



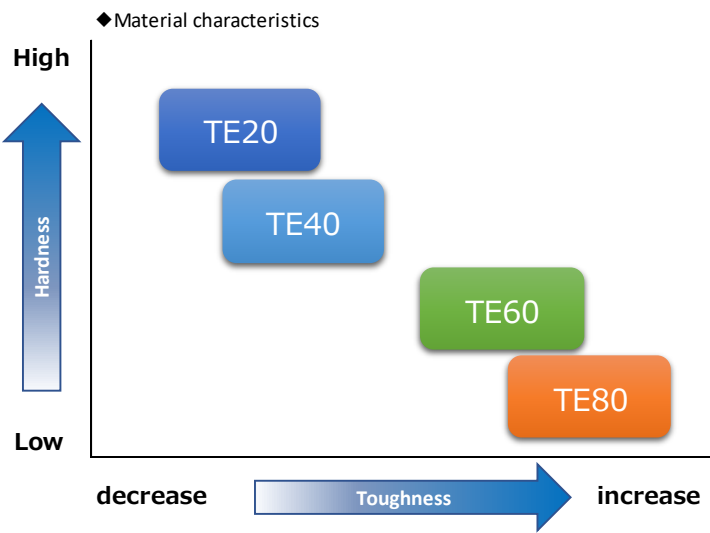
NIHON HARDMETAL CO.,LTD.

Civil engineering General Catalog

Orders and Inquiries
TEL 0954-23-9151

◆List of materials we handle

Recommended use	分類	材種名
For bedrock	E3	TE20
For bedrock	E4	TE40
General use	E5	TE60
For boulders ・Obstacle	E6	TE80



● Base inventory

Nnnumber	Productspecifications	W	Outside:S Center:N Inside:U	Materials					Drg No.	Item number
				TE20	TE40	TE60	TE80	S45CH		
GRN-A1	Earth augers	16	E-16KI			●		●	E-1387	SY97-116-4023
GRN-A2	welding	20	E-20CI			●		●	E-1433	SY97-116-2001
GRN-A3		25	E-25F			●		●	E-0800	SY97-116-1028
GRN-B1	Flat Blade:F	30	E-30K			●		●	E-1435	SY97-116-1008
GRN-B2	Sword tip Blade:K		E-30FY-Ⅱ			●		●	E-1483	E-1483
GRN-B3			E-30FY-Ⅲ			●		●	E-1484	E-1484
GRN-B4			E-30ZUH		●			●	E-0705	SY97-115-1125
GRN-C1		40	E-40K			●		●	E-1158	SY97-116-1019
GRN-C2			E-40KIY (R)			●		●	E-3391	E-3391
GRN-C3			E-40F			●		●	E-1157	SY97-116-1011
GRN-C4			E-40FH 70L			●		●	E-2152	SY97-116-1129
GRN-C5		50	E-40FY-Ⅱ			●		●	E-1485	E-1485
GRN-C6			E-40FY-Ⅲ			●		●	E-1486	E-1486
GRN-D1			E-50K			●		●	E-1453	SY97-116-1039
GRN-D2			E-50KS			●		●	E-2987	E-2987
GRN-D3		50	E-50KI			●		●	E-1454	SY97-116-1047-1
GRN-D4			E-50KIY-R			●		●	E-1322	SY97-116-1054
GRN-D5			E-50KIY-L			●		●	E-1522	SY97-116-1053
GRN-D6			E-50KW			●		●	E-1235	SY97-116-1040
GRN-D7			E-50F			●		●	E-1391	SY97-116-1026
GRN-D8			E-50FS			●		●	E-1481	SY97-116-1035
GRN-D9			E-50FYC-R			●		●	E-0862	SY97-116-1038
GRN-D10			E-50FYC-L			●		●	E-1668	SY97-116-1041
GRN-D11			E-50FSY(Normal)			●		●	E-1482	SY97-116-1034
GRN-D12	※Ultra Bit		350A-TS-Y			●		●	E-1651	SY97-116-5005
GRN-D13			450A-TS-Y			●		●	E-1653	SY97-116-5012
GRN-D14			550A-TS-Y			●		●	E-1655	SY97-116-5019
GRN-E1	Holder use	60	E-60K			●		●	E-1159	SY97-116-1072
GRN-E2			E-60F			●		●	E-1155	SY97-116-1070
GRN-F1		70	E-70K			●		●	E-1160	SY97-116-1077
GRN-F2			E-70F			●		●	E-1131	SY97-116-1074
GRN-G1		80	E-80K			●		●	E-1161	SY97-116-1082
GRN-G2			E-80F					●	E-1156	SY97-116-1080
GRN-H1		50Holder use	H-50/D (Holder)					●	E-B0214	SY97-953-1127
GRN-H2			EH-50K/D(Normal)			●		●	E-1413	SY97-116-1086
GRN-H3			EH-50F/D(Normal)			●		●	E-1410	SY97-116-1087
GRN-I1		60Holder use	H-60/D (Holder)					●	E-B0443	SY97-953-1119
GRN-I2			EH-60K/D(Normal)			●		●	E-1414	SY97-116-1100
GRN-I3			EH-60F/D(Normal)			●		●	E-1411	SY97-116-1092
GRN-J1			H-60/N (Holder)					●	E-B0444	SY97-953-1120
GRN-J2			EH-60K/N(Normal)			●		●	E-1415	SY97-116-1105
GRN-J3			EH-60F/N(Normal)			●		●	E-1412	SY97-116-1095
GRN-K1			80Holder use	H-80/D (Holder)					●	E-B0445
GRN-K2		EH-80K/D(Normal)				●		●	E-1424	SY97-116-1112
GRN-L1		H-80/N (Holder)						●	E-B0446	SY97-953-1126
GRN-L2		EH-80K/N(Normal)				●		●	E-1425	SY97-116-1115
GRN-L3		EH-80F/D(Normal)				●		●	E-1421	SY97-116-1110
GRN-L4		EH-80F/N(Normal)				●		●	E-1422	SY97-116-1111

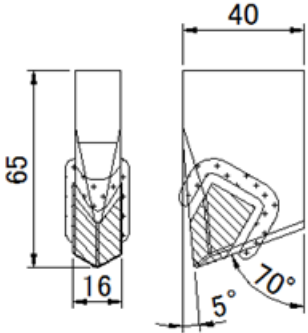
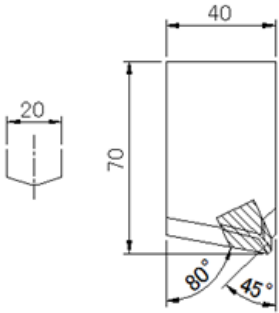
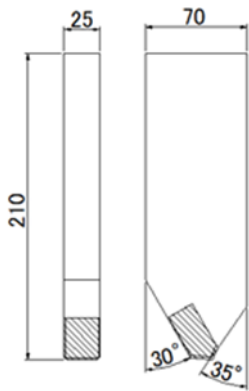
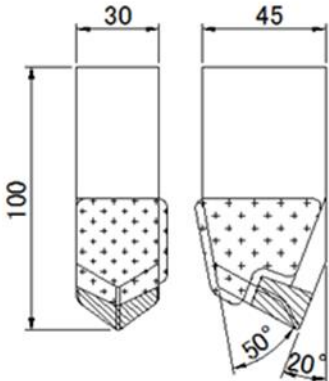
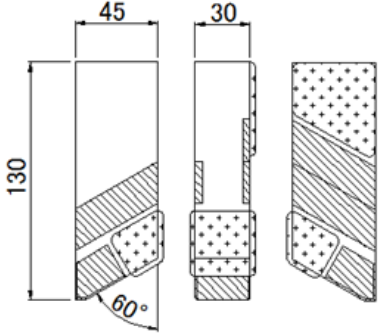
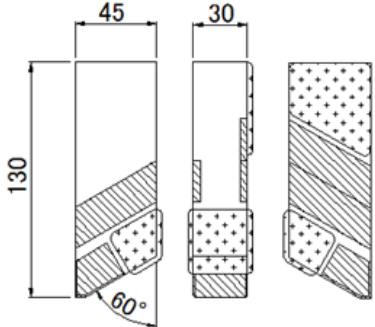
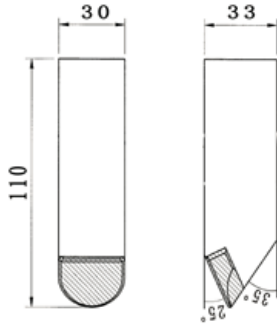
● Base inventory

Nnnumber	Product specifications	W	Outside:S Center:N Inside:U	Materials					Drg No.	Item number	
				TE20	TE40	TE60	TE80	SCM 440			
BLU-A1	Casings welding	22	C-22C			●		●	E-1229	SY97-116-2002	
BLU-B1		40	C-40K/N			●		●	E-1175	SY97-116-2022	
BLU-B2	Holder use		C-40KRS/LU			●		●	E-1987	SY97-116-2148	
BLU-B3			C-40KLS/RU			●		●	E-1988	SY97-116-2035	
BLU-C1		40Holder use	CH-40 (Holder)					●※H	E-B0974	SY97-951-1117	
BLU-D1		CH-40KRS-B-TA80			●		●	E-1779	SY97-116-2144		
BLU-D2		CH-40KRN-B			●		●	E-2199	SY97-116-2094		
BLU-D3		CH-40KRU-B-TA80			●		●	E-1780	SY97-116-2145		
BLU-D4		CH-40KLS-B-TA80			●		●	E-1782	SY97-116-2141		
BLU-D5		CH-40KLN-B			●		●	E-1589	SY97-116-2073		
BLU-D6		CH-40KLU-B-TA80			●		●	E-1781	SY97-116-2142		
BLU-D7		CH-40KILS-B-SE			●		●	E-3278	E-3278		
BLU-D8		CH-40KILU-B-SE			●		●	E-3277	E-3277		
BLU-D9		CH-40KIRS-B-SE		●				●	E-2875	E-2875-TE20	
					●			●	E-2875	E-2875-TE40	
						●		●	E-2875	E-2875-TE80	
					●		●	E-2875	E-2875		
BLU-D10	CH-40KIRN-B-SE			●			●	E-2893	E-2893-TE40		
					●		●	E-2893	E-2893		
BLU-D11	CH-40KIRU-B-SE		●				●	E-2876	E-2876-TE20		
				●			●	E-2876	E-2876-TE40		
					●		●	E-2876	E-2876		
BLU-D12	CH-40KIRS-B-SE05				●		●	E-2876	E-2876-TE80		
BLU-D13	CH-40KILS-B-CE				●		●	E-2878	E-2878		
BLU-D14	CH-40KILN-B-CE					●	●	E-3479	E-3479		
BLU-D15	CH-40KILU-B-CE					●	●	E-3479	E-3479-TE80		
BLU-D16	CH-40KIRS-B-CE					●		●	E-3480	E-3480	
						●		●	E-3478	E-3478	
						●		●	E-3478	E-3478-TE80	
BLU-D17	CH-40KIRN-B-CE		●				●	E-2871	E-2871-TE20		
				●			●	E-2871	E-2871-TE40		
					●		●	E-2871	E-2871		
BLU-D18	CH-40KIRU-B-CE					●		●	E-2871	E-2871-TE80	
						●		●	E-3480	E-3480	
			●				●	E-2872	E-2872-TE20		
BLU-D19	CH-40KIRS(146L)			●			●	E-2872	E-2872-TE40		
					●		●	E-2872	E-2872		
					●		●	E-2872	E-2872-TE80		
BLU-D20	CH-40KIRN(146L)				●		●	E-3142	E-3142		
BLU-D21	CH-40KIRU(146L)				●		●	E-3144	E-3144		
BLU-D22	CH-40KIRS(171L)				●		●	E-3143	E-3143		
BLU-D23	CH-40KIRN(171L)				●		●	E-3111	E-3111		
BLU-D24	CH-40KIRU(171L)				●		●	E-3113	E-3113		
BLU-D25	CH-40KIRS (H-Protective tip)					●		●	E-3112	E-3112	
BLU-D26	CH-40KIRS (52.3/5°)				●			●	E-3605	E-3605	
BLU-D27	CH-40KIRU (52.3/5°)				●			●	E-1982	E-1982	
BLU-D28	CH-45KIRS-B							●	E-1983	E-1983	
								●	E-1726-2	SY97-116-2119	
								●	E-1726-3	SY97-116-2119	
BLU-D29	CH-45KIRU-B			●				●	E-2442-2	SY97-116-2120	
					●			●	E-2442-3	SY97-116-2120	
BLU-D30	MH-40KIN				●			●	E-3402	E-3402	
BLU-D31	MH-40KINW						●	●	E-3087	E-3087	
BLU-D32	MH-45KIN				●			●	E-3241	E-3241	
BLU-D33	MH-40BRS				●			●	E-3013-2	E-3013	
						●		●	E-3013-3	E-3013	
BLU-D34	MH-40BRN					●		●	E-3476-3	E-3476	
							●		●	E-3476-4	E-3476
BLU-D35	MH-40BRU				●			●	E-3012-2	E-3012	
BLU-E1	45Holder use		CH-45 (Holder)					●	E-3012-3	E-3012	
			CH-45KIRS-B-CE					●	E-B1746	E-B1746	
			CH-45KIRN-B-CE				●		●	E-3644	E-3644
			CH-45KIRU-B-CE				●		●	E-3646	E-3646
BLU-F1	50Holder use		CH-50 (Holder)					●	E-3645	E-3645	
CH-50KIRS-B-CE							●	E-B2523	E-B2523		
CH-50KIRN-B-CE						●		●	E-3555	E-3555	
CH-50KIRU-B-CE						●		●	E-3557	E-3557	
BLU-H1	BLU-H2		CH-50KIRS-B-A-CE					●	E-3556	E-3556	
BLU-H3			CH-55KIRS-B-A-CE				●		●	E-3065	E-3065
BLU-H4			CH-55KIRN-B-CE				●		●	E-3067	E-3067
BLU-H5			CH-55KIRU-B-A-CE				●		●	E-3066	E-3066
BLU-H6			CH-55KIRS-B-A-CE				●		●	E-3066	E-3066
BLU-H6			CH-55KIRN-B-A-CE				●		●	E-3066	E-3066

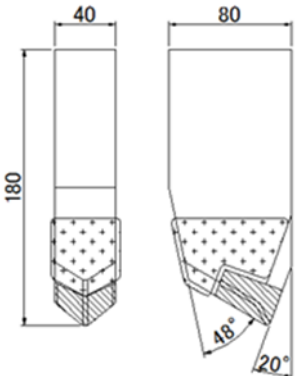
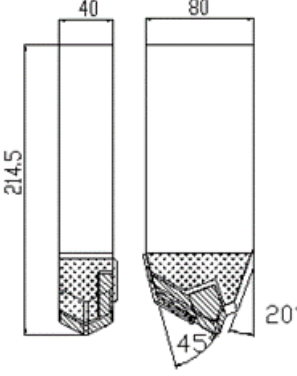
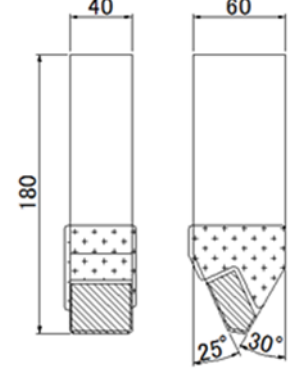
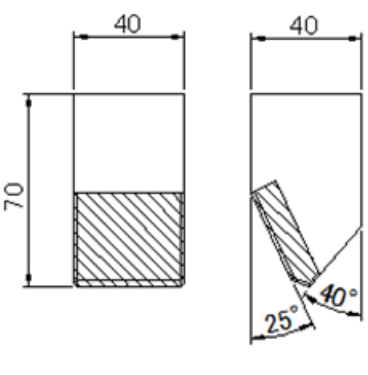
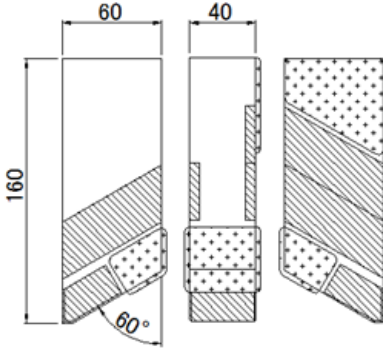
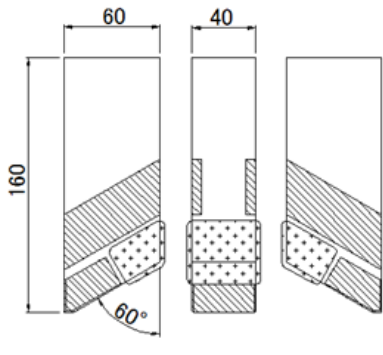
● Base inventory

Nmber	Product specifications	W	Outside:S Center:N Inside:U	Materials						Drg No.	Item number
				TE20	TE40	TE60	U3B	SCM 440	S45 CH		
YEL-A1	Inner bit	25	C-25KIRN			●				E-3327	E-3327
YEL-B1	welding	30	C-30KIRN			●				E-3328	E-3328
YEL-C1	Sword tip Blade:K	40	C-40K/RS			●			●	E-2664	SY97-116-2126
YEL-C2			C-40K/RN			●			●	E-2662	SY97-116-2124
YEL-C3			C-40K/RU			●			●	E-2660	SY97-116-2125
YEL-D1		50	C-50KIRS			●			●	E-3651	E-3651
YEL-D2			C-50KIRN			●			●	E-3650	E-3650
YEL-D3			C-50KIRU			●			●	E-3652	E-3652
YEL-E1		60	C-60K/RS			●			●	E-2901	E-2901
YEL-E2			C-60K/RN			●				E-2255	E-2255
YEL-E3			C-60K/RU			●				E-3050	E-3050
YEL-E4			C-60KIRS			●				E-3309	E-3309
YEL-E5			C-60KIRN			●				E-3189	E-3189
YEL-E6			C-60KIRU			●				E-3310	E-3310
YEL-F1		80	C-80K/RS			●			●	E-2902	E-2902
YEL-F2			C-80K/RN			●				E-2908	E-2908
YEL-F3			C-80K/RU			●				E-20200326-1	E-20200326-1
YEL-F4			C-80KIRS			●				E-3311	E-3311
YEL-F5			C-80KIRN			●				E-3195	E-3195
YEL-F6			C-80KIRU			●				E-3312	E-3312
YEL-G1		100	C-100KIRS			●				E-3649	E-3649
YEL-G2			C-100KIRN			●				E-20200326-2	E-20200326-2
YEL-G3			C-100KIRU			●				E-3648	E-3648
WHT-A1	Conical		φ50-φ30			●		●		E-3088	E-3088-TE60
WHT-A2	Conical	Holder	Conical H (φ30)					●		E-B1739	E-B1739
WHT-A3	Holder	Holder	Concal HO (φ30)					●		E-B2680	E-B2680
WHT-B1	TRD		25K-80L			●			●	E-2335	E-2335
WHT-B2	welding		25K-100L			●			●	E-2337	E-2337
WHT-B3	Sword tip Blade:K		25K-120L			●			●	E-2339	E-2339
WHT-C1	For bottom enlarged bucket		46-54-20			●			●	E-20191209	E-20191209
WHT-C2	welding		60-60-25			●			●	E-191209	E-191209
WHT-D1	Anti-abrasion plates Pin plates		ピンプレート 50-20-9				●			E-1180	SY97-301-0003
WHT-D2			ピンプレート 50-30-9				●			E-1179	SY97-301-0007
WHT-D3			ピンプレート 50-40-9				●			E-1178	SY97-301-0009
WHT-D4			ピンプレート 50-50-9				●			E-1177	SY97-301-0011
WHT-E1	Build-up plate		1000-50-10						●	E-2019025-1	E-2019025-1

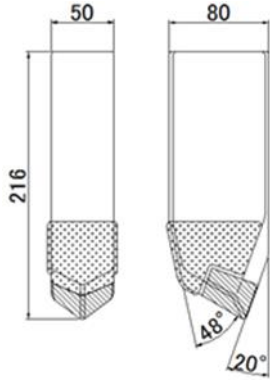
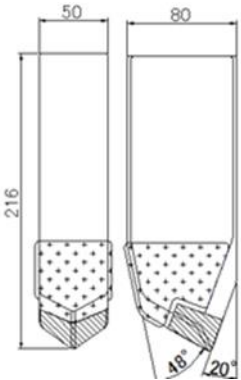
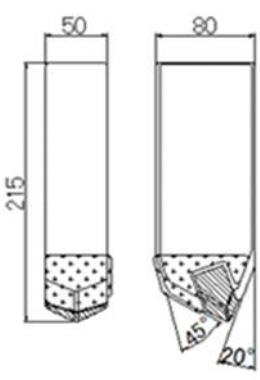
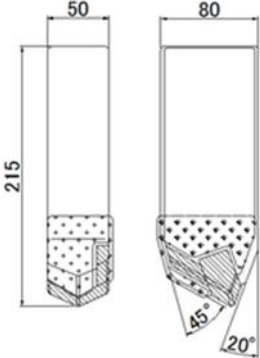
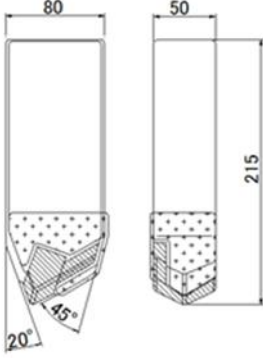
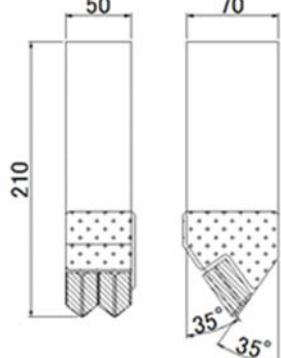
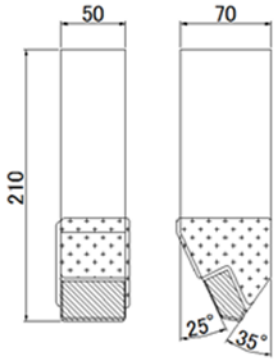
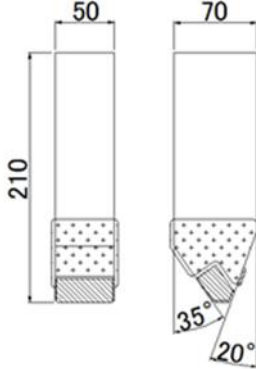
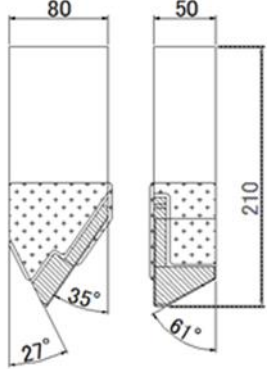
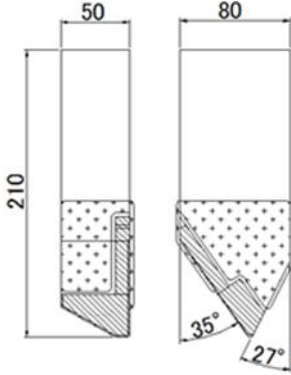
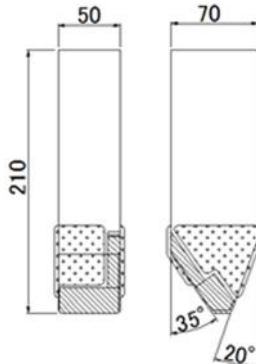
Earth augers (welding)

W 16 · 20 · 25						
	E-16KI	GRN-A1	E-20CI	GRN-A2	E-25F	GRN-A3
W 30						
	E-30K	GRN-B1	E-30FY- II	GRN-B2	E-30FY- III	GRN-B3
W 30						
	E-30ZUH	GRN-B4				

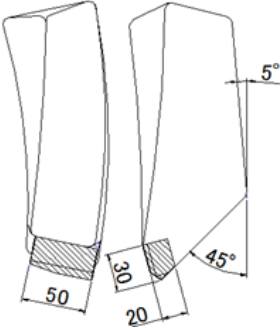
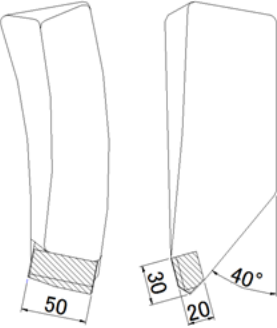
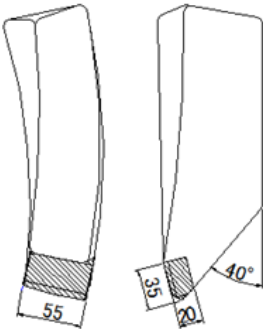
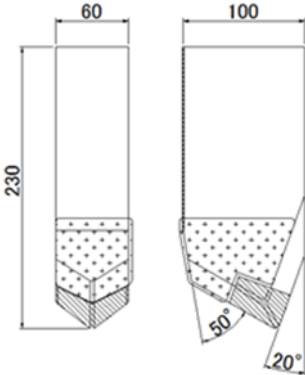
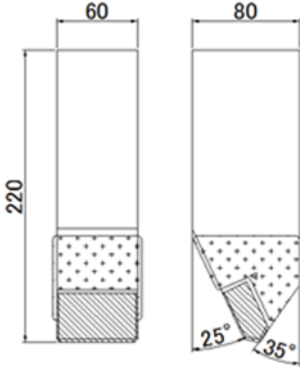
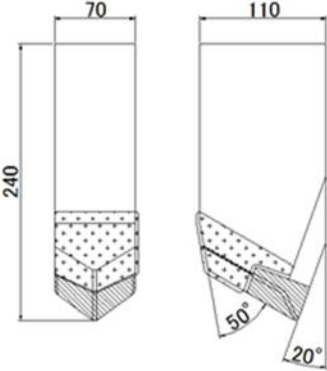
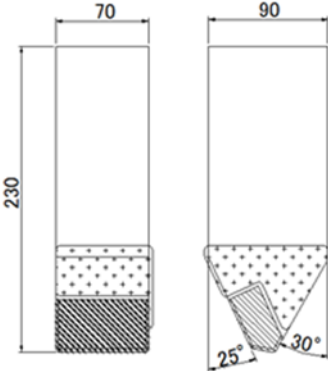
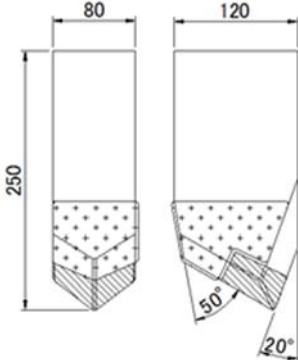
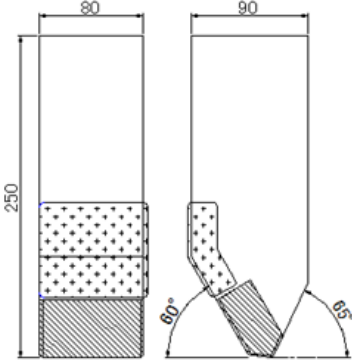
Earth augers (welding)

W 40				
	E-40K	GRN-C1	E-40KIY (R)	GRN-C2
W 40				
	E-40F	GRN-C3	E-40FH 70L	GRN-C4
W 40				
	E-40FY-II	GRN-C5	E-40FY-III	GRN-C6

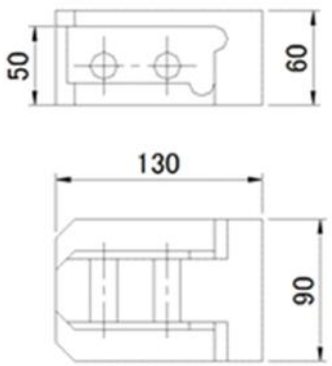
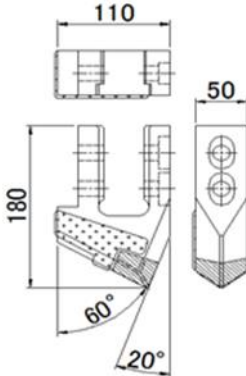
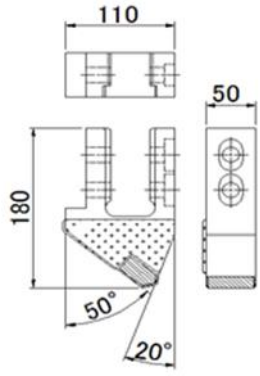
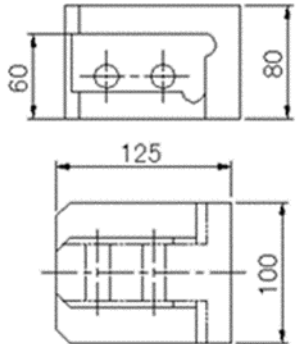
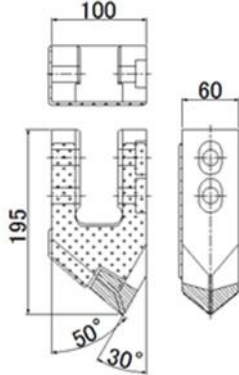
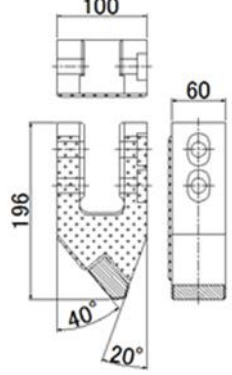
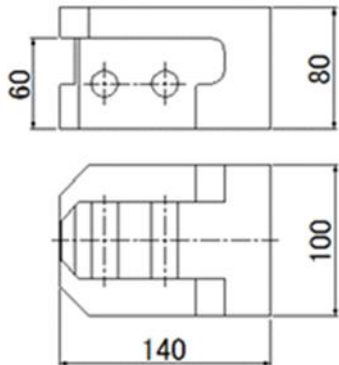
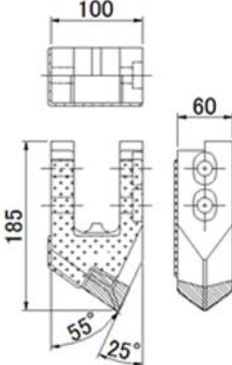
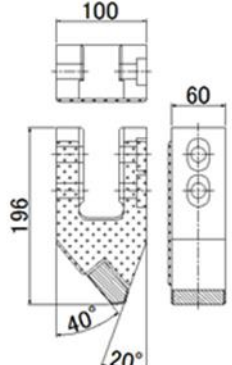
Earth augers (welding)

W 50						
	E-50K	GRN-D1	E-50KS	GRN-D2	E-50KI	GRN-D3
W 50						
	E-50KIY-R	GRN-D4	E-50KIY-L	GRN-D5	E-50KW	GRN-D6
W 50						
	E-50F	GRN-D7	E-50FS	GRN-D8	E-50FYC-R	GRN-D9
W 50						
	E-50FYC-L	GRN-D10	E-50FSY (Normal)	GRN-D11		

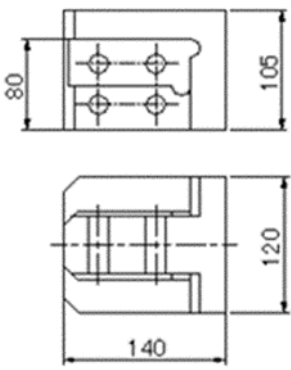
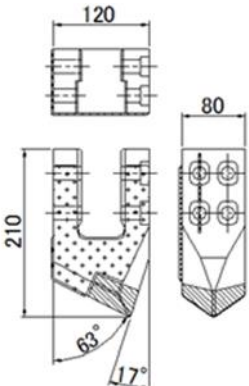
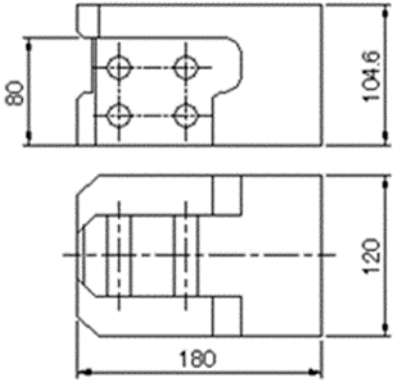
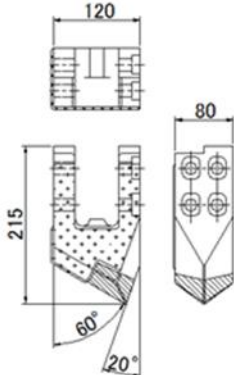
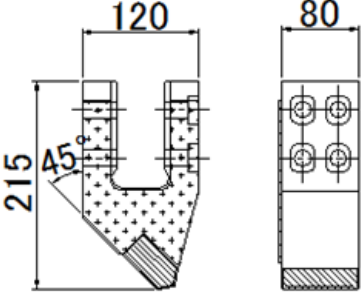
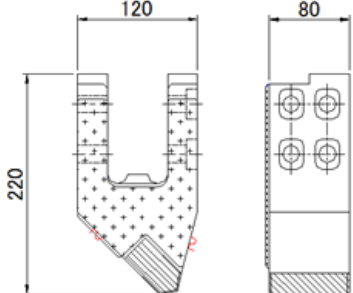
Earth augers (welding)

W 50 • 55	Ultra Bit 		Ultra Bit 		Ultra Bit 	
	350A-TS-Y	GRN-D12	450A-TS-Y	GRN-D13	550A-TS-Y	GRN-D14
W 60						
	E-60K	GRN-E1	E-60F	GRN-E2		
W 70						
	E-70K	GRN-F1	E-70F	GRN-F2		
W 80						
	E-80K	GRN-G1	E-80F	GRN-G2		

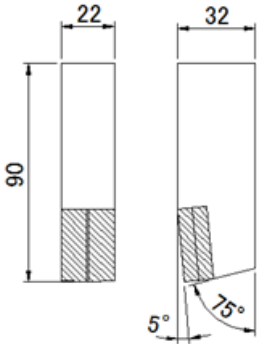
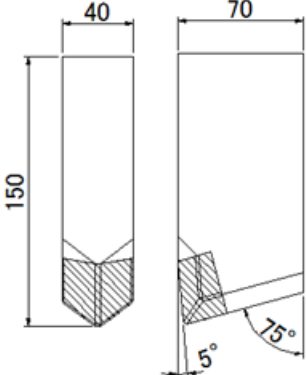
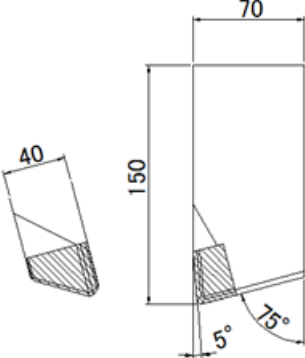
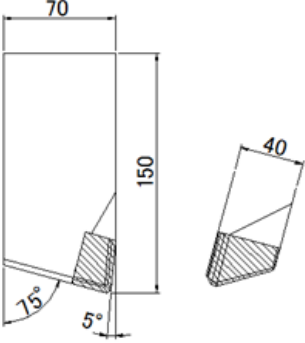
Earth augers (Holder use)

W 50						
	H-50/D	GRN-H1	EH-50K/D (Normal)	GRN-H2	EH-50F/D (Normal)	GRN-H3
W 60						
	H-60/D	GRN-I1	EH-60K/D (Normal)	GRN-I2	EH-60F/D (Normal)	GRN-I3
W 60						
	H-60/N	GRN-J1	EH-60K/N (Normal)	GRN-J2	EH-60F/N (Normal)	GRN-J3

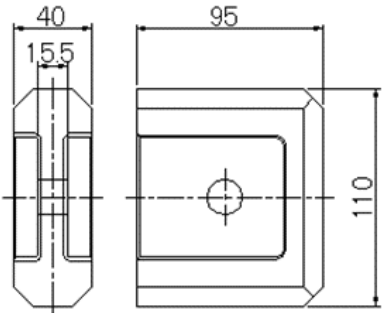
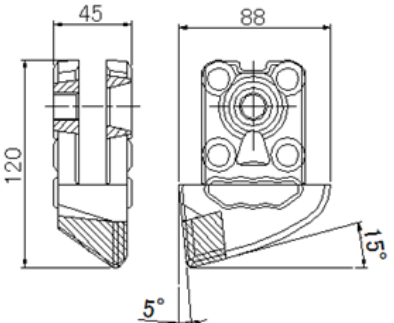
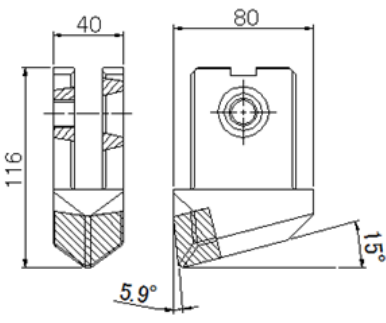
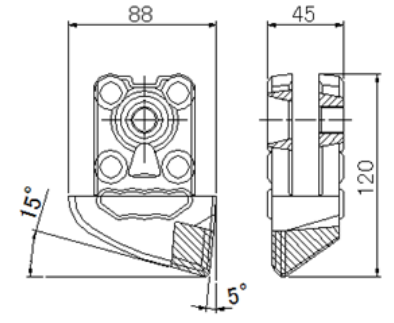
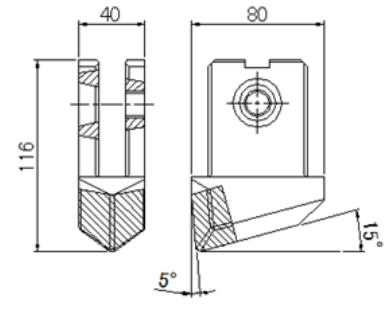
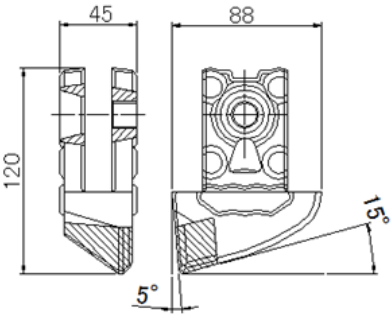
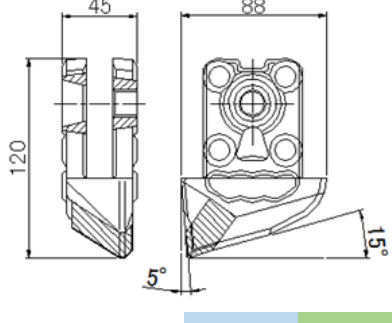
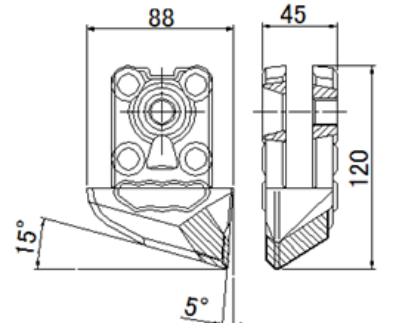
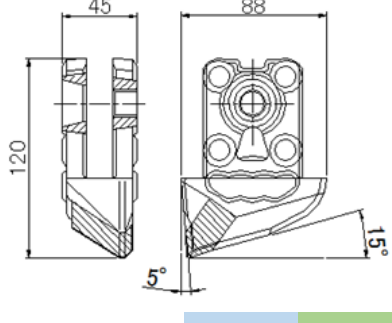
Earth augers （Holder use）

W 80					
	H-80/D	GRN-K1	EH-80K/D (Normal)	GRN-K2	
W 80					
	H-80/N	GRN-L1	EH-80K/N (Normal)	GRN-L2	EH-80F/D (Normal) GRN-L3
W 80					
			EH-80F/N (Normal)	GRN-L4	

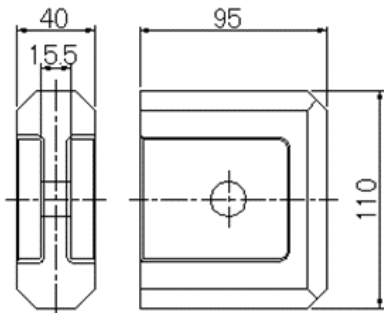
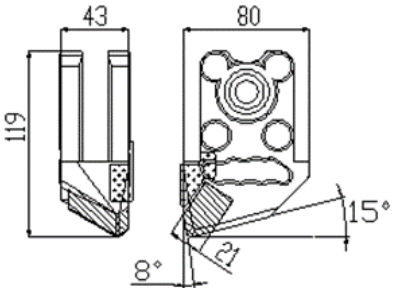
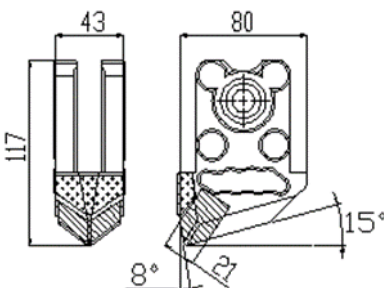
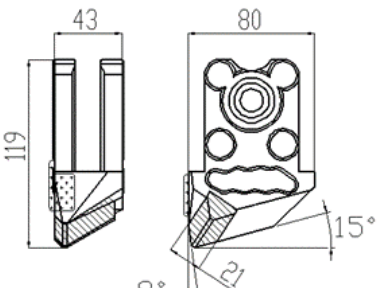
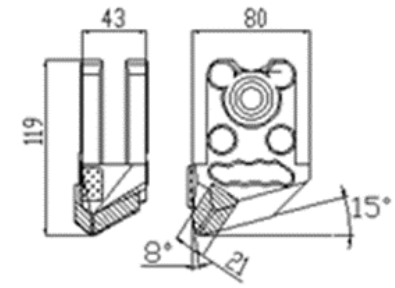
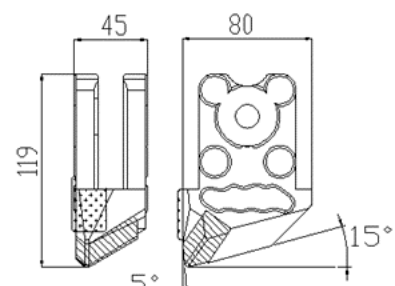
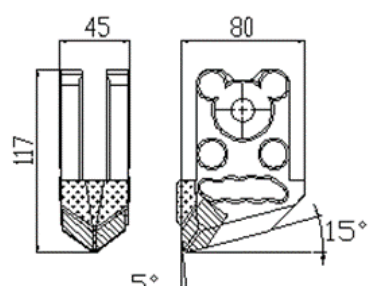
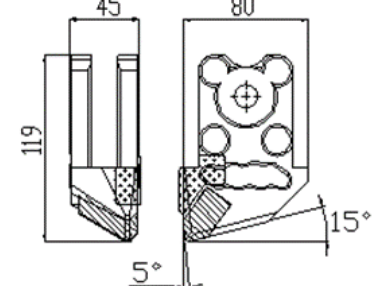
Casing bit (welding)

W 22			
C-22C	BLU-A1		
W 40			
C-40K/N	BLU-B1		
W 40			
C-40KRS/LU	BLU-B2	C-40KLS/RU	BLU-B3

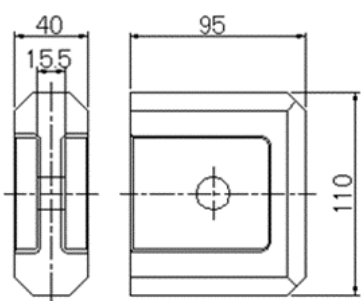
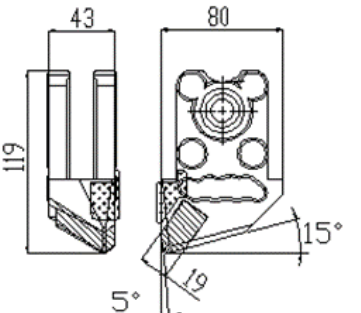
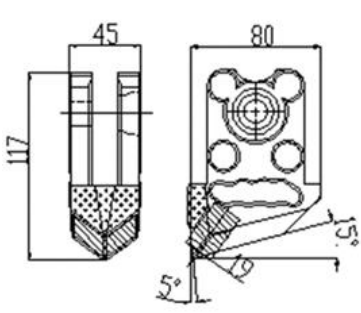
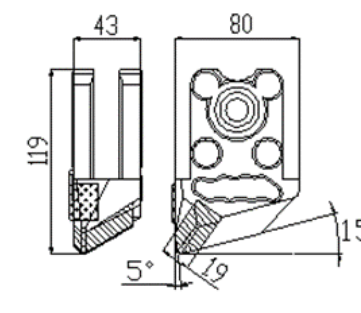
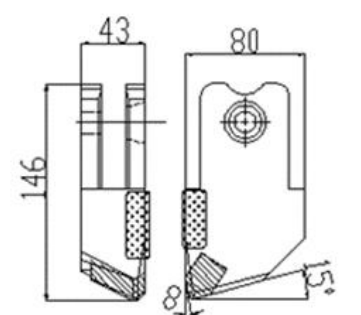
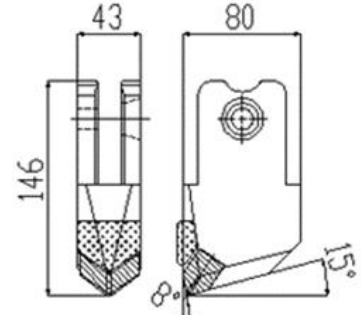
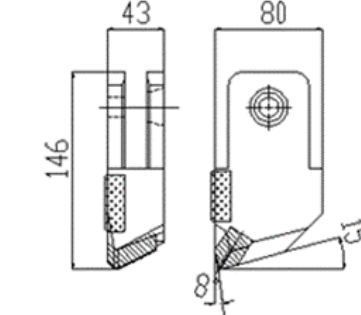
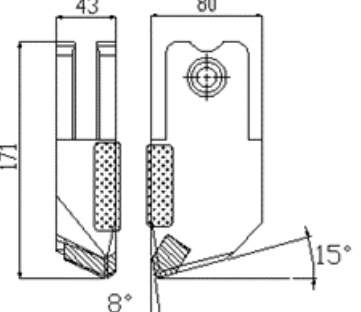
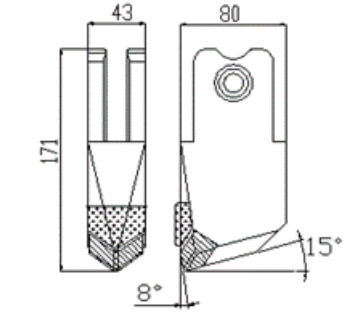
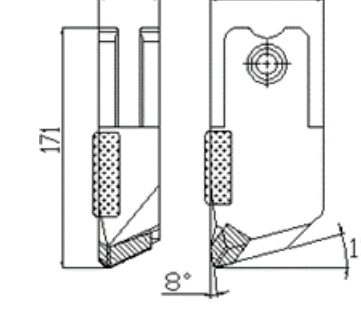
Casing bit W40 (Holder use)

W 40				
	CH-40	BLU-C1		
W 40	 NormalOutside		 NormalCenter	
	CH-40KRS-B-TA80	BLU-D1	CH-40KRN-B	BLU-D2
W 40	 ReversOutside		 ReversCenter	
	CH-40KLS-B-TA80	BLU-D4	CH-40KLN-B	BLU-D5
W 40	 ReversInside		 ReversInside	
	CH-40KRU-B-TA80	BLU-D3	CH-40KLU-B-TA80	BLU-D6
W 40 SE	 ReversOutside		 ReversInside	
	CH-40KILS-B-SE	BLU-D7	CH-40KILU-B-SE	BLU-D8

Casing bit W40 (Holder use)

W 40					
	CH-40	BLU-C1			
W 40 SE			Normal	Outside	
	CH-40KIRS-B-SE	BLU-D9		Normal	Center
				Normal	Inside
	CH-40KIRU-B-SE	BLU-D11			
W 40 SE			Tip width 45	Normal	Inside
	CH-40KIRU-B-SE05	BLU-D12			
W 40 CE			Revers	Outside	
	CH-40KILS-B-CE	BLU-D13		Revers	Center
				Revers	Inside
	CH-40KILU-B-CE	BLU-D15			

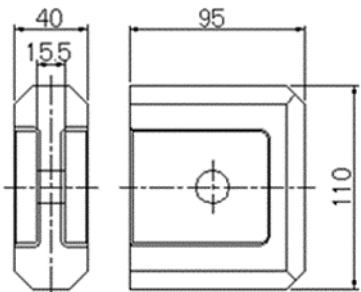
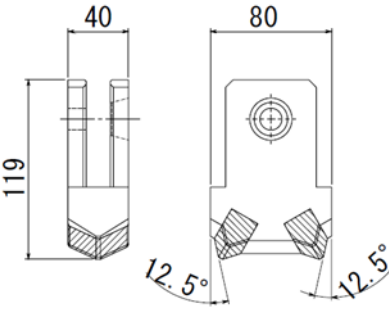
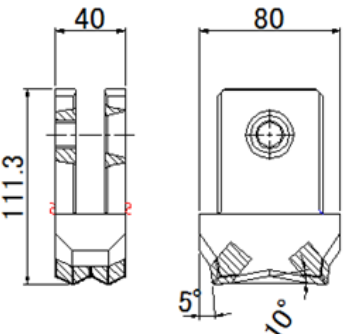
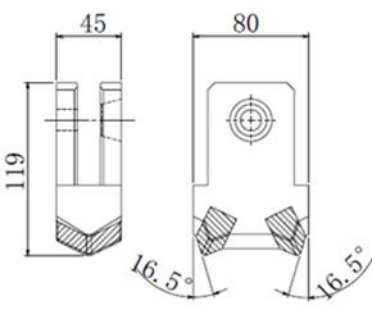
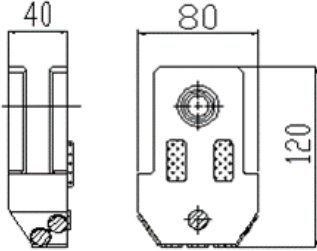
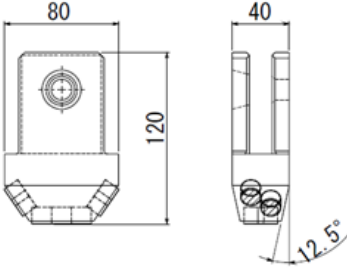
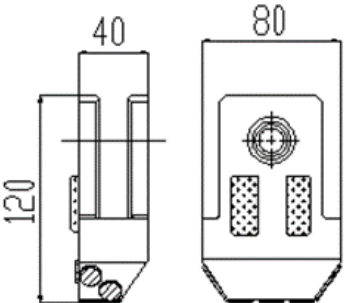
Casing bit W40 (Holder use)

W 40			
	CH-40	BLU-C1	
W 40 CE			
		Normal Outside	
	CH-40KIRS-B-CE	BLU-D16	
			
		Normal Center	
	CH-40KIRN-B-CE	BLU-D17	
			
		Normal Inside	
	CH-40KIRU-B-CE	BLU-D18	
W 40			
		Normal Outside	
	CH-40KIRS (146L)	BLU-D19	
			
		Normal Center	
	CH-40KIRN (146L)	BLU-D20	
			
		Normal Inside	
	CH-40KIRU (146L)	BLU-D21	
W 40			
		Normal Outside	
	CH-40KIRS (171L)	BLU-D22	
			
		Normal Center	
	CH-40KIRN (171L)	BLU-D23	
			
		Normal Inside	
	CH-40KIRU (171L)	BLU-D24	

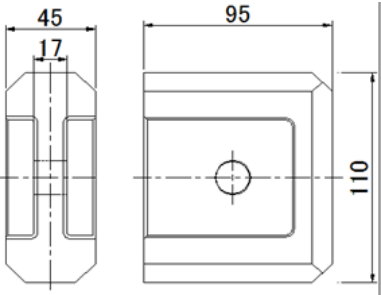
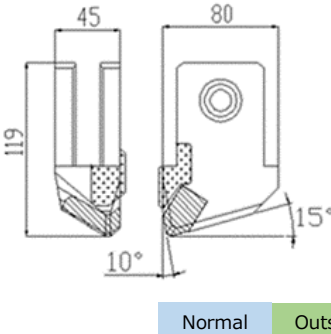
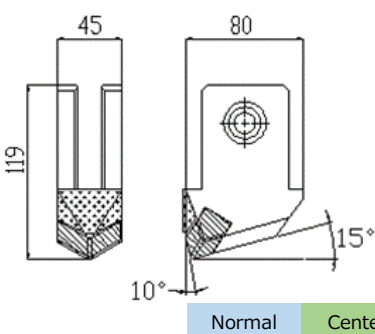
Casing bit W40 (Holder use)

W 40			
CH-40	BLU-C1		
W 40	H-Protective tip		
CH-40KIRS	BLU-D25		
W 40			
52. 3/5°	Normal Outside	52. 3/5°	Normal Inside
CH-40KIRS	BLU-D26	CH-40KIRU	BLU-D27
W 40			
Tip width 45	Normal Outside	Tip width 45	Normal Inside
CH-45KIRS-B	BLU-D28	CH-45KIRU-B	BLU-D29

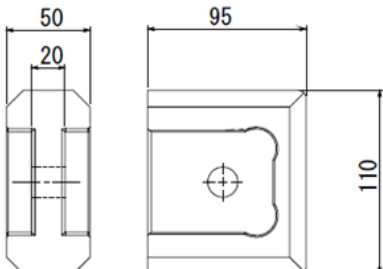
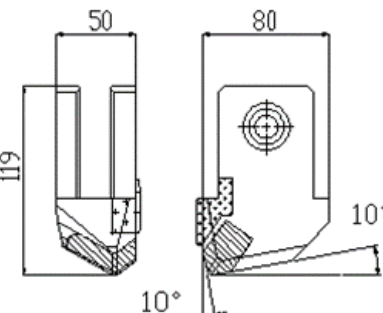
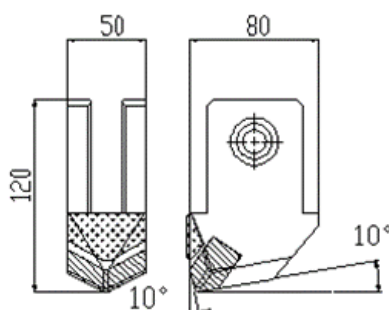
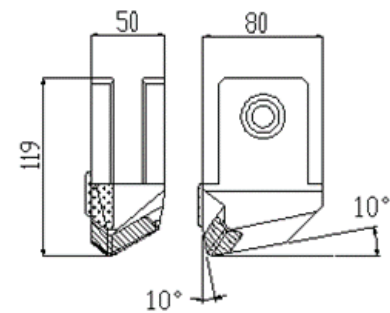
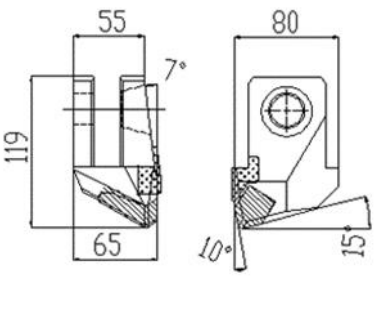
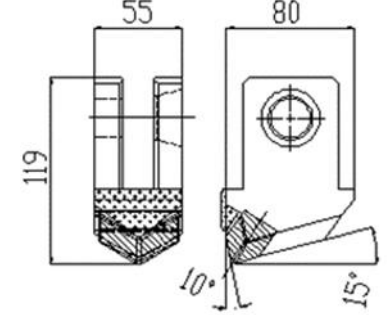
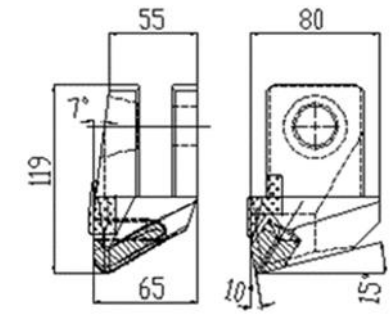
Casing bit W40 (Holder use)

W 40					
CH-40		BLU-C1			
W 40					
MH-40KIN		BLU-D30		MH-40KINW	
MH-45KIN		BLU-D32			
W 40		For iron cutting 		For iron cutting 	
MH-40BRS		BLU-D33		MH-40BRN	
MH-40BRU		BLU-D35			

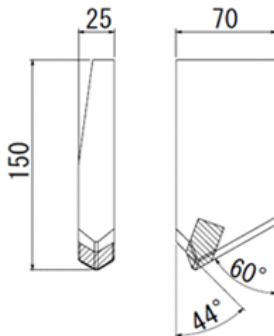
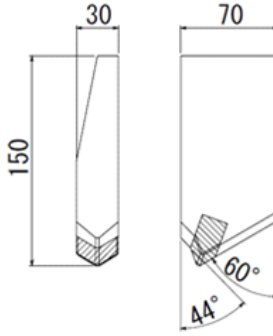
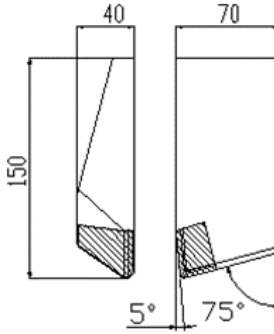
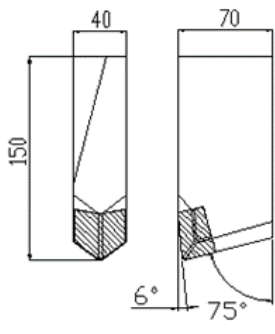
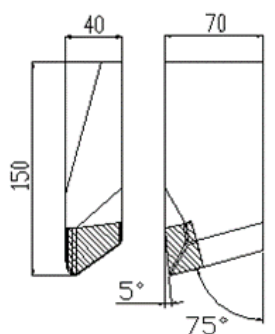
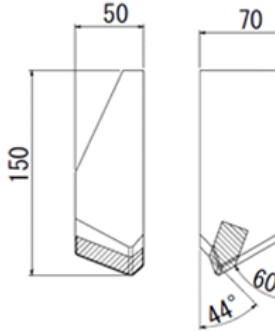
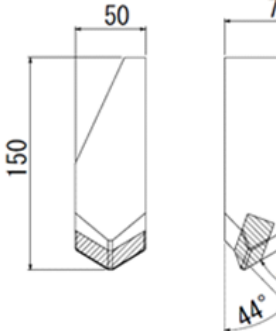
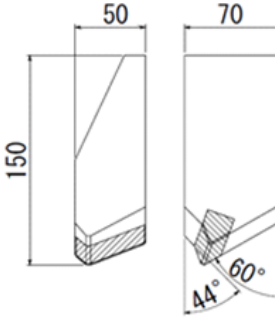
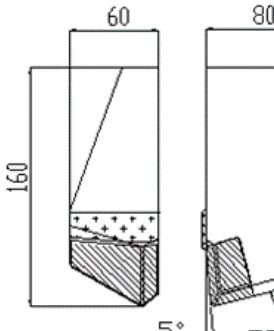
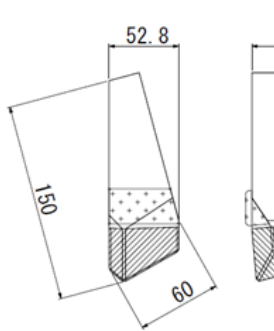
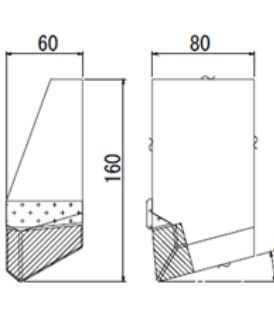
Casing bit W45 (Holder use)

W 45				
	CH-45	BLU-E1		
W 45 CE				
	CH-45KIRS-B-CE	BLU-F1	CH-45KIRN-B-CE	BLU-F2
			CH-45KIRU-B-CE	

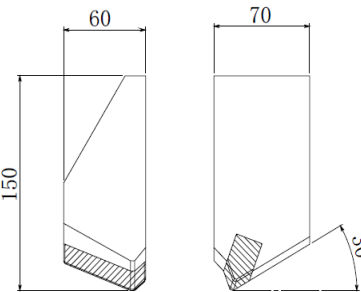
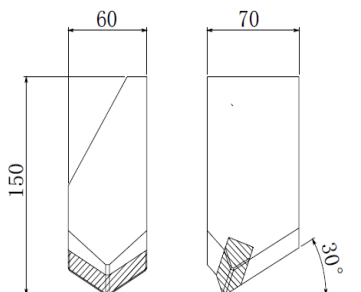
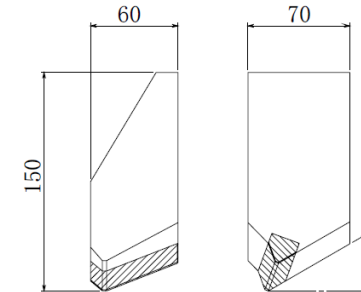
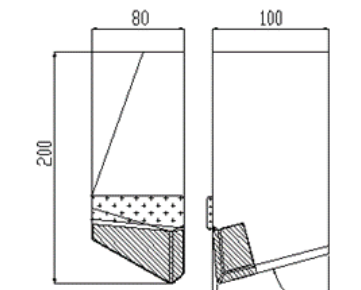
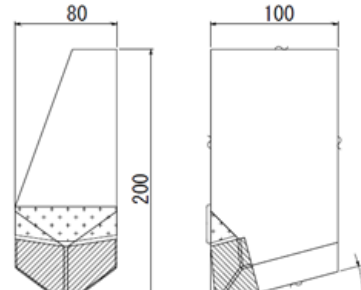
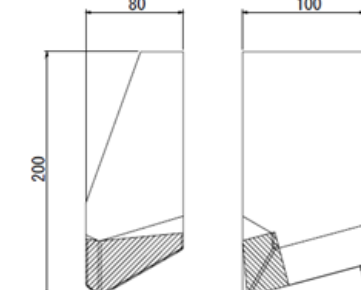
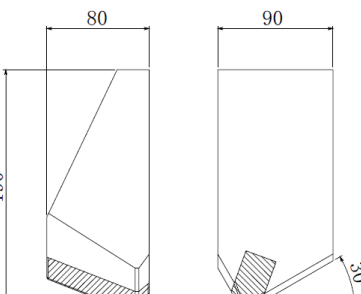
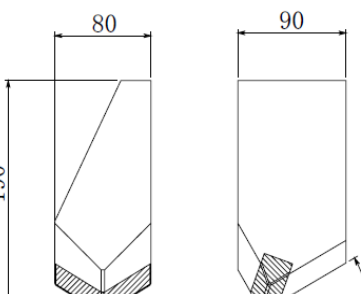
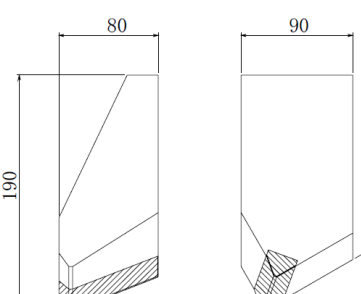
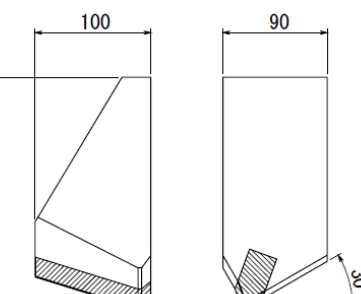
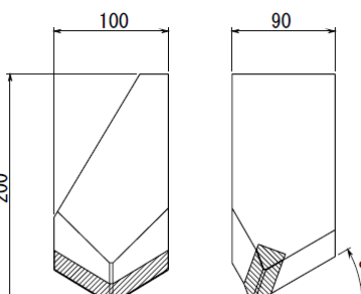
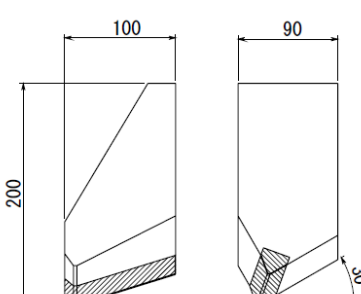
Casing bit W50 (Holder use)

W 50						
	CH-50	BLU-G1				
W 50 CE	 NormalOutside		 NormalCenter		 NormalInside	
	CH-50KIRS-B-CE	BLU-H1	CH-50KIRN-B-CE	BLU-H2	CH-50KIRU-B-CE	BLU-H3
W 50 CE	 NormalOutside		 NormalCenter		 NormalInside	
	CH-55KIRS-B-A-CE	BLU-H4	CH-55KIRN-B-CE	BLU-H5	CH-55KIRU-B-A-CE	BLU-H6

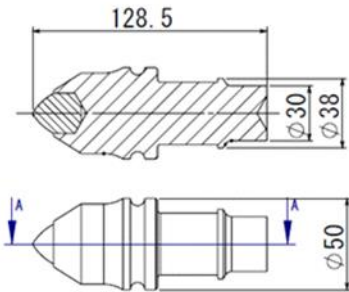
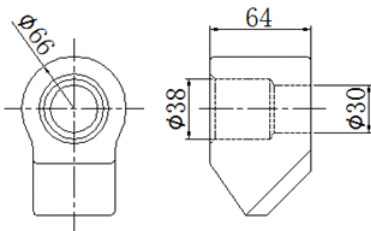
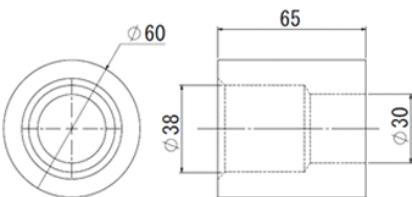
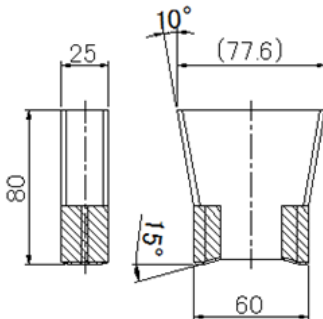
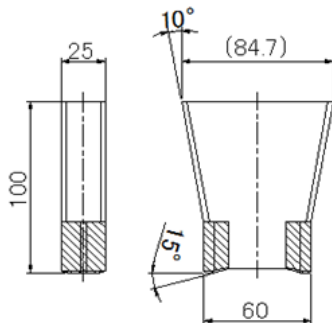
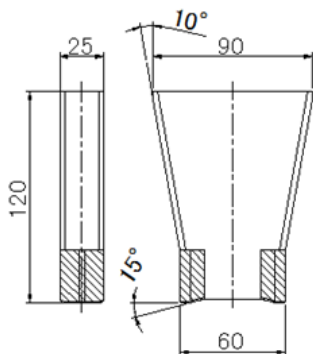
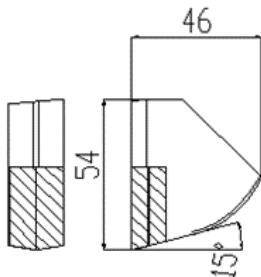
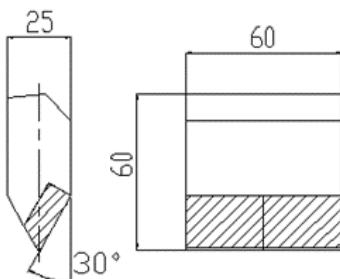
Inner bit (welding)

W 25 · 30						
	C-25KIRN	YEL-A1	C-30KIRN	YEL-B1		
W 40						
	C-40K/RS	YEL-C1	C-40K/RN	YEL-C2	C-40K/RU	YEL-C3
W 50						
	C-50KIRS	YEL-D1	C-50KIRN	YEL-D2	C-50KIRU	YEL-D3
W 60						
	C-60K/RS	YEL-E1	C-60K/RN	YEL-E2	C-60K/RU	UEL-E3

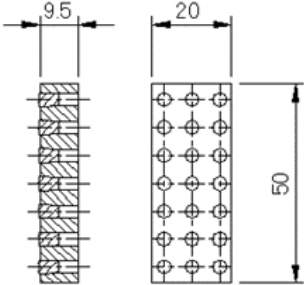
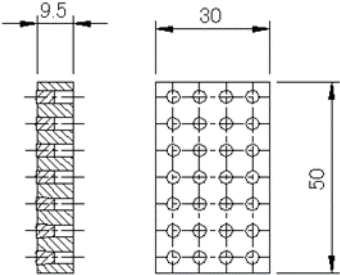
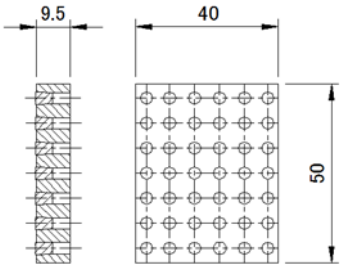
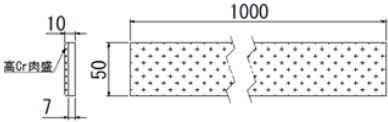
Inner bit (welding)

W 60								
	Normal Outside		Normal Center		Normal Inside			
	C-60KIRS		YEL-E4	C-60KIRN		YEL-E5	C-60KIRU	
W 80								
	Normal Outside		Normal Center		Normal Inside			
	C-80K/RS		YEL-F1	C-80K/RN		YEL-F2	C-80K/RU	
W 80								
	Normal Outside		Normal Center		Normal Inside			
	C-80KIRS		YEL-F4	C-80KIRN		YEL-F5	C-80KIRU	
W 100								
	Normal Outside		Normal Center		Normal Inside			
	C-100KIRS		YEL-G1	C-100KIRN		YEL-G2	C-100KIRU	

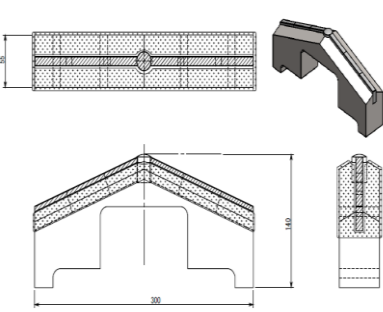
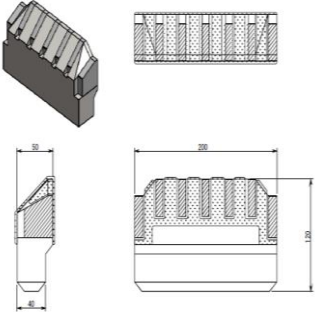
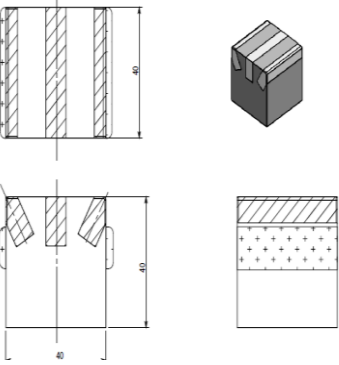
Tools for underground continuous walls, conical

						
	$\phi 50-\phi 30$	WHT-A1	コニカルH ($\phi 30$)	WHT-A2	コニカルHO ($\phi 30$)	WHT-A3
TRD						
	25K-80L	WHT-B1	25K-100L	WHT-B2	25K-120L	WHT-B3
						
	46-54-20	WHT-C1	60-60-25	WHTC2		

Anti-abrasion plates

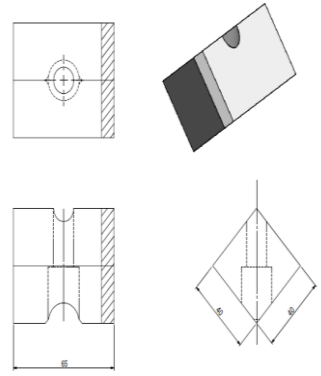
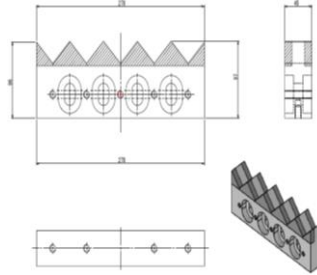
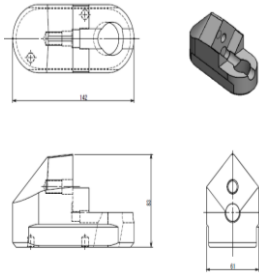
			
50-20-9	WHT-D1		WHT-D2
50-40-9	WHT-D3		
50-50-9	WHT-D4		
			
1000-50-10	WHT-E1		

Tools for propulsion (make to order manufacture)

[illegible]

Environmental tools (make to order manufacture)



Shield bits (make to order manufacture)

