5/8	30°