

MingHong

浙江鸣鸿精密技术有限公司
Zhejiang MingHong Precision Co. Ltd

STANDARD DRILLS

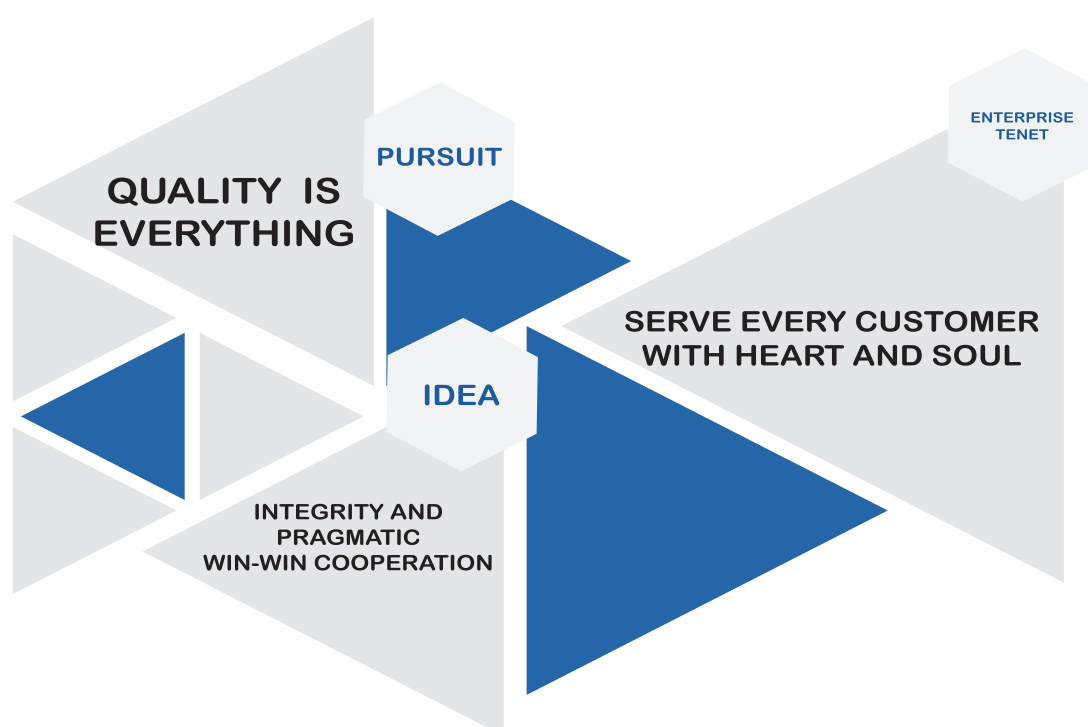
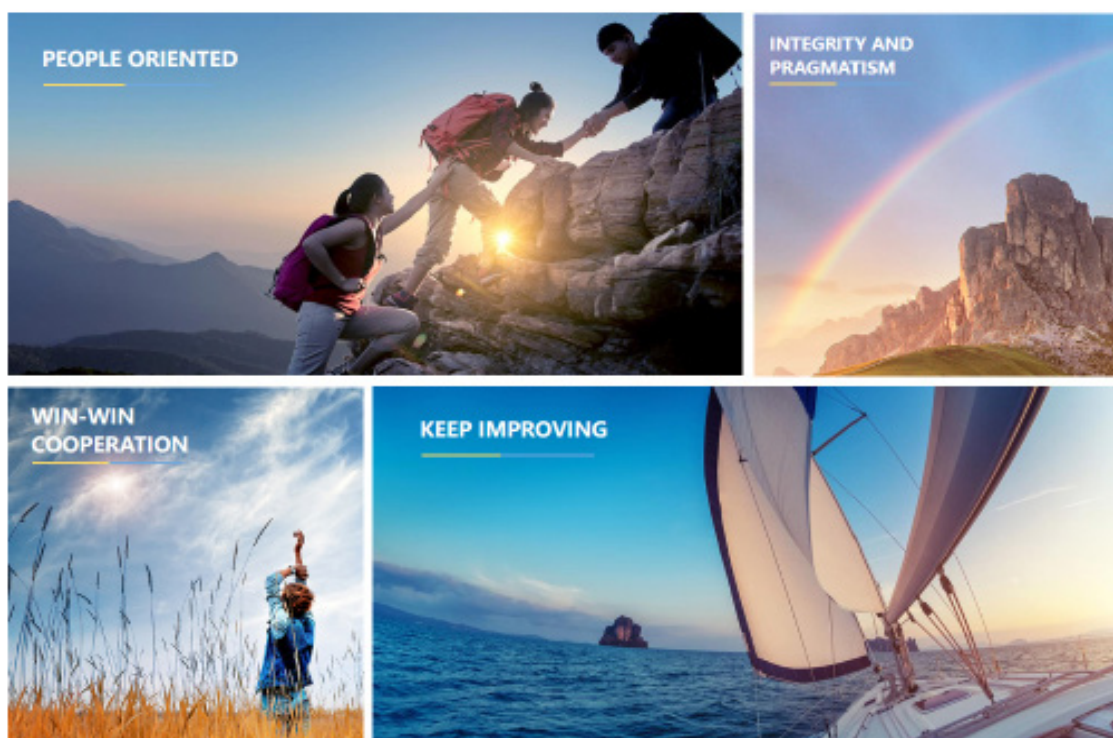


ZHEJIANG MINGHONG PRECISION TECHNOLOGY CO., LTD



浙江鸣鸿精密技术有限公司
Zhejiang MingHong Precision Co. Ltd

CORE VALUES



ABOUT MINGHONG

Zhejiang Minghong Precision Technology Co., Ltd. is a high-tech enterprise integrating independent research and development and production of high-precision cutting tools, headquartered in Linping District, Hangzhou City, Zhejiang Province, China.

The company is committed to the advancement and development of industry technology, and has more than 10 years of experience in the production of high-precision cutting tools. In 2022, the company officially launched the factory direct sales business to provide global customers with overall solutions for precision cutting tools.

The company's products are widely used in 3C consumer electronics, molds, graphite, automobiles, medical equipment and other processing and manufacturing fields. Customers are located in China, South Korea, Japan, Russia and other countries and regions, and strive to build a dedicated, professional and dedicated modern enterprise.

All the staff of the company adhere to the tenet of strict requirements and innovation, pay attention to every commitment, focus on every detail, keep improving, produce excellent products, and win unanimous praise from many customers.



ISO9001 Certification

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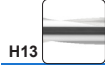
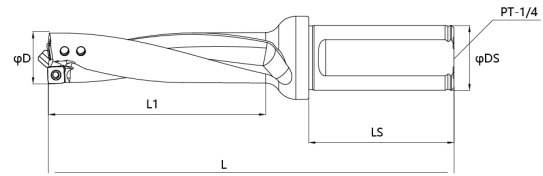
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HD-3 SELF-CENTERING QUICK DRILL (6D)



M42 HSS



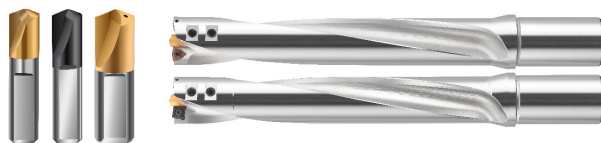
Self-centering drilling + internal water discharge

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number (6D)	Cutting Dia.	Cutting Length	Total Length	Shank Dia.	LS(mm)	WC		SP		Centring bit	Screws/ spanner
	D(mm)	L1(mm)	L (mm)	DS (mm)		Blade type	Screws/spanner	Blade type	Screws/spanner		
MH-C25*SD20*6D*06	20	120	210	25	55	WCMX030208	M2.5*7 T8	SPMG06204	M2.2*6 T7	6mm	M5 Hex socket 2.5mm
MH-C25*SD21*6D*06	21	126	215								
MH-C25*SD22*6D*06	22	132	225								
MH-C25*SD23*6D*06	23	138	230								
MH-C25*SD24*6D*06	24	144	235								
MH-C32*SD25*6D*06	25	150	245	32	60	WCMX040208					
MH-C32*SD26*6D*06	26	156	255								
MH-C32*SD27*6D*06	27	162	260								
MH-C32*SD28*6D*06	28	168	265								
MH-C32*SD29*6D*06	29	174	270								
MH-C32*SD30*6D*08	30	180	266			WCMX050308	M3*8 T10	SPMG07T308	M2.5*7 T8	8mm	M6 Hex socket 3MM
MH-C32*SD31*6D*08	31	186	272								
MH-C32*SD32*6D*08	32	192	278								
MH-C32*SD33*6D*08	33	198	284								
MH-C32*SD34*6D*08	34	204	290								
MH-C32*SD35*6D*08	35	210	296								
MH-C32*SD36*6D*08	36	216	302								
MH-C32*SD37*6D*08	37	222	308								
MH-C32*SD38*6D*08	38	228	314								
MH-C32*SD39*6D*08	39	234	320								
MH-C40*SD40*6D*10	40	240	336	40	70	WCMX06T308	M3.5*9 T15	SPMG090408	M3.5*8 T15		
MH-C40*SD41*6D*10	41	246	342								
MH-C40*SD42*6D*10	42	252	348								
MH-C40*SD43*6D*10	43	258	354								
MH-C40*SD44*6D*10	44	264	360								
MH-C40*SD45*6D*10	45	270	366					SPMG110408		10mm	M8 Hex socket 4MM
MH-C40*SD46*6D*10	46	276	372								
MH-C40*SD47*6D*10	47	282	378								
MH-C40*SD48*6D*10	48	288	384								
MH-C40*SD49*6D*10	49	294	390								
MH-C40*SD50*6D*10	50	300	396								

HD-3 SELF-CENTERING QUICK DRILL (6D)



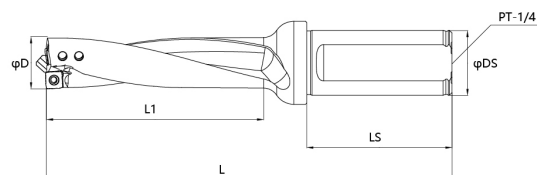
H13



M42 HSS



Self-centering drilling + internal water discharge



P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

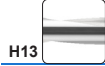
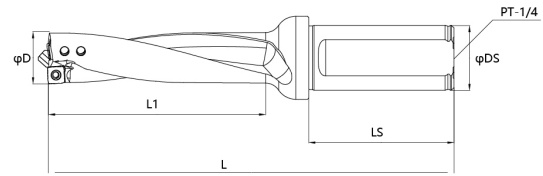
○ Can be used
● Suitable
● Not Recommended

Art.Number (6D)	Cutting Dia.	Cutting Length	Total Length	Shank Dia.	WC	Centring bit	screw	spanner
	D(mm)	L1(mm)	L (mm)	DS (mm)				
MH-40*SD51*6D*12	51	306	406	40	70	12mm	M4*11	T15
MH-40*SD52*6D*12	52	312	412					
MH-40*SD53*6D*12	53	318	418					
MH-40*SD54*6D*12	54	324	424					
MH-40*SD55*6D*12	55	330	430					
MH-40*SD56*6D*12	56	336	436					
MH-40*SD57*6D*12	57	342	442					
MH-40*SD58*6D*12	58	348	448					
MH-40*SD59*6D*12	59	354	454					
MH-40*SD60*6D*12	60	360	460					
MH-40*SD61*6D*12	61	366	466					
MH-40*SD62*6D*12	62	372	472					
MH-40*SD63*6D*12	63	378	478					
MH-40*SD64*6D*12	64	384	484					
MH-40*SD65*6D*12	65	390	490					
MH-40*SD66*6D*12	66	396	496					
MH-40*SD67*6D*12	67	402	502					
MH-40*SD68*6D*12	68	408	508					
MH-40*SD69*6D*12	69	414	514					
MH-40*SD70*6D*12	70	420	520					
MH-40*SD71*6D*12	71	426	526					
MH-40*SD72*6D*12	72	432	532					
MH-40*SD73*6D*12	73	438	538					
MH-40*SD74*6D*12	74	444	544					
MH-40*SD75*6D*16	75	450	550	50	80	16mm	M3*8	T10
MH-40*SD76*6D*16	76	456	556					
MH-40*SD77*6D*16	77	462	562					
MH-40*SD78*6D*16	78	468	568					
MH-40*SD79*6D*16	79	474	574					
MH-50*SD80*6D*16	80	480	600					
MH-50*SD81*6D*16	81	486	606					
MH-50*SD82*6D*16	82	492	612					
MH-50*SD83*6D*16	83	498	618					
MH-50*SD84*6D*16	84	504	624					
MH-50*SD85*6D*16	85	510	630					
MH-50*SD86*6D*16	86	516	636					
MH-50*SD87*6D*16	87	522	642					
MH-50*SD88*6D*16	88	528	648					
MH-50*SD89*6D*16	89	534	654					
MH-50*SD90*6D*16	90	540	660					
MH-50*SD91*6D*16	91	546	666					
MH-50*SD92*6D*16	92	552	672					
MH-50*SD93*6D*16	93	558	678					
MH-50*SD94*6D*16	94	564	684					
MH-50*SD95*6D*16	95	570	690					
MH-50*SD96*6D*16	96	576	696					
MH-50*SD97*6D*16	97	582	702					
MH-50*SD98*6D*16	98	588	708					
MH-50*SD99*6D*16	99	594	714					
MH-50*SD100*6D*16	100	600	646					

M10

Hex key
5MM

HD-3 SELF-CENTERING QUICK DRILL (8D)



M42 HSS



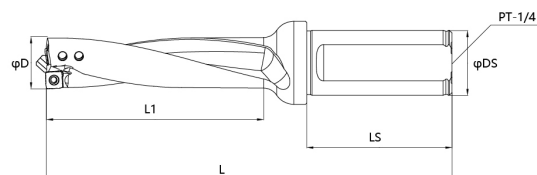
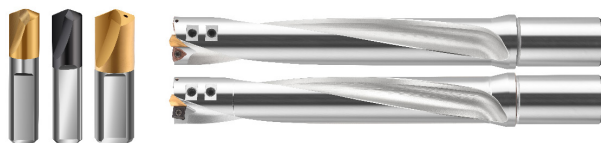
Self-centering drilling + internal water discharge

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number (8D)	Cutting Dia.	Cutting Length	Total Length	Shank Dia.	LS(mm)	WC		SP		Centring bit	Screws/ spanner
	D(mm)	L1(mm)	L (mm)	DS (mm)		Blade type	Screws/spanner	Blade type	Screws/spanner		
MH-C25*SD20*8D*06	20	160	250	25	55	WCMX030208	M2.5*7 T8	SPMG060204	M2.2*6 T7	6mm	M5 Hex socket 2.5mm
MH-C25*SD21*8D*06	21	168	255								
MH-C25*SD22*8D*06	22	176	275								
MH-C25*SD23*8D*06	23	184	280								
MH-C25*SD24*8D*06	24	192	285								
MH-C32*SD25*8D*06	25	200	290	32	60	MCMX040208					
MH-C32*SD26*8D*06	26	208	295								
MH-C32*SD27*8D*06	27	216	300								
MH-C32*SD28*8D*06	28	224	315								
MH-C32*SD29*8D*06	29	232	320								
MH-C32*SD30*8D*08	30	240	326			WCMX050308	M3*8 T10	SPMG07T308	M2.5*7 T8	8mm	M6 Hex socket 3MM
MH-C32*SD31*8D*08	31	248	334								
MH-C32*SD32*8D*08	32	256	342								
MH-C32*SD33*8D*08	33	264	350								
MH-C32*SD34*8D*08	34	272	358								
MH-C32*SD35*8D*08	35	280	366								
MH-C32*SD36*8D*08	36	288	374								
MH-C32*SD37*8D*08	37	296	382								
MH-C32*SD38*8D*08	38	304	390								
MH-C32*SD39*8D*08	39	312	398								
MH-C40*SD40*8D*10	40	320	416	40	70	WCMX06T308	M3.5*9 T15	SPMG090408	M3.5*8 T15	10mm	M8 Hex socket 4MM
MH-C40*SD41*8D*10	41	328	424								
MH-C40*SD42*8D*10	42	336	432								
MH-C40*SD43*8D*10	43	344	440								
MH-C40*SD44*8D*10	44	352	448								
MH-C40*SD45*8D*10	45	360	456					SPMG110408			
MH-C40*SD46*8D*10	46	368	464								
MH-C40*SD47*8D*10	47	376	472								
MH-C40*SD48*8D*10	48	384	480								
MH-C40*SD49*8D*10	49	392	488								
MH-C40*SD50*8D*10	50	400	496								

HD-3 SELF-CENTERING QUICK DRILL (8D)



H13

M42 HSS

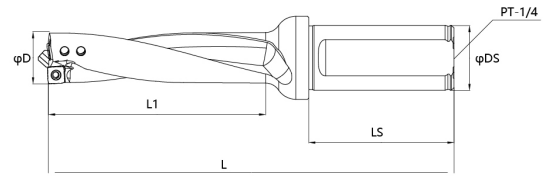
Self-centering drilling + internal water discharge

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number (8D)	Cutting Dia.	Cutting Length	Total Length	Shank Dia.	WC	Centring bit	screw	spanner
	D(mm)	L1(mm)	L (mm)	DS (mm)				
MH-C40*SD51*6D*12	51	408	508	40	70	12mm	M4*11	T15
MH-C40*SD52*6D*12	52	416	516					
MH-C40*SD53*6D*12	53	424	524					
MH-C40*SD54*6D*12	54	432	532					
MH-C40*SD55*6D*12	55	440	540					
MH-C40*SD56*6D*12	56	448	548					
MH-C40*SD57*6D*12	57	456	556					
MH-C40*SD58*6D*12	58	464	564					
MH-C40*SD59*6D*12	59	472	572					
MH-C40*SD60*6D*12	60	480	580					
MH-C40*SD61*6D*12	61	488	588					
MH-C40*SD62*6D*12	62	496	596					
MH-C40*SD63*6D*12	63	504	604					
MH-C40*SD64*6D*12	64	512	612					
MH-C40*SD65*6D*12	65	520	620					
MH-C40*SD66*6D*12	66	528	628					
MH-C40*SD67*6D*12	67	536	636					
MH-C40*SD68*6D*12	68	544	644					
MH-C40*SD69*6D*12	69	552	652					
MH-C40*SD70*6D*12	70	560	660					
MH-C40*SD71*6D*12	71	568	668					
MH-C40*SD72*6D*12	72	576	676					
MH-C40*SD73*6D*12	73	584	684					
MH-C40*SD74*6D*12	74	592	692					
MH-C40*SD75*6D*16	75	600	700	50	80	16MM	M10	Hex socket 5MM
MH-C40*SD76*6D*16	76	608	708					
MH-C40*SD77*6D*16	77	616	716					
MH-C40*SD78*6D*16	78	624	724					
MH-C40*SD79*6D*16	79	632	732					
MH-C50*SD80*6D*16	80	640	760					
MH-C50*SD81*6D*16	81	648	728					
MH-C50*SD82*8D*16	82	656	776					
MH-C50*SD83*8D*16	83	664	784					
MH-C50*SD84*8D*16	84	672	792					
MH-C50*SD85*8D*16	85	680	800					
MH-C50*SD86*8D*16	86	688	808					
MH-C50*SD87*8D*16	87	696	816					
MH-C50*SD88*8D*16	88	704	824					
MH-C50*SD89*8D*16	89	712	832					
MH-C50*SD90*8D*16	90	720	840					
MH-C50*SD91*8D*16	91	728	848					
MH-C50*SD92*8D*16	92	736	856					
MH-C50*SD93*8D*16	93	744	864					
MH-C50*SD94*8D*16	94	752	872					
MH-C50*SD95*8D*16	95	760	880					
MH-C50*SD96*8D*16	96	768	888					
MH-C50*SD97*8D*16	97	776	896					
MH-C50*SD98*8D*16	98	784	904					
MH-C50*SD99*8D*16	99	792	912					
MH-C50*SD100*8D*16	100	800	920					

HD-3 SELF-CENTERING QUICK DRILL (10D)



H13

M42 HSS



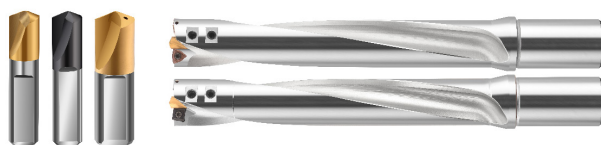
Self-centering drilling + internal water discharge

P	M	K	N	S	H
steel	Stainless Steel	Cast iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

- Can be used
- Suitable
- Not Recommended

Art.Number （8D）	Cutting Dia.	Cutting Length	Total Length	Shank Dia.		WC		SP		Centring bit	Screws/ spanner			
	D(mm)	L1(mm)	L (mm)	DS (mm)	LS(mm)	Blade type	Screws/spanner	Blade type	Screws/spanner					
MH-C25*SD20*10D*06	20	200	290	25	55	WCMX030208	M2.5*7 T8	SPMG060204	M2.2*6 T7	6mm	M5 Hex socket 2.5mm			
MH-C25*SD21*10D*06	21	210	295											
MH-C25*SD22*10D*06	22	220	310											
MH-C25*SD23*10D*06	23	230	320											
MH-C25*SD24*10D*06	24	240	330											
MH-C32*SD25*10D*06	25	250	345	32	60	WCMX040208								
MH-C32*SD26*10D*06	26	260	350											
MH-C32*SD27*10D*06	27	270	360											
MH-C32*SD28*10D*06	28	280	370											
MH-C32*SD29*10D*06	29	290	380											
MH-C32*SD30*10D*08	30	300	386			WCMX050308	M3*8 T10	SPMG07T308	M2.5*7 T8		8mm	M6 Hex socket 3mm		
MH-C32*SD31*10D*08	31	310	396											
MH-C32*SD32*10D*08	32	320	406											
MH-C32*SD33*10D*08	33	330	416											
MH-C32*SD34*10D*08	34	340	426											
MH-C32*SD35*10D*08	35	350	436											
MH-C32*SD36*10D*08	36	360	446											
MH-C32*SD37*10D*08	37	370	456											
MH-C32*SD38*10D*08	38	380	466											
MH-C32*SD39*10D*08	39	390	476											
MH-C40*SD40*10D*10	40	400	496	40	70	WCMX06T308	M3.5*9 T15	SPMG090408	M3.5*8 T15	10mm	M8 Hex socket 4mm			
MH-C40*SD41*10D*10	41	410	506											
MH-C40*SD42*10D*10	42	420	516											
MH-C40*SD43*10D*10	43	430	526											
MH-C40*SD44*10D*10	44	440	536											
MH-C40*SD45*10D*10	45	450	546											
MH-C40*SD46*10D*10	46	460	556											
MH-C40*SD47*10D*10	47	470	566											
MH-C40*SD48*10D*10	48	480	576											
MH-C40*SD49*10D*10	49	490	586											
MH-C40*SD50*10D*10	50	500	596					SPMG110408	M4*9 T15					

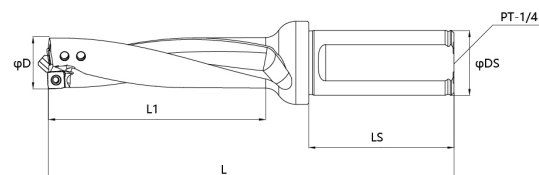
HD-3 SELF-CENTERING QUICK DRILL (10D)



H13

M42 HSS

Self-centering drilling + internal water discharge

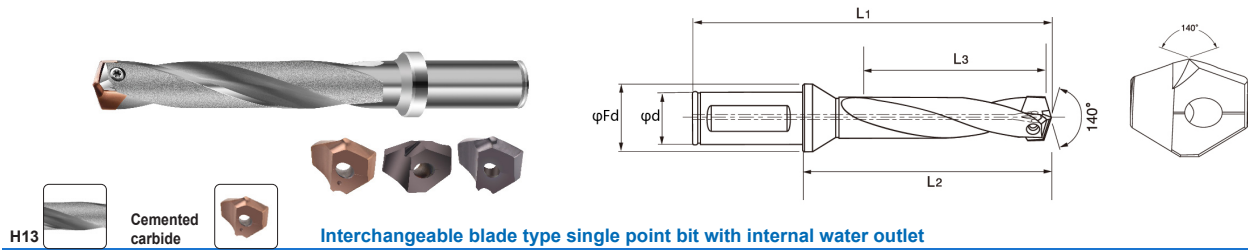


P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number (8D)	Cutting Dia.	Cutting Length	Total Length	Shank Dia.	WC	Centring bit	screw	spanner
	D(mm)	L1(mm)	L (mm)	DS (mm)				
MH-C40*SD51*10D*12	51	510	610	40	70	12mm	M10	Hex socket 5MM
MH-C40*SD52*10D*12	52	520	620					
MH-C40*SD53*10D*12	53	530	630					
MH-C40*SD54*10D*12	54	540	640					
MH-C40*SD55*10D*12	55	550	650					
MH-C40*SD56*10D*12	56	560	660					
MH-C40*SD57*10D*12	57	570	670					
MH-C40*SD58*10D*12	58	580	680					
MH-C40*SD59*10D*12	59	590	690					
MH-C40*SD60*10D*12	60	600	700					
MH-C40*SD61*10D*12	61	610	710					
MH-C40*SD62*10D*12	62	620	720					
MH-C40*SD63*10D*12	63	630	730					
MH-C40*SD64*10D*12	64	640	740					
MH-C40*SD65*10D*12	65	650	750					
MH-C40*SD66*10D*12	66	660	760					
MH-C40*SD67*10D*12	67	670	770					
MH-C40*SD68*10D*12	68	680	780					
MH-C40*SD69*10D*12	69	690	790					
MH-C40*SD70*10D*12	70	700	800					
MH-C40*SD71*10D*12	71	710	810					
MH-C40*SD72*10D*12	72	720	820					
MH-C40*SD73*10D*12	73	730	830					
MH-C40*SD74*10D*12	74	740	840					
MH-C40*SD75*10D*16	75	750	850	50	80	16mm	M10	Hex socket 5MM
MH-C40*SD76*10D*16	76	760	860					
MH-C40*SD77*10D*16	77	770	870					
MH-C40*SD78*10D*16	78	780	880					
MH-C40*SD79*10D*16	79	790	890					
MH-C50*SD80*10D*16	80	800	920					
MH-C50*SD81*10D*16	81	810	930					
MH-C50*SD82*10D*16	82	820	940					
MH-C50*SD83*10D*16	83	830	950					
MH-C50*SD84*10D*16	84	840	960					
MH-C50*SD85*10D*16	85	850	970					
MH-C50*SD86*10D*16	86	860	980					
MH-C50*SD87*10D*16	87	870	990					
MH-C50*SD88*10D*16	88	880	1000					
MH-C50*SD89*10D*16	89	890	1010					
MH-C50*SD90*10D*16	90	900	1020					
MH-C50*SD91*10D*16	91	910	1030					
MH-C50*SD92*10D*16	92	920	1040					
MH-C50*SD93*10D*16	93	930	1050					
MH-C50*SD94*10D*16	94	940	1060					
MH-C50*SD95*10D*16	95	950	1070					
MH-C50*SD96*10D*16	96	960	1080					
MH-C50*SD97*10D*16	97	970	1090					
MH-C50*SD98*10D*16	98	980	1100					
MH-C50*SD99*10D*16	99	990	1110					
MH-C50*SD100*10D*16	100	1000	1120					

HD-1 INTERCHANGEABLE ALLOY VIOLENT DRILL

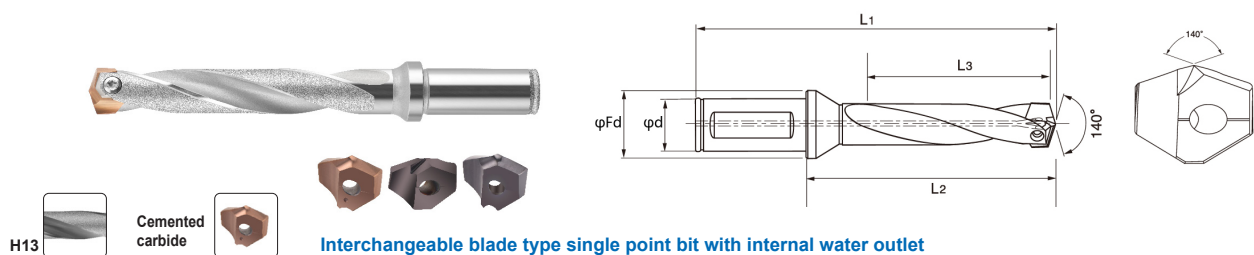


P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminium/copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Blade diameter range	Shank diameter	Depth of cutting	L1	L2	L3	Flange diameter	Screw type	spanner type
MH-XD*F20*SD12.5	φ12-φ12.9mm	20	3D	111	63	37.5	25	M3.0 CS11.0-12.5SL	T10
			5D	136	88	62.5			
			7D	161	113	87.5			
			10D	199	151	125			
MH-XD*F20*SD13	φ13mm-φ13.9mm		3D	114	66	39			
			5D	140	92	65			
			7D	166	118	91			
			10D	205	157	130			
MH-XD*F20*SD14	φ14mm-φ14.9mm		3D	119	71	42			
			5D	147	99	70			
			7D	175	127	98			
			10D	217	169	140			
MH-XD*F20*SD15	φ15mm-φ15.9mm		3D	127	77	45			
			5D	157	107	75			
			7D	187	137	105			
			10D	232	182	150			
MH-XD*F20*SD16	φ16mm-φ16.9mm		3D	132	82	48			
			5D	164	114	80			
			7D	196	146	112			
			10D	244	194	160			
MH-XD*F20*SD17	φ16mm-φ16.9mm		3D	132	82	51			
			5D	166	116	85			
			7D	200	150	119			
			10D	251	201	170			
MH-XD*F20*SD18	φ16mm-φ16.9mm		3D	135	85	54			
			5D	171	121	90			
			7D	207	157	126			
			10D	261	211	180			
								M3.0 CS16.0-18.0SL	

INTERCHANGEABLE ALLOY VIOLENT DRILL

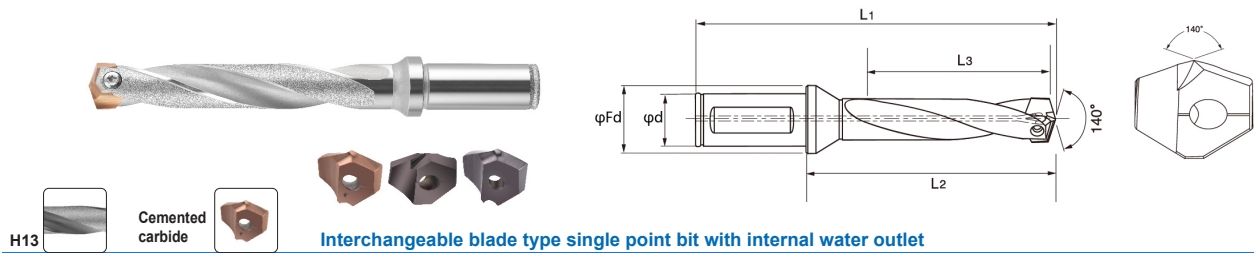


P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminium/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Blade diameter range	Shank diameter	Depth of cutting	L1	L2	L3	Flange diameter	Screw type	spanner type
MH-XD-F20-SD19	φ19mm-φ19.9mm	20	3D	138	88	57	25	M4.0 CS18.0-20.0SL	T15
			5D	176	126	95			
			7D	214	164	133			
			10D	271	221	190			
MH-XD-F20-SD20	φ20mm-φ20.9mm	25	3D	146	90	60	25	M4.0 CS18.0-20.0SL	T15
			5D	186	130	100			
			7D	226	170	140			
			10D	286	286	200			
MH-XD-F20-SD21	φ21mm-φ21.9mm	25	3D	149	93	63	25	M4.0 CS18.0-20.0SL	T15
			5D	191	135	105			
			7D	233	177	147			
			10D	296	240	210			
MH-XD-F25-SD22	φ22mm-φ22.9mm	25	3D	153	97	66	25	M5.0 CS20.0-22.0SL	T20
			5D	197	144	110			
			7D	241	188	154			
			10D	307	251	220			
MH-XD-F25-SD23	φ23mm-φ23.9mm	25	3D	156	100	69	25	M5.0 CS20.0-22.0SL	T20
			5D	202	146	115			
			7D	248	192	161			
			10D	317	261	230			
MH-XD-F25-SD24	φ24mm-φ24.9mm	25	3D	164	104	72	34	M5.0 CS22.0-24.0SL	T20
			5D	212	152	120			
			7D	261	200	168			
			10D	332	272	240			
MH-XD-F25-SD25	φ25mm-φ25.9mm	25	3D	166	106	75	34	M5.0 CS22.0-24.0SL	T20
			5D	216	156	125			
			7D	266	206	175			
			10D	341	281	250			
MH-XD-F25-SD26	φ26mm-φ26.9mm	25	3D	169	109	78	34	M5.0 CS22.0-24.0SL	T20
			5D	221	161	130			
			7D	273	213	182			
			10D	351	291	260			
MH-XD-F25-SD26	φ26mm-φ26.9mm	25	3D	169	109	78	34	M6.0 CS24.0-26.0SL	T25
			5D	221	161	130			
			7D	273	213	182			
			10D	351	291	260			

INTERCHANGEABLE ALLOY VIOLENT DRILL

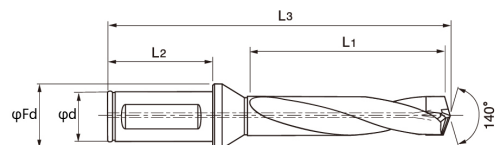


P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminium/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Blade diameter range	Shank diameter	Depth of cutting	L1	L2	L3	Flange diameter	Screw type	spanner type				
MH-XD-F25-SD27	φ27mm-φ27.9mm	32	3D	173	113	81	41	M6.0 CS24.0-26.0SL	T25				
			5D	227	167	135							
			7D	281	221	189							
			10D	362	302	270							
MH-XD-F32-SD28	φ28mm-φ28.9mm		3D	178	118	84		41		M6.0 CS26.0-28.0SL			
			5D	234	174	140							
			7D	290	230	196							
			10D	374	314	280							
MH-XD-F32-SD29	φ29mm-φ29.9mm		3D	182	122	87					41	M6.0 CS26.0-28.0SL	
			5D	240	180	145							
			7D	298	238	203							
			10D	385	325	290							
MH-XD-F32-SD30	φ30mm-φ30.9mm		3D	186	126	90				41			M6.0 CS28.0-30.0SL
			5D	246	186	150							
			7D	306	247	210							
			10D	396	336	300							
MH-XD-F32-SD31	φ31mm-φ31.9mm		3D	191	131	93	41					M6.0 CS28.0-30.0SL	
			5D	253	193	155							
			7D	315	255	217							
			10D	408	348	310							
MH-XD-F32-SD32	φ32mm-φ32.9mm		3D	195	135	96		41					M6.0 CS28.0-30.0SL
			5D	259	199	160							
			7D	323	263	224							
			10D	419	359	320							
MH-XD-F32-SD33	φ33mm-φ33.9mm		3D	200	140	99					49	M6.0 CS30.0-34.0SL	
			5D	266	206	165							
			7D	332	272	231							
			10D	431	371	330							
MH-XD-F40-SD34	φ34mm-φ34.9mm		3D	215	145	102				49			M6.0 CS30.0-34.0SL
			5D	283	213	170							
			7D	351	281	238							
			10D	453	383	340							
MH-XD-F40-SD35	φ35mm-φ35.9mm		3D	218	148	105	49					M6.0 CS30.0-34.0SL	
			5D	288	218	175							
			7D	358	288	245							
			10D	463	393	350							

HD-2 INTERCHANGEABLE ALLOY VIOLENT DRILL



H13

Cemented
carbide

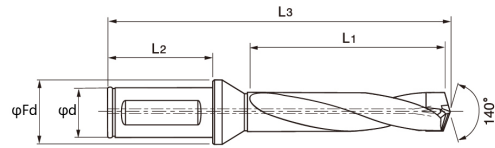
Interchangeable blade type single point bit with internal water outlet

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Blade diameter range	Shank diameter	Depth of cutting	L1	L2	Flange diameter	Screw type	spanner type				
MH-XD*F20*SD12	φ12.0mm-12.4mm	16	3D	101	36	50	M3.0L-M2.5	T6				
MH-XD*F20*SD12.5	φ12.5mm-12.9mm		5D	125	60							
MH-XD*F20*SD13	φ13.0mm-13.5mm		7D	149	84							
MH-XD*F20*SD13.5	φ13.5mm-13.9mm		10D	185	120							
MH-XD*F20*SD14	φ14.0mm-14.5mm		3D	104	39							
MH-XD*F20*SD14.5	φ14.5mm-14.9mm		5D	130	65							
MH-XD*F20*SD15	φ15mm-15.4mm		7D	156	91							
MH-XD*F20*SD15.5	φ15.5mm-15.9mm		10D	195	130							
MH-XD*F20*SD16	φ16.0mm-16.4mm		3D	107	42							
MH-XD*F20*SD16.5	φ16.5mm-16.9mm		5D	135	70							
MH-XD*F20*SD17	φ17mm-17.4mm	20	7D	163	98		50	M3.5L-M2.5	1.5			
MH-XD*F20*SD17.5	φ17.5mm-18mm		10D	205	140							
MH-XD*F20*SD18	φ18mm-18.4mm		3D	110	45							
MH-XD*F20*SD18.5	φ18.5mm-18.9mm		5D	140	75							
MH-XD*F20*SD19	φ19mm-φ19.4mm		7D	170	105							
MH-XD*F20*SD19.5	φ19.5mm-φ19.9mm		10D	215	150							
MH-XD*F20*SD20	φ20mm-φ20.4mm		3D	113	48							
MH-XD*F20*SD20.5	φ20.5mm-φ20.9mm		5D	145	80							
MH-XD*F20*SD21	φ21mm-φ21.4mm		7D	177	112							
MH-XD*F20*SD21.5	φ21.5mm-φ22mm		10D	225	160							
MH-XD*F20*SD22	φ22mm-φ22.4mm	25	3D	116	51			56	M4.0L-3.0	2.0		
MH-XD*F20*SD22.5	φ22.5mm-φ22.9mm		5D	145	85							
MH-XD*F25*SD23	φ23mm-φ23.4mm		7D	184	119							
MH-XD*F25*SD23.5	φ23.5mm-φ24mm		10D	235	170							
			3D	119	54							
			5D	155	90							
			7D	191	126							
			10D	245	180							
			3D	122	57							
			5D	160	95							
		7D	198	133								
		10D	255	190								
		3D	125	60								
		5D	165	100								
		7D	205	140								
		10D	265	200								
		3D	128	63								
		5D	170	105								
		7D	212	147								
		10D	275	210								
		3D	142	66								
		5D	186	110								
		7D	230	154								
		10D	296	220								
		3D	145	69								
		5D	191	115								
		7D	237	161								
		10D	306	230								

HD-2 INTERCHANGEABLE ALLOY VIOLENT DRILL



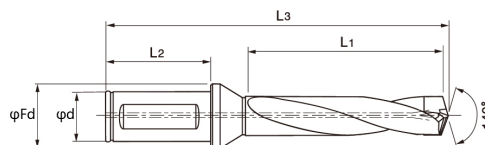
Interchangeable blade type single point bit with internal water outlet

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Blade diameter range	Shank diameter	Depth of cutting	L1	L2	Flange diameter	Screw type	spanner type
MH-XD*F25*SD24	φ24mm-φ24.4mm	32	3D	148	72	56	M4.0L-3.0	2.0
			5D	196	120			
MH-XD*F25*SD24.5	φ24.5mm-φ24.9mm		7D	244	168			
			10D	316	240			
MH-XD*F25*SD25	φ25mm-φ25.4mm		3D	151	75		M5.0L-M4.0	2.5
			5D	201	125			
MH-XD*F25*SD25.5	φ25.5mm-φ26mm		7D	251	175			
			10D	326	250			
MH-XD*F25*SD26	φ26mm-φ26.4mm		3D	154	78			
			5D	206	130			
MH-XD*F25*SD26.5	φ26.5mm-φ26.9mm		7D	258	182			
			10D	336	260			
MH-XD*F25*SD27	φ27mm-φ27.4mm		3D	157	81			
			5D	211	135			
MH-XD*F25*SD27.5	φ27.5mm-φ28mm		7D	265	189			
			10D	346	270			
MH-XD*F32*SD28	φ28mm-φ28.4mm		3D	169	84	66	M6.0L-M5.0	3.0
			5D	225	140			
MH-XD*F32*SD28.5	φ28.5mm-φ28.9mm		7D	281	196			
			10D	365	280			
MH-XD*F32*SD29	φ29mm-φ29.4mm		3D	172	87			
			5D	230	145			
MH-XD*F32*SD29.5	φ29.5mm-φ30mm		7D	288	203			
			10D	375	290			
MH-XD*F32*SD30	φ30mm-φ30.4mm		3D	175	90			
			5D	235	150			
MH-XD*F32*SD30.5	φ30.5mm-φ30.9mm		7D	295	210			
			10D	300	385			
MH-XD*F32*SD31	φ31mm-φ31.4mm		3D	178	93		M6.0L-M6.0	3.0
			5D	240	155			
MH-XD*F32*SD31.5	φ31.5mm-φ32mm		7D	302	217			
			10D	395	310			

HD-2 INTERCHANGEABLE ALLOY VIOLENT DRILL



H13

Cemented
carbide

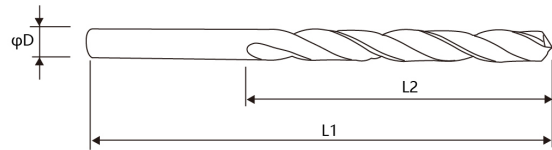
Interchangeable blade type single point bit with internal water outlet

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Blade diameter range	Shank diameter	Depth of cutting	L1	L2	Flange diameter	Screw type	spanner type
MH-XD*F32*SD32	φ32mm-φ32.4mm	40	3D	181	96	66	M6.0L-M6.0	3.0
			5D	245	160			
MH-XD*F32*SD32.5	φ32.5mm-φ32.9mm		7D	309	224			
			10D	405	320			
MH-XD*F32*SD33	φ33mm-φ33.4mm		3D	184	99	60		
			5D	250	165			
MH-XD*F32*SD33.5	φ33.5mm-φ33.9mm		7D	316	231			
			10D	415	330			
MH-XD*F32*SD34	φ34mm-φ34.4mm		3D	187	102			
			5D	255	170			
MH-XD*F32*SD34.5	φ34.5mm-φ34.9mm		7D	323	238			
			10D	425	340			
MH-XD*F32*SD35	φ35mm-φ35.4mm		3D	190	105			
			5D	260	175			
MH-XD*F32*SD35.5	φ35.5mm-φ36mm		7D	330	245			
			10D	435	350			
MH-XD*F32*SD36	φ36mm-φ36.4mm		3D	193	108			
			5D	265	180			
MH-XD*F32*SD36.5	φ36.5mm-φ36.9mm		7D	337	252			
			10D	445	360			
MH-XD*F32*SD37	φ37mm-φ37.4mm		3D	196	111			
			5D	270	185			
MH-XD*F32*SD37.5	φ37.5mm-φ37.9mm		7D	344	259			
			10D	455	370			
MH-XD*F32*SD38	φ38mm-φ38.4mm		3D	199	114			
			5D	275	190			
MH-XD*F32*SD38.5	φ38.5mm-φ38.9mm		7D	351	266			
			10D	465	380			
MH-XD*F32*SD39	φ39mm-φ39.4mm		3D	202	117	70		
			5D	280	195			
MH-XD*F32*SD39.5	φ39.5mm-φ39.9mm		7D	358	273			
			10D	475	390			
MH-XD*F40*SD40	φ40mm-φ40.4mm	3D	220	120				
		5D	330	200				
MH-XD*F40*SD40.5	φ40.5mm-φ40.9mm	7D	380	280				
		10D	500	400				

HIGH PERFORMANCE STANDARD STRAIGHT SHANK HIGH-SPEED DRILL



M42/HSP



135°



coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

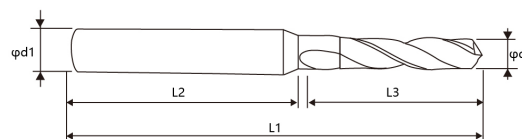
○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-3*33*61	3.0	33	61
MH-3.1*36*65	3.1	36	65
MH-3.2*36*65	3.2	36	65
MH-3.3*36*65	3.3	36	65
MH-3.4*39*70	3.4	39	70
MH-3.5*39*70	3.5	39	70
MH-3.6*39*70	3.6	39	70
MH-3.7*39*70	3.7	39	70
MH-3.8*43*75	3.8	43	75
MH-3.9*43*75	3.9	43	75
MH-4*43*75	4.0	43	75
MH-4.1*43*75	4.1	43	75
MH-4.2*43*75	4.2	43	75
MH-4.3*47*80	4.3	47	80
MH-4.4*47*80	4.4	47	80
MH-4.5*47*80	4.5	47	80
MH-4.6*47*80	4.6	47	80
MH-4.7*47*80	4.7	47	80
MH-4.8*52*86	4.8	52	86
MH-4.9*52*86	4.9	52	86
MH-5*52*86	5.0	52	86
MH-5.1*52*86	5.1	52	86
MH-5.2*52*86	5.2	52	86
MH-5.3*52*86	5.3	52	86
MH-5.4*57*86	5.4	57	86
MH-5.5*57*86	5.5	57	86
MH-5.6*57*86	5.6	57	86
MH-5.7*57*93	5.7	57	93
MH-5.8*57*93	5.8	57	93
MH-5.9*57*93	5.9	57	93
MH-6*57*93	6.0	57	93
MH-6.1*63*101	6.1	63	101
MH-6.2*63*101	6.2	63	101
MH-6.3*63*101	6.3	63	101
MH-6.4*63*101	6.4	63	101
MH-6.5*63*101	6.5	63	101
MH-6.6*63*101	6.6	63	101

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-6.7*63*101	6.7	63	101
MH-6.8*69*109	6.8	69	109
MH-6.9*69*109	6.9	69	109
MH-7*69*109	7.0	69	109
MH-7.1*69*109	7.1	69	109
MH-7.2*69*109	7.2	69	109
MH-7.3*69*109	7.3	69	109
MH-7.4*69*109	7.4	69	109
MH-7.5*69*109	7.5	69	109
MH-7.6*75*117	7.6	75	117
MH-7.7*75*117	7.7	75	117
MH-7.8*75*117	7.8	75	117
MH-7.9*75*117	7.9	75	117
MH-8*75*117	8.0	75	117
MH-8.1*75*117	8.1	75	117
MH-8.2*75*117	8.2	75	117
MH-8.3*75*117	8.3	75	117
MH-8.4*75*117	8.4	75	117
MH-8.5*75*117	8.5	75	117
MH-8.6*81*125	8.6	81	125
MH-8.7*81*125	8.7	81	125
MH-8.8*81*125	8.8	81	125
MH-8.9*81*125	8.9	81	125
MH-9*81*125	9.0	81	125
MH-9.1*81*125	9.1	81	125
MH-9.2*81*125	9.2	81	125
MH-9.3*81*125	9.3	81	125
MH-9.4*81*125	9.4	81	125
MH-9.5*81*125	9.5	81	125
MH-9.6*87*133	9.6	87	133
MH-9.7*87*133	9.7	87	133
MH-9.8*87*133	9.8	87	133
MH-9.9*87*133	9.9	87	133
MH-10*87*133	10.0	87	133
MH-10.1*87*133	10.1	87	133
MH-10.2*87*133	10.2	87	133
MH-10.3*87*133	10.3	87	133

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-10.4*87*133	10.4	87	133
MH-10.5*87*133	10.5	87	133
MH-10.6*87*133	10.6	87	133
MH-10.7*94*142	10.7	94	142
MH-10.8*94*142	10.8	94	142
MH-10.9*94*142	10.9	94	142
MH-11*94*142	11.0	94	142
MH-11.1*94*142	11.1	94	142
MH-11.2*94*142	11.2	94	142
MH-11.3*94*142	11.3	94	142
MH-11.4*94*142	11.4	94	142
MH-11.5*94*142	11.5	94	142
MH-11.6*94*142	11.6	94	142
MH-11.7*101*142	11.7	101	142
MH-11.8*101*142	11.8	101	142
MH-11.9*101*151	11.9	101	151
MH-12*101*151	12	101	151
MH-12.1*101*151	12.1	101	151
MH-12.2*101*151	12.2	101	151
MH-12.3*101*151	12.3	101	151
MH-12.4*101*151	12.4	101	151
MH-12.5*101*151	12.5	101	151
MH-12.6*101*151	12.6	101	151
MH-12.7*101*151	12.7	101	151
MH-12.8*101*151	12.8	101	151
MH-12.9*101*151	12.9	101	151
MH-13*101*151	13.0	101	151
MH-13.1*101*151	13.1	101	151
MH-13.2*101*151	13.2	101	151
MH-13.3*108*160	13.3	108	160
MH-13.4*108*160	13.4	108	160
MH-13.5*108*160	13.5	108	160
MH-13.6*108*160	13.6	108	160
MH-13.7*108*160	13.7	108	160
MH-13.8*108*160	13.8	108	160
MH-13.9*108*160	13.9	108	160
MH-14*108*160	14.0	108	160

HIGH PERFORMANCE COARSE SHANK HIGH SPEED DRILL (SHORT TYPE 1)



M42/HSP



118°/135°



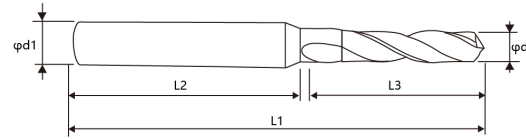
coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank Dia.	Shank length	Total Length
	d(mm)	L3(mm)	d1 (mm)	L2(mm)	L1(mm)
MH-2*12*3*28*44	2.00	12	3	28	44
MH-2.1*12*3*28*44	2.10	12	3	28	44
MH-2.2*13*3*28*45	2.20	13	3	28	45
MH-2.3*14*3*28*46	2.30	14	3	28	46
MH-2.4*14*3*28*46	2.40	14	3	28	46
MH-2.5*14*3*28*46	2.50	14	3	28	46
MH-2.6*14*3*28*46	2.60	14	3	28	46
MH-2.7*16*3*28*48	2.70	16	3	28	48
MH-2.8*16*3*28*48	2.80	16	3	28	48
MH-2.9*16*3*28*48	2.90	16	3	28	48
MH-3*16*4*28*48	3.00	16	4	28	48
MH-3.1*18*4*28*50	3.10	18	4	28	50
MH-3.2*18*4*28*50	3.20	18	4	28	50
MH-3.3*18*4*28*50	3.30	18	4	28	50
MH-3.4*20*4*28*52	3.40	20	4	28	52
MH-3.5*20*4*28*52	3.50	20	4	28	52
MH-3.6*20*4*28*52	3.60	20	4	28	52
MH-3.7*20*4*28*52	3.70	20	4	28	52
MH-3.8*22*4*28*54	3.80	22	4	28	54
MH-3.9*22*4*28*54	3.90	22	4	28	54
MH-4*22*4*28*54	4.00	22	4	28	54
MH-4.1*22*6*36*66	4.10	22	6	36	66
MH-4.2*22*6*36*66	4.20	22	6	36	66
MH-4.3*24*6*36*68	4.30	24	6	36	68
MH-4.4*24*6*36*68	4.40	24	6	36	68
MH-4.5*24*6*36*68	4.50	24	6	36	68
MH-4.6*24*6*36*68	4.60	24	6	36	68
MH-4.7*24*6*36*68	4.70	24	6	36	68
MH-4.8*26*6*36*70	4.80	26	6	36	70
MH-4.9*26*6*36*70	4.90	26	6	36	70
MH-5*26*6*36*70	5.00	26	6	36	70
MH-5.1*26*6*36*70	5.10	26	6	36	70
MH-5.2*26*6*36*70	5.20	26	6	36	70
MH-5.3*26*6*36*70	5.30	26	6	36	70
MH-5.4*28*6*36*72	5.40	28	6	36	72
MH-5.5*28*6*36*72	5.50	28	6	36	72
MH-5.6*28*6*36*72	5.60	28	6	36	72
MH-5.7*28*6*36*72	5.70	28	6	36	72
MH-5.8*28*6*36*72	5.80	28	6	36	72
MH-5.9*28*6*36*72	5.90	28	6	36	72
MH-6*28*6*36*72	6.00	28	6	36	72
MH-6.1*31*8*36*75	6.10	31	8	36	75

HIGH PERFORMANCE COARSE SHANK HIGH SPEED DRILL (SHORT TYPE 2)



M42/HSP



118°/135°



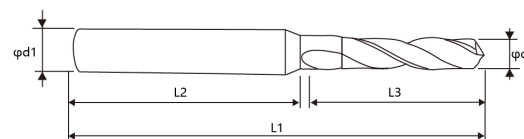
coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank Dia.	Shank length	Total Length
	d(mm)	L3(mm)	d1 (mm)	L2(mm)	L1(mm)
MH-6.2*31*8*36*75	6.20	31	8	36	75
MH-6.3*31*8*36*75	6.30	31	8	36	75
MH-6.4*31*8*36*75	6.40	31	8	36	75
MH-6.5*31*8*36*75	6.50	31	8	36	75
MH-6.6*31*8*36*75	6.60	31	8	36	75
MH-6.7*31*8*36*75	6.70	31	8	36	75
MH-6.8*34*8*36*78	6.80	34	8	36	78
MH-6.9*34*8*36*78	6.90	34	8	36	78
MH-7*34*8*36*78	7.00	34	8	36	78
MH-7.1*34*8*36*78	7.10	34	8	36	78
MH-7.2*34*8*36*78	7.20	34	8	36	78
MH-7.3*34*8*36*78	7.30	34	8	36	78
MH-7.4*34*8*36*78	7.40	34	8	36	78
MH-7.5*34*8*36*78	7.50	34	8	36	78
MH-7.6*37*8*36*81	7.60	37	8	36	81
MH-7.7*37*8*36*81	7.70	37	8	36	81
MH-7.8*37*8*36*81	7.80	37	8	36	81
MH-7.9*37*8*36*81	7.90	37	8	36	81
MH-8*37*8*36*81	8.00	37	8	36	81
MH-8.1*37*10*40*87	8.10	37	10	40	87
MH-8.2*37*10*40*87	8.20	37	10	40	87
MH-8.3*37*10*40*87	8.30	37	10	40	87
MH-8.4*37*10*40*87	8.40	37	10	40	87
MH-8.5*37*10*40*87	8.50	37	10	40	87
MH-8.6*40*10*40*91	8.60	40	10	40	91
MH-8.7*40*10*40*91	8.70	40	10	40	91
MH-8.8*40*10*40*91	8.80	40	10	40	91
MH-8.9*40*10*40*91	8.90	40	10	40	91
MH-9*40*10*40*91	9.00	40	10	40	91
MH-9.1*40*10*40*91	9.10	40	10	40	91
MH-9.2*40*10*40*91	9.20	40	10	40	91
MH-9.3*40*10*40*91	9.30	40	10	40	91
MH-9.4*40*10*40*91	9.40	40	10	40	91
MH-9.5*40*10*40*91	9.50	40	10	40	91
MH-9.6*43*10*40*93	9.60	43	10	40	93
MH-9.7*43*10*40*93	9.70	43	10	40	93
MH-9.8*43*10*40*93	9.80	43	10	40	93
MH-9.9*43*10*40*93	9.90	43	10	40	93
MH-10*43*10*40*93	10.00	43	10	40	93
MH-10.1*43*12*45*100	10.10	43	12	45	100
MH-10.2*43*12*45*100	10.20	43	12	45	100
MH-10.3*43*12*45*100	10.30	43	12	45	100

HIGH PERFORMANCE COARSE SHANK HIGH SPEED DRILL (SHORT TYPE 3)



M42/HSP



118°/135°



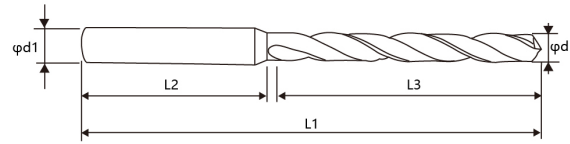
coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank Dia.	Shank length	Total Length
	d(mm)	L3(mm)	d1 (mm)	L2(mm)	L1(mm)
MH-10.4*43*12*45*100	10.40	43	12	45	100
MH-10.5*43*12*45*100	10.50	43	12	45	100
MH-10.6*47*12*45*100	10.60	47	12	45	100
MH-10.7*47*12*45*104	10.70	47	12	45	104
MH-10.8*47*12*45*104	10.80	47	12	45	104
MH-10.9*47*12*45*104	10.90	47	12	45	104
MH-11*47*12*45*104	11.00	47	12	45	104
MH-11.1*47*12*45*104	11.10	47	12	45	104
MH-11.2*47*12*45*104	11.20	47	12	45	104
MH-11.3*47*12*45*104	11.30	47	12	45	104
MH-11.4*47*12*45*104	11.40	47	12	45	104
MH-11.5*47*12*45*104	11.50	47	12	45	104
MH-11.6*47*12*45*104	11.60	47	12	45	104
MH-11.7*47*12*45*104	11.70	47	12	45	104
MH-11.8*47*12*45*104	11.80	47	12	45	104
MH-11.9*51*12*45*108	11.90	51	12	45	108
MH-12*51*12*45*108	12.00	51	12	45	108
MH-12.1*51*14*48*111	12.10	51	14	48	111
MH-12.2*51*14*48*111	12.20	51	14	48	111
MH-12.3*51*14*48*111	12.30	51	14	48	111
MH-12.4*51*14*48*111	12.40	51	14	48	111
MH-12.5*51*14*48*111	12.50	51	14	48	111
MH-12.6*51*14*48*111	12.60	51	14	48	111
MH-12.7*51*14*48*111	12.70	51	14	48	111
MH-12.8*51*14*48*111	12.80	51	14	48	111
MH-12.9*51*14*48*111	12.90	51	14	48	111
MH-13*51*14*48*111	13.00	51	14	48	111
MH-13.1*54*14*48*114	13.10	54	14	48	114
MH-13.2*54*14*48*114	13.20	54	14	48	114
MH-13.3*54*14*48*114	13.30	54	14	48	114
MH-13.4*54*14*48*114	13.40	54	14	48	114
MH-13.5*54*14*48*114	13.50	54	14	48	114
MH-13.6*54*14*48*114	13.60	54	14	48	114
MH-13.7*54*14*48*114	13.70	54	14	48	114
MH-13.8*54*14*48*114	13.80	54	14	48	114
MH-13.9*54*14*48*114	13.90	54	14	48	114
MH-14*54*14*48*114	14.00	54	14	48	114

HIGH PERFORMANCE COARSE SHANK HIGH SPEED DRILL (LONG TYPE 1)



M42/HSP



118°/135°



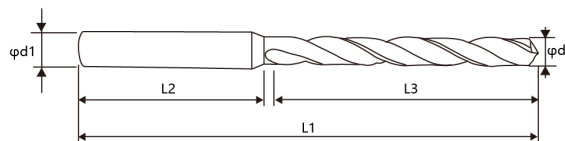
coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank Dia.	Shank length	Total Length
	d(mm)	L3(mm)	d1 (mm)	L2(mm)	L1(mm)
MH-2*24*3*28*56	2.00	24	3	28	56
MH-2.1*24*3*28*56	2.10	24	3	28	56
MH-2.2*27*3*28*59	2.20	27	3	28	59
MH-2.3*27*3*28*59	2.30	27	3	28	59
MH-2.4*30*3*28*62	2.40	30	3	28	62
MH-2.5*30*3*28*62	2.50	30	3	28	62
MH-2.6*30*3*28*62	2.60	30	3	28	62
MH-2.7*33*3*28*65	2.70	33	3	28	65
MH-2.8*33*3*28*65	2.80	33	3	28	65
MH-2.9*33*3*28*65	2.90	33	3	28	65
MH-3*33*3*28*65	3.00	33	3	28	65
MH-3.1*36*4*28*68	3.10	36	4	28	68
MH-3.2*36*4*28*68	3.20	36	4	28	68
MH-3.3*36*4*28*68	3.30	36	4	28	68
MH-3.4*39*4*28*71	3.40	39	4	28	71
MH-3.5*39*4*28*71	3.50	39	4	28	71
MH-3.6*39*4*28*71	3.60	39	4	28	71
MH-3.7*39*4*28*71	3.70	39	4	28	71
MH-3.8*43*4*28*75	3.80	43	4	28	75
MH-3.9*43*4*36*75	3.90	43	4	36	75
MH-4*43*4*36*75	4.00	43	4	36	75
MH-4.1*43*6*36*87	4.10	43	6	36	87
MH-4.2*43*6*36*87	4.20	43	6	36	87
MH-4.3*47*6*36*91	4.30	47	6	36	91
MH-4.4*47*6*36*91	4.40	47	6	36	91
MH-4.5*47*6*36*91	4.50	47	6	36	91
MH-4.6*47*6*36*91	4.60	47	6	36	91
MH-4.7*47*6*36*91	4.70	47	6	36	91
MH-4.8*52*6*36*96	4.80	52	6	36	96
MH-4.9*52*6*36*96	4.90	52	6	36	96
MH-5*52*6*36*96	5.00	52	6	36	96
MH-5.1*52*6*36*96	5.10	52	6	36	96
MH-5.2*52*6*36*96	5.20	52	6	36	96
MH-5.3*52*6*36*96	5.30	52	6	36	96
MH-5.4*57*6*36*101	5.40	57	6	36	101
MH-5.5*57*6*36*101	5.50	57	6	36	101
MH-5.6*57*6*36*101	5.60	57	6	36	101
MH-5.7*57*6*36*101	5.70	57	6	36	101
MH-5.8*57*6*36*101	5.80	57	6	36	101
MH-5.9*57*6*36*101	5.90	57	6	36	101
MH-6*57*6*36*101	6.00	57	6	36	101
MH-6.1*63*6*36*107	6.10	63	6	36	107

HIGH PERFORMANCE COARSE SHANK HIGH SPEED DRILL (LONG TYPE 2)



M42/HSP



118°/135°



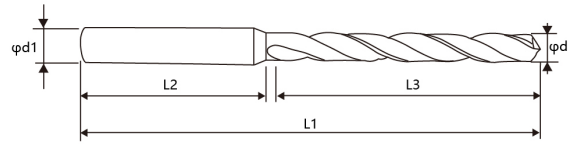
coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank Dia.	Shank length	Total Length
	d(mm)	L3(mm)	d1 (mm)	L2(mm)	L1(mm)
MH-6.2*63*8*36*107	6.20	63	8	36	107
MH-6.3*63*8*36*107	6.30	63	8	36	107
MH-6.4*63*8*36*107	6.40	63	8	36	107
MH-6.5*63*8*36*107	6.50	63	8	36	107
MH-6.6*63*8*36*107	6.60	63	8	36	107
MH-6.7*63*8*36*107	6.70	63	8	36	107
MH-6.8*69*8*36*113	6.80	69	8	36	113
MH-6.9*69*8*36*113	6.90	69	8	36	113
MH-7*69*8*36*113	7.00	69	8	36	113
MH-7.1*69*8*36*113	7.10	69	8	36	113
MH-7.2*69*8*36*113	7.20	69	8	36	113
MH-7.3*69*8*36*113	7.30	69	8	36	113
MH-7.4*69*8*36*113	7.40	69	8	36	113
MH-7.5*69*8*36*113	7.50	69	8	36	113
MH-7.6*75*8*36*119	7.60	75	8	36	119
MH-7.7*75*8*36*119	7.70	75	8	36	119
MH-7.8*75*8*36*119	7.80	75	8	36	119
MH-7.9*75*8*36*119	7.90	75	8	36	119
MH-8*75*8*36*119	8.00	75	8	36	119
MH-8.1*75*10*40*125	8.10	75	10	40	125
MH-8.2*75*10*40*125	8.20	75	10	40	125
MH-8.3*75*10*40*125	8.30	75	10	40	125
MH-8.4*75*10*40*125	8.40	75	10	40	125
MH-8.5*75*10*40*125	8.50	75	10	40	125
MH-8.6*81*10*40*131	8.60	81	10	40	131
MH-8.7*81*10*40*131	8.70	81	10	40	131
MH-8.8*81*10*40*131	8.80	81	10	40	131
MH-8.9*81*10*40*131	8.90	81	10	40	131
MH-9*81*10*40*131	9.00	81	10	40	131
MH-9.1*81*10*40*131	9.10	81	10	40	131
MH-9.2*81*10*40*131	9.20	81	10	40	131
MH-9.3*81*10*40*131	9.30	81	10	40	131
MH-9.4*81*10*40*131	9.40	81	10	40	131
MH-9.5*81*10*40*131	9.50	81	10	40	131
MH-9.6*87*10*40*137	9.60	87	10	40	137
MH-9.7*87*10*40*137	9.70	87	10	40	137
MH-9.8*87*10*40*137	9.80	87	10	40	137
MH-9.9*87*10*40*137	9.90	87	10	40	137
MH-10*87*10*40*137	10.00	87	10	40	137
MH-10.1*87*12*45*144	10.10	87	12	45	144
MH-10.2*87*12*45*144	10.20	87	12	45	144
MH-10.3*87*12*45*144	10.30	87	12	45	144

HIGH PERFORMANCE COARSE SHANK HIGH SPEED DRILL (LONG TYPE 3)



M42/HSP



118°/135°



coating

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank Dia.	Shank length	Total Length
	d(mm)	L3(mm)	d1 (mm)	L2(mm)	L1(mm)
MH-10.4*87*12*45*144	10.40	87	12	45	144
MH-10.5*87*12*45*144	10.50	87	12	45	144
MH-10.6*87*12*45*144	10.60	87	12	45	144
MH-10.7*94*12*45*151	10.70	94	12	45	151
MH-10.8*94*12*45*151	10.80	94	12	45	151
MH-10.9*94*12*45*151	10.90	94	12	45	151
MH-11*94*12*45*151	11.00	94	12	45	151
MH-11.1*94*12*45*151	11.10	94	12	45	151
MH-11.2*94*12*45*151	11.20	94	12	45	151
MH-11.3*94*12*45*151	11.30	94	12	45	151
MH-11.4*94*12*45*151	11.40	94	12	45	151
MH-11.5*94*12*45*151	11.50	94	12	45	151
MH-11.6*94*12*45*151	11.60	94	12	45	151
MH-11.7*94*12*45*151	11.70	94	12	45	151
MH-11.8*94*12*45*151	11.80	94	12	45	151
MH-11.9*101*12*45*158	11.90	101	12	45	158
MH-12*101*12*45*158	12.00	101	12	45	158
MH-12.1*98*14*48*158	12.10	98	14	48	158
MH-12.2*98*14*48*158	12.20	98	14	48	158
MH-12.3*98*14*48*158	12.30	98	14	48	158
MH-12.4*98*14*48*158	12.40	98	14	48	158
MH-12.5*98*14*48*158	12.50	98	14	48	158
MH-12.6*98*14*48*158	12.60	98	14	48	158
MH-12.7*98*14*48*158	12.70	98	14	48	158
MH-12.8*98*14*48*158	12.80	98	14	48	158
MH-12.9*98*14*48*158	12.90	98	14	48	158
MH-13*98*14*48*158	13.00	98	14	48	158
MH-13.1*98*14*48*158	13.10	98	14	48	158
MH-13.2*98*14*48*158	13.20	98	14	48	158
MH-13.3*98*14*48*158	13.30	98	14	48	158
MH-13.4*98*14*48*158	13.40	98	14	48	158
MH-13.5*98*14*48*158	13.50	98	14	48	158
MH-13.6*98*14*48*158	13.60	98	14	48	158
MH-13.7*98*14*48*158	13.70	98	14	48	158
MH-13.8*98*14*48*158	13.80	98	14	48	158
MH-13.9*98*14*48*158	13.90	98	14	48	158
MH-14*98*14*48*158	14.00	98	14	48	158

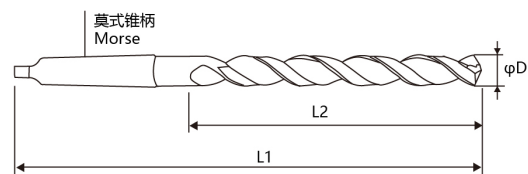
DIN345 HIGH COBALT TAPER SHANK ALL GROUND TWIST DRILL



118°/135°



M35/M2



P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-5*52*133*1	5.00	52	133	1
MH-5.2*52*133*1	5.20	52	133	1
MH-5.5*57*138*1	5.50	57	138	1
MH-6*57*138*1	6.00	57	138	1
MH-6.2*63*144*1	6.20	63	144	1
MH-6.5*63*144*1	6.50	63	144	1
MH-6.8*69*150*1	6.80	69	150	1
MH-7*69*150*1	7.00	69	150	1
MH-7.5*69*150*1	7.50	69	150	1
MH-7.8*75*156*1	7.80	75	156	1
MH-8*75*156*1	8.00	75	156	1
MH-8.5*75*156*1	8.50	75	156	1
MH-8.8*81*162*1	8.80	81	162	1
MH-9*81*162*1	9.00	81	162	1
MH-9.5*81*162*1	9.50	81	162	1
MH-9.8*87*168*1	9.80	87	168	1
MH-10*87*168*1	10.00	87	168	1
MH-10.5*87*168*1	10.50	87	168	1
MH-10.8*94*175*1	10.80	94	175	1
MH-11*94*175*1	11.00	94	175	1
MH-11.5*94*175*1	11.50	94	175	1
MH-11.8*94*175*1	11.80	94	175	1
MH-12*101*182*1	12.00	101	182	1
MH-12.5*101*182*1	12.50	101	182	1
MH-13*101*182*1	13.00	101	182	1
MH-13.2*101*182*1	13.20	101	182	1
MH-13.5*108*189*1	13.50	108	189	1
MH-14*108*189*1	14.00	108	189	1
MH-14.25*114*212*2	14.25	114	212	2
MH-14.5*114*212*2	14.50	114	212	2
MH-15*114*212*2	15.00	114	212	2
MH-15.25*120*218*2	15.25	120	218	2
MH-15.5*120*218*2	15.50	120	218	2
MH-16*120*218*2	16.00	120	218	2
MH-16.25*125*223*2	16.25	125	223	2
MH-16.5*125*223*2	16.50	125	223	2
MH-17*125*223*2	17.00	125	223	2
MH-17.25*130*228*2	17.25	130	228	2
MH-17.5*130*228*2	17.50	130	228	2
MH-18*130*228*2	18.00	130	228	2
MH-18.5*135*233*2	18.50	135	233	2
MH-19*135*233*2	19.00	135	233	2
MH-19.5*140*238*2	19.50	140	238	2
MH-20*140*238*2	20.00	140	238	2

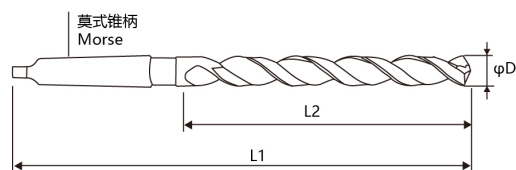
Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-20.5*145*243*2	20.50	145	243	2
MH-21*145*243*2	21.00	145	243	2
MH-21.5*150*248*2	21.50	150	248	2
MH-22*150*248*2	22.00	150	248	2
MH-22.5*155*253*2	22.50	155	253	2
MH-23*155*253*2	23.00	155	253	2
MH-23.5*160*276*3	23.50	160	276	3
MH-24*160*281*3	24.00	160	281	3
MH-24.5*160*281*3	24.50	160	281	3
MH-25*160*281*3	25.00	160	281	3
MH-25.5*165*286*3	25.50	165	286	3
MH-26*165*286*3	26.00	165	286	3
MH-26.5*165*291*3	26.50	165	291	3
MH-27*170*291*3	27.00	170	291	3
MH-27.5*170*291*3	27.50	170	291	3
MH-28*170*291*3	28.00	170	291	3
MH-28.5*175*296*3	28.50	175	296	3
MH-29*175*296*3	29.00	175	296	3
MH-29.5*175*296*3	29.50	175	296	3
MH-30*175*296*3	30.00	175	296	3
MH-30.5*180*301*3	30.50	180	301	3
MH-31*180*301*3	31.00	180	301	3
MH-31.5*180*301*3	31.50	180	301	3
MH-31.75*185*306*3	31.75	185	306	3
MH-32*185*334*4	32.00	185	334	4
MH-33*185*334*4	33.00	185	334	4
MH-34*190*339*4	34.00	190	339	4
MH-35*190*339*4	35.00	190	339	4
MH-36*195*344*4	36.00	195	344	4
MH-37*195*344*4	37.00	195	344	4
MH-38*200*349*4	38.00	200	349	4
MH-39*200*349*4	39.00	200	349	4
MH-40*200*349*4	40.00	200	349	4
MH-41*205*354*4	41.00	205	354	4
MH-42*205*354*4	42.00	205	354	4
MH-43*210*359*4	43.00	210	359	4
MH-44*210*359*4	44.00	210	359	4
MH-45*210*359*4	45.00	210	359	4
MH-46*215*364*4	46.00	215	364	4
MH-47*215*364*4	47.00	215	364	4
MH-48*220*369*4	48.00	220	369	4
MH-49*220*369*4	49.00	220	369	4
MH-50*220*369*4	50.00	220	369	4

DIN345 TAPER SHANK TWIST DRILL (MILLING/ROLLING)



4341/6542

118°



P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-5*52*133*1	5.00	52	133	1
MH-5.2*52*133*1	5.20	52	133	1
MH-5.5*57*138*1	5.50	57	138	1
MH-6*57*138*1	6.00	57	138	1
MH-6.2*63*144*1	6.20	63	144	1
MH-6.5*63*144*1	6.50	63	144	1
MH-6.8*69*150*1	6.80	69	150	1
MH-7*69*150*1	7.00	69	150	1
MH-7.5*69*150*1	7.50	69	150	1
MH-7.8*75*156*1	7.80	75	156	1
MH-8*75*156*1	8.00	75	156	1
MH-8.5*75*156*1	8.50	75	156	1
MH-8.8*81*162*1	8.80	81	162	1
MH-9*81*162*1	9.00	81	162	1
MH-9.5*81*162*1	9.50	81	162	1
MH-9.8*87*168*1	9.80	87	168	1
MH-10*87*168*1	10.00	87	168	1
MH-10.5*87*168*1	10.50	87	168	1
MH-10.8*94*175*1	10.80	94	175	1
MH-11*94*175*1	11.00	94	175	1
MH-11.5*94*175*1	11.50	94	175	1
MH-11.8*94*175*1	11.80	94	175	1
MH-12*101*182*1	12.00	101	182	1
MH-12.5*101*182*1	12.50	101	182	1
MH-13*101*182*1	13.00	101	182	1
MH-13.2*101*182*1	13.20	101	182	1
MH-13.5*108*189*1	13.50	108	189	1
MH-14*108*189*1	14.00	108	189	1
MH-14.25*114*212*2	14.25	114	212	2
MH-14.5*114*212*2	14.50	114	212	2
MH-15*114*212*2	15.00	114	212	2
MH-15.25*120*218*2	15.25	120	218	2
MH-15.5*120*218*2	15.50	120	218	2
MH-16*120*218*2	16.00	120	218	2
MH-16.25*125*223*2	16.25	125	223	2
MH-16.5*125*223*2	16.50	125	223	2
MH-17*125*223*2	17.00	125	223	2
MH-17.25*130*228*2	17.25	130	228	2
MH-17.5*130*228*2	17.50	130	228	2

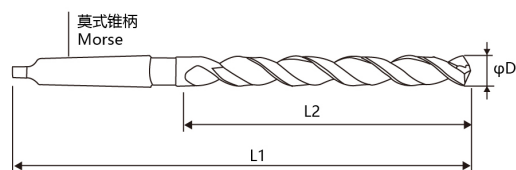
Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-18*130*228*2	18.00	130	228	2
MH-18.5*135*233*2	18.50	135	233	2
MH-19*135*233*2	19.00	135	233	2
MH-19.5*140*238*2	19.50	140	238	2
MH-20*140*238*2	20.00	140	238	2
MH-20.5*145*243*2	20.50	145	243	2
MH-21*145*243*2	21.00	145	243	2
MH-21.5*150*248*2	21.50	150	248	2
MH-22*150*248*2	22.00	150	248	2
MH-22.5*155*253*2	22.50	155	253	2
MH-23*155*253*2	23.00	155	253	2
MH-23.5*155*276*3	23.50	155	276	3
MH-24*160*281*3	24.00	160	281	3
MH-24.5*160*281*3	24.50	160	281	3
MH-25*160*281*3	25.00	160	281	3
MH-25.5*165*286*3	25.50	165	286	3
MH-26*165*286*3	26.00	165	286	3
MH-26.5*165*286*3	26.50	165	286	3
MH-27*170*291*3	27.00	170	291	3
MH-27.5*170*291*3	27.50	170	291	3
MH-28*170*291*3	28.00	170	291	3
MH-28.5*175*296*3	28.50	175	296	3
MH-29*175*296*3	29.00	175	296	3
MH-29.5*175*296*3	29.50	175	296	3
MH-30*175*296*3	30.00	175	296	3
MH-30.5*180*301*3	30.50	180	301	3
MH-31*180*301*3	31.00	180	301	3
MH-31.5*180*301*3	31.50	180	301	3
MH-31.75*185*306*3	31.75	185	306	3
MH-32*185*334*4	32.00	185	334	4
MH-32.5*185*334*4	32.50	185	334	4
MH-33*185*334*4	33.00	185	334	4
MH-33.5*185*334*4	33.50	185	334	4
MH-34*190*339*4	34.00	190	339	4
MH-34.5*190*339*4	34.50	190	339	4
MH-35*190*339*4	35.00	190	339	4
MH-35.5*190*339*4	35.50	190	339	4
MH-36*195*344*4	36.00	195	344	4
MH-36.5*195*344*4	36.50	195	344	4

DIN345 TAPER SHANK TWIST DRILL (MILLING/ROLLING)



4341/6542

118°



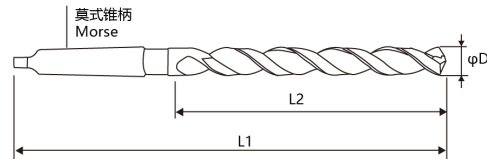
P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-37*195*344*4	37.00	195	344	4
MH-37.5*195*344*4	37.50	195	344	4
MH-38*200*349*4	38.00	200	349	4
MH-38.5*200*349*4	38.50	200	349	4
MH-39*200*349*4	39.00	200	349	4
MH-39.5*200*349*4	39.50	200	349	4
MH-40*200*349*4	40.00	200	349	4
MH-40.5*205*354*4	40.50	205	354	4
MH-41*205*354*4	41.00	205	354	4
MH-41.5*205*354*4	41.50	205	354	4
MH-42*205*354*4	42.00	205	354	4
MH-42.5*205*354*4	42.50	205	354	4
MH-43*210*359*4	43.00	210	359	4
MH-43.5*210*359*4	43.50	210	359	4
MH-44*210*359*4	44.00	210	359	4
MH-44.5*210*359*4	44.50	210	359	4
MH-45*210*359*4	45.00	210	359	4
MH-45.5*215*359*4	45.50	215	359	4
MH-46*215*364*4	46.00	215	364	4
MH-46.5*215*364*4	46.50	215	364	4
MH-47*215*364*4	47.00	215	364	4
MH-47.5*215*364*4	47.50	215	364	4
MH-48*220*369*4	48.00	220	369	4
MH-48.5*220*369*4	48.50	220	369	4
MH-49*220*369*4	49.00	220	369	4
MH-49.5*220*369*4	49.50	220	369	4
MH-50*220*369*4	50.00	220	369	4
MH-50.5*225*374*4	50.50	225	374	4
MH-51*225*412*5	51.00	225	412	5
MH-52*225*412*5	52.00	225	412	5
MH-53*225*412*5	53.00	225	412	5
MH-54*230*417*5	54.00	230	417	5
MH-55*230*417*5	55.00	230	417	5
MH-56*230*417*5	56.00	230	417	5
MH-57*235*422*5	57.00	235	422	5
MH-58*235*422*5	58.00	235	422	5
MH-59*235*422*5	59.00	235	422	5
MH-60*235*422*5	60.00	235	422	5
MH-61*240*427*5	61.00	240	427	5

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-62*240*427*5	62.00	240	427	5
MH-63*240*427*5	63.00	240	427	5
MH-64*245*432*5	64.00	245	432	5
MH-65*245*432*5	65.00	245	432	5
MH-66*245*432*5	66.00	245	432	5
MH-67*245*432*5	67.00	245	432	5
MH-68*250*437*5	68.00	250	437	5
MH-69*250*437*5	69.00	250	437	5
MH-70*250*437*5	70.00	250	437	5
MH-71*250*437*5	71.00	250	437	5
MH-72*255*442*5	72.00	255	442	5
MH-73*255*442*5	73.00	255	442	5
MH-74*255*442*5	74.00	255	442	5
MH-75*255*442*5	75.00	255	442	5
MH-76*260*447*5	76.00	260	447	5
MH-77*260*514*6	77.00	260	514	6
MH-78*260*514*6	78.00	260	514	6
MH-79*260*514*6	79.00	260	514	6
MH-80*260*514*6	80.00	260	514	6
MH-81*265*519*6	81.00	265	519	6
MH-82*265*519*6	82.00	265	519	6
MH-83*265*519*6	83.00	265	519	6
MH-84*265*519*6	84.00	265	519	6
MH-85*265*519*6	85.00	265	519	6
MH-86*270*524*6	86.00	270	524	6
MH-87*270*524*6	87.00	270	524	6
MH-88*270*524*6	88.00	270	524	6
MH-89*270*524*6	89.00	270	524	6
MH-90*270*524*6	90.00	270	524	6
MH-91*275*529*6	91.00	275	529	6
MH-92*275*529*6	92.00	275	529	6
MH-93*275*529*6	93.00	275	529	6
MH-94*275*529*6	94.00	275	529	6
MH-95*275*529*6	95.00	275	529	6
MH-96*280*534*6	96.00	280	534	6
MH-97*280*534*6	97.00	280	534	6
MH-98*280*534*6	98.00	280	534	6
MH-99*280*534*6	99.00	280	534	6
MH-100*280*534*6	100.00	280	534	6

DIN341 TAPER SHANK TWIST DRILL



4341/6542



118°



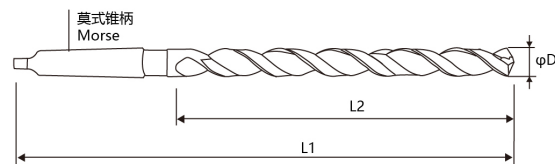
P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-5*74*155*1	5.0	74	155	1
MH-5.5*80*161*1	5.5	80	161	1
MH-6*80*161*1	6.0	80	161	1
MH-6.5*86*167*1	6.5	86	167	1
MH-7*93*174*1	7.0	93	174	1
MH-7.5*93*174*1	7.5	93	174	1
MH-8*100*181*1	8.0	100	181	1
MH-8.5*100*181*1	8.5	100	181	1
MH-9*107*188*1	9.0	107	188	1
MH-9.5*107*188*1	9.5	107	188	1
MH-10*116*197*1	10.0	116	197	1
MH-10.5*116*197*1	10.5	116	197	1
MH-11*125*206*1	11.0	125	206	1
MH-11.5*125*206*1	11.5	125	206	1
MH-12*134*215*1	12.0	134	215	1
MH-12.5*134*215*1	12.5	134	215	1
MH-13*134*215*1	13.0	134	215	1
MH-13.5*142*223*1	13.5	142	223	1
MH-14*142*223*1	14.0	142	223	1
MH-14.5*147*245*2	14.5	147	245	2
MH-15*147*245*2	15.0	147	245	2
MH-15.5*153*251*2	15.5	153	251	2
MH-16*153*251*2	16.0	153	251	2
MH-16.5*159*257*2	16.5	159	257	2
MH-17*159*257*2	17.0	159	257	2
MH-17.5*165*263*2	17.5	165	263	2
MH-18*165*263*2	18.0	165	263	2
MH-18.5*171*269*2	18.5	171	269	2
MH-19*171*269*2	19.0	171	269	2
MH-19.5*177*275*2	19.5	177	275	2
MH-20*177*275*2	20.0	177	275	2
MH-20.5*184*282*2	20.5	184	282	2
MH-21*184*282*2	21.0	184	282	2
MH-21.5*191*289*2	21.5	191	289	2
MH-22*191*289*2	22.0	191	289	2
MH-22.5*198*296*2	22.5	198	296	2
MH-23*198*289*2	23.0	198	289	2
MH-23.5*202*319*3	23.5	202	319	3

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-24*206*327*3	24.0	206	327	3
MH-24.5*206*327*3	24.5	206	327	3
MH-25*206*327*3	25.0	206	327	3
MH-25.5*214*335*3	25.5	214	335	3
MH-26*214*335*3	26.0	214	335	3
MH-26.5*214*335*3	26.5	214	335	3
MH-27*222*343*3	27.0	222	343	3
MH-27.5*222*343*3	27.5	222	343	3
MH-28*230*351*3	28.0	230	351	3
MH-28.5*230*351*3	28.5	230	351	3
MH-29*230*351*3	29.0	230	351	3
MH-29.5*230*351*3	29.5	230	351	3
MH-30*230*351*3	30.0	230	351	3
MH-30.5*239*360*3	30.5	239	360	3
MH-31*239*360*3	31.0	239	360	3
MH-31.5*239*360*3	31.5	239	360	3
MH-32*248*391*4	32.0	248	391	4
MH-32.5*248*397*4	32.5	248	397	4
MH-33*248*397*4	33.0	248	397	4
MH-33.5*248*397*4	33.5	248	397	4
MH-34*257*406*4	34.0	257	406	4
MH-35*257*406*4	35.0	257	406	4
MH-36*267*416*4	36.0	267	416	4
MH-37*267*416*4	37.0	267	416	4
MH-38*277*426*4	38.0	277	426	4
MH-39*277*426*4	39.0	277	426	4
MH-40*277*426*4	40.0	277	426	4
MH-41*287*436*4	41.0	287	436	4
MH-42*287*436*4	42.0	287	436	4
MH-43*298*447*4	43.0	298	447	4
MH-44*298*447*4	44.0	298	447	4
MH-45*298*447*4	45.0	298	447	4
MH-46*310*459*4	46.0	310	459	4
MH-47*310*459*4	47.0	310	459	4
MH-48*321*470*4	48.0	321	470	4
MH-49*321*470*4	49.0	321	470	4
MH-50*321*470*4	50.0	321	470	4

STANDARD LONG TAPER SHANK TWIST DRILL(GB1438.3)



6542



118°



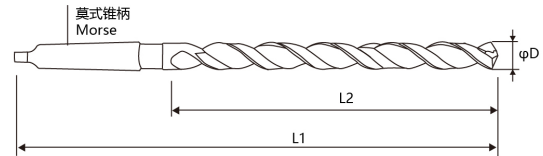
P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-6*145*225*1	6	145	225	1
MH-6.5*150*230*1	6.5	150	230	1
MH-7*155*235*1	7	155	235	1
MH-7.5*155*235*1	7.5	155	235	1
MH-8*160*240*1	8	160	240	1
MH-8.5*160*240*1	8.5	160	240	1
MH-9*165*245*1	9	165	245	1
MH-9.5*165*245*1	9.5	165	245	1
MH-10*170*250*1	10	170	250	1
MH-10.5*170*250*1	10.5	170	250	1
MH-11*175*255*1	11	175	255	1
MH-11.5*175*255*1	11.5	175	255	1
MH-12*180*260*1	12	180	260	1
MH-12.5*180*260*1	12.5	180	260	1
MH-13*180*260*1	13	180	260	1
MH-13.5*185*265*1	13.5	185	265	1
MH-14*185*265*1	14	185	265	1
MH-14.5*190*290*2	14.5	190	290	2
MH-15*190*290*2	15	190	290	2
MH-15.5*195*295*2	15.5	195	295	2
MH-16*195*295*2	16	195	295	2
MH-16.5*200*300*2	16.5	200	300	2
MH-17*200*300*2	17	200	300	2
MH-17.5*205*305*2	17.5	205	305	2
MH-18*205*305*2	18	205	305	2
MH-18.5*210*310*2	18.5	210	310	2
MH-19*210*310*2	19	210	310	2
MH-19.5*220*320*2	19.5	220	320	2
MH-20*220*320*2	20	220	320	2
MH-20.5*230*330*2	20.5	230	330	2
MH-21*230*330*2	21	230	330	2
MH-21.5*235*335*2	21.5	235	335	2
MH-22*235*335*2	22	235	335	2
MH-22.5*240*340*2	22.5	240	340	2
MH-23*240*340*2	23	240	340	2
MH-23.5*240*360*3	23.5	240	360	3
MH-24*245*365*3	24	245	365	3
MH-24.5*245*365*3	24.5	245	365	3
MH-25*245*365*3	25	245	365	3
MH-25.5*255*375*3	25.5	255	375	3
MH-26*255*375*3	26	255	375	3
MH-26.5*265*385*3	26.5	265	385	3
MH-27*265*385*3	27	265	385	3
MH-27.5*265*385*3	27.5	265	385	3
MH-28*265*385*3	28	265	385	3
MH-28.5*275*395*3	28.5	275	395	3
MH-29*275*395*3	29	275	395	3
MH-29.5*275*395*3	29.5	275	395	3

Art.Number	Cutting Dia.	Cutting Length	Total Length	Morse
	D(mm)	L2(mm)	L1(mm)	
MH-30*275*395*3	30	275	395	3
MH-31*280*400*3	31	280	400	3
MH-32*270*420*4	32	270	420	4
MH-33*270*420*4	33	270	420	4
MH-34*280*420*4	34	280	420	4
MH-35*280*430*4	35	280	430	4
MH-36*280*430*4	36	280	430	4
MH-37*280*430*4	37	280	430	4
MH-38*280*430*4	38	280	430	4
MH-39*300*450*4	39	300	450	4
MH-40*300*450*4	40	300	450	4
MH-41*300*450*4	41	300	450	4
MH-42*300*450*4	42	300	450	4
MH-43*300*450*4	43	300	450	4
MH-44*300*450*4	44	300	450	4
MH-45*300*450*4	45	300	450	4
MH-46*310*460*4	46	310	460	4
MH-47*310*460*4	47	310	460	4
MH-48*320*470*4	48	320	470	4
MH-49*320*470*4	49	320	470	4
MH-50*320*470*4	50	320	470	4
MH-51*350*550*5	51	350	550	5
MH-52*350*550*5	52	350	550	5
MH-53*350*550*5	53	350	550	5
MH-54*350*550*5	54	350	550	5
MH-55*350*550*5	55	350	550	5
MH-56*350*550*5	56	350	550	5
MH-57*350*550*5	57	350	550	5
MH-58*350*550*5	58	350	550	5
MH-59*350*550*5	59	350	550	5
MH-60*350*550*5	60	350	550	5
MH-61*350*550*5	61	350	550	5
MH-62*350*550*5	62	350	550	5
MH-63*350*550*5	63	350	550	5
MH-64*350*550*5	64	350	550	5
MH-65*350*550*5	65	350	550	5
MH-66*350*550*5	66	350	550	5
MH-67*350*550*5	67	350	550	5
MH-68*350*550*5	68	350	550	5
MH-69*350*550*5	69	350	550	5
MH-70*350*550*5	70	350	550	5
MH-71*350*550*5	71	350	550	5
MH-72*350*550*5	72	350	550	5
MH-73*350*550*5	73	350	550	5
MH-74*350*550*5	74	350	550	5
MH-75*350*550*5	75	350	550	5
MH-76*350*550*5	76	350	550	5
MH-77-80*400*650*6	77-80	400	650	6

LONG TAPER SHANK TWIST DRILL (GB1438.4)



6542



118°



P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

D(mm)	L=300	L=350	L=400	L=450	L=500	L=550	L=600	L=650	L=700	L=750	L=800	L=900	L=1000
12-14	200	250	300	350	400	450	500						
15-19		250	300	350	400	450	500	550	600	650	700		
20-23		250	300	330	400	450	500	550	600	650	700	800	900
24-29			280	330	380	430	480	530	630	630	670	720	770
30-31			280	300	380	430	480	530	630	630	670	720	770
32-38					350	400	450	500	600	600	650	700	750
39-50					350	400	450	500	600	600	650	700	750
51-76							400	450	550	550	600	700	800
77-100									500	500	550	650	750

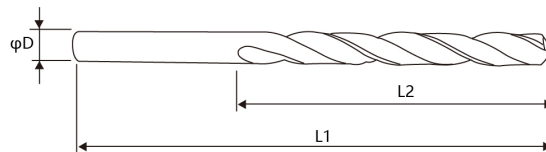
DIN338 STRAIGHT SHANK TWIST DRILL



118°/135°



Double rear Angle self-centering



M35/6542/4341

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

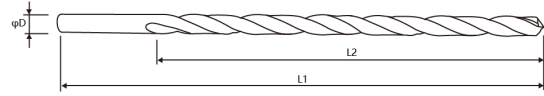
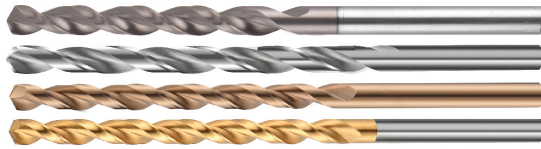
○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-0.5*6*22	0.5	6	22
MH-0.6*7*24	0.6	7	24
MH-0.7*9*28	0.7	9	28
MH-0.8*10*30	0.8	10	30
MH-0.9*11*32	0.9	11	32
MH-1*12*34	1.0	12	34
MH-1.1*14*36	1.1	14	36
MH-1.2*16*38	1.2	16	38
MH-1.3*18*40	1.3	18	40
MH-1.4*18*40	1.4	18	40
MH-1.5*20*43	1.5	20	43
MH-1.6*20*43	1.6	20	43
MH-1.7*22*46	1.7	22	46
MH-1.8*22*46	1.8	22	46
MH-1.9*24*46	1.9	24	46
MH-2*24*49	2.0	24	49
MH-2.1*24*49	2.1	24	49
MH-2.2*27*53	2.2	27	53
MH-2.3*27*53	2.3	27	53
MH-2.4*30*57	2.4	30	57
MH-2.5*30*57	2.5	30	57
MH-2.6*30*57	2.6	30	57
MH-2.7*33*61	2.7	33	61
MH-2.8*33*61	2.8	33	61
MH-2.9*33*61	2.9	33	61
MH-3*33*61	3.0	33	61
MH-3.1*36*65	3.1	36	65
MH-3.2*36*65	3.2	36	65
MH-3.3*36*65	3.3	36	65
MH-3.4*39*70	3.4	39	70
MH-3.5*39*70	3.5	39	70
MH-3.6*39*70	3.6	39	70
MH-3.7*39*70	3.7	39	70
MH-3.8*43*75	3.8	43	75
MH-3.9*43*75	3.9	43	75
MH-4*43*75	4.0	43	75
MH-4.1*43*75	4.1	43	75
MH-4.2*43*75	4.2	43	75
MH-4.3*47*80	4.3	47	80
MH-4.4*47*80	4.4	47	80
MH-4.5*47*80	4.5	47	80
MH-4.6*47*80	4.6	47	80
MH-4.7*47*80	4.7	47	80
MH-4.8*52*86	4.8	52	86
MH-4.9*52*86	4.9	52	86
MH-5*52*86	5.0	52	86
MH-5.1*52*86	5.1	52	86
MH-5.2*52*86	5.2	52	86
MH-5.3*52*86	5.3	52	86
MH-5.4*57*93	5.4	57	93

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-5.5*57*93	5.5	57	93
MH-5.6*57*93	5.6	57	93
MH-5.7*57*93	5.7	57	93
MH-5.8*57*93	5.8	57	93
MH-5.9*57*93	5.9	57	93
MH-6*57*93	6.0	57	93
MH-6.1*63*101	6.1	63	101
MH-6.2*63*101	6.2	63	101
MH-6.3*63*101	6.3	63	101
MH-6.4*63*101	6.4	63	101
MH-6.5*63*101	6.5	63	101
MH-6.6*63*101	6.6	63	101
MH-6.7*63*101	6.7	63	101
MH-6.8*69*109	6.8	69	109
MH-6.9*69*109	6.9	69	109
MH-7*69*109	7.0	69	109
MH-7.1*69*109	7.1	69	109
MH-7.2*69*109	7.2	69	109
MH-7.3*69*109	7.3	69	109
MH-7.4*69*109	7.4	69	109
MH-7.5*69*109	7.5	69	109
MH-7.6*75*117	7.6	75	117
MH-7.7*75*117	7.7	75	117
MH-7.8*75*117	7.8	75	117
MH-7.9*75*117	7.9	75	117
MH-8*75*117	8.0	75	117
MH-8.1*75*117	8.1	75	117
MH-8.2*75*117	8.2	75	117
MH-8.3*75*117	8.3	75	117
MH-8.4*75*117	8.4	75	117
MH-8.5*75*117	8.5	75	117
MH-8.6*81*125	8.6	81	125
MH-8.7*81*125	8.7	81	125
MH-8.8*81*125	8.8	81	125
MH-8.9*81*125	8.9	81	125
MH-9*81*125	9.0	81	125
MH-9.1*81*125	9.1	81	125
MH-9.2*81*125	9.2	81	125
MH-9.3*81*125	9.3	81	125
MH-9.4*81*125	9.4	81	125
MH-9.5*81*125	9.5	81	125
MH-9.6*87*133	9.6	87	133
MH-9.7*87*133	9.7	87	133
MH-9.8*87*133	9.8	87	133
MH-9.9*87*133	9.9	87	133
MH-10*87*133	10.0	87	133
MH-10.1*87*133	10.1	87	133
MH-10.2*87*133	10.2	87	133
MH-10.3*87*133	10.3	87	133
MH-10.4*87*133	10.4	87	133

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-10.5*87*133	10.5	87	133
MH-10.6*87*133	10.6	87	133
MH-10.7*94*142	10.7	94	142
MH-10.8*94*142	10.8	94	142
MH-10.9*94*142	10.9	94	142
MH-11*94*142	11.0	94	142
MH-11.1*94*142	11.1	94	142
MH-11.2*94*142	11.2	94	142
MH-11.3*94*142	11.3	94	142
MH-11.4*94*142	11.4	94	142
MH-11.5*94*142	11.5	94	142
MH-11.6*94*142	11.6	94	142
MH-11.7*94*142	11.7	94	142
MH-11.8*94*142	11.8	94	142
MH-11.9*101*151	11.9	101	151
MH-12*101*151	12.0	101	151
MH-12.1*101*151	12.1	101	151
MH-12.2*101*151	12.2	101	151
MH-12.3*101*151	12.3	101	151
MH-12.4*101*151	12.4	101	151
MH-12.5*101*151	12.5	101	151
MH-12.6*101*151	12.6	101	151
MH-12.7*101*151	12.7	101	151
MH-12.8*101*151	12.8	101	151
MH-12.9*101*151	12.9	101	151
MH-13*101*151	13.0	101	151
MH-13.1*101*151	13.1	101	151
MH-13.2*101*151	13.2	101	151
MH-13.3*108*160	13.3	108	160
MH-13.4*108*160	13.4	108	160
MH-13.5*108*160	13.5	108	160
MH-13.6*108*160	13.6	108	160
MH-13.7*108*160	13.7	108	160
MH-13.8*108*160	13.8	108	160
MH-13.9*108*160	13.9	108	160
MH-14*108*160	14.0	108	160
MH-14.5*108*169	14.5	108	169
MH-15*108*169	15.0	108	169
MH-15.5*114*178	15.5	114	178
MH-16*114*178	16.0	114	178
MH-16.5*120*184	16.5	120	184
MH-17*120*184	17.0	120	184
MH-17.5*125*191	17.5	125	191
MH-18*125*191	18.0	125	191
MH-18.5*135*198	18.5	135	198
MH-19*135*198	19.0	135	198
MH-19.5*140*205	19.5	140	205
MH-20*140*205	20.0	140	205

DIN340 HIGH SPEED STEEL STRAIGHT SHANK TWIST DRILL (FULL GROUND/MILLED/PARABOLA)



6542/M35



118°/135°



Double rear Angle self-centering

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

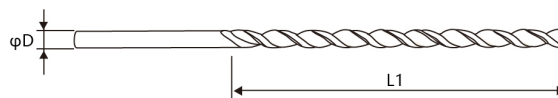
○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-0.5*33*56	0.5	33	56
MH-0.6*33*56	0.6	33	56
MH-0.7*33*56	0.7	33	56
MH-0.8*33*56	0.8	33	56
MH-0.9*33*56	0.9	33	56
MH-1*33*56	1.0	33	56
MH-1.1*37*60	1.1	37	60
MH-1.2*41*65	1.2	41	65
MH-1.3*41*65	1.3	41	65
MH-1.4*45*70	1.4	45	70
MH-1.5*45*70	1.5	45	70
MH-1.6*50*86	1.6	50	86
MH-1.7*50*86	1.7	50	86
MH-1.8*53*80	1.8	53	80
MH-1.9*53*80	1.9	53	80
MH-2*56*85	2.0	56	85
MH-2.1*56*85	2.1	56	85
MH-2.2*56*90	2.2	56	90
MH-2.3*56*90	2.3	56	90
MH-2.4*62*95	2.4	62	95
MH-2.5*62*95	2.5	62	95
MH-2.6*62*100	2.6	62	100
MH-2.7*66*100	2.7	66	100
MH-2.8*66*100	2.8	66	100
MH-2.9*66*100	2.9	66	100
MH-3*66*100	3.0	66	100
MH-3.1*69*106	3.1	69	106
MH-3.2*69*106	3.2	69	106
MH-3.3*69*106	3.3	69	106
MH-3.4*69*110	3.4	69	110
MH-3.5*73*110	3.5	73	110
MH-3.6*73*110	3.6	73	110
MH-3.7*73*110	3.7	73	110
MH-3.8*78*119	3.8	78	119
MH-3.9*78*119	3.9	78	119
MH-4*78*119	4.0	78	119
MH-4.1*78*119	4.1	78	119
MH-4.2*82*126	4.2	82	126
MH-4.3*82*126	4.3	82	126
MH-4.4*82*126	4.4	82	126
MH-4.5*82*126	4.5	82	126
MH-4.6*82*126	4.6	82	126
MH-4.7*87*132	4.7	87	132
MH-4.8*87*132	4.8	87	132
MH-4.9*87*132	4.9	87	132
MH-5*87*132	5.0	87	132
MH-5.1*87*132	5.1	87	132
MH-5.2*87*132	5.2	87	132
MH-5.3*91*139	5.3	91	139
MH-5.4*91*139	5.4	91	139

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-5.5*91*139	5.5	91	139
MH-5.6*91*139	5.6	91	139
MH-5.7*91*139	5.7	91	139
MH-5.8*91*139	5.8	91	139
MH-5.9*91*139	5.9	91	139
MH-6*97*148	6.0	97	148
MH-6.1*97*148	6.1	97	148
MH-6.2*97*148	6.2	97	148
MH-6.3*97*148	6.3	97	148
MH-6.4*97*148	6.4	97	148
MH-6.5*97*148	6.5	97	148
MH-6.6*97*148	6.6	97	148
MH-6.7*97*148	6.7	97	148
MH-6.8*102*156	6.8	102	156
MH-6.9*102*156	6.9	102	156
MH-7*102*156	7.0	102	156
MH-7.1*102*156	7.1	102	156
MH-7.2*102*156	7.2	102	156
MH-7.3*102*156	7.3	102	156
MH-7.4*102*156	7.4	102	156
MH-7.5*109*165	7.5	109	165
MH-7.6*109*165	7.6	109	165
MH-7.7*109*165	7.7	109	165
MH-7.8*109*165	7.8	109	165
MH-7.9*109*165	7.9	109	165
MH-8*109*165	8.0	109	165
MH-8.1*109*165	8.1	109	165
MH-8.2*109*165	8.2	109	165
MH-8.3*109*165	8.3	109	165
MH-8.4*109*165	8.4	109	165
MH-8.5*115*175	8.5	115	175
MH-8.6*115*175	8.6	115	175
MH-8.7*115*175	8.7	115	175
MH-8.8*115*175	8.8	115	175
MH-8.9*115*175	8.9	115	175
MH-9*115*175	9.0	115	175
MH-9.1*115*175	9.1	115	175
MH-9.2*115*175	9.2	115	175
MH-9.3*115*175	9.3	115	175
MH-9.4*115*175	9.4	115	175
MH-9.5*121*184	9.5	121	184
MH-9.6*121*184	9.6	121	184
MH-9.7*121*184	9.7	121	184
MH-9.8*121*184	9.8	121	184
MH-9.9*121*184	9.9	121	184
MH-10*121*184	10.0	121	184
MH-10.1*121*184	10.1	121	184
MH-10.2*121*184	10.2	121	184
MH-10.3*121*184	10.3	121	184
MH-10.4*121*184	10.4	121	184

Art.Number	Cutting Dia. D(mm)	Cutting Length L2(mm)	Total Length L1(mm)
MH-10.5*121*184	10.5	121	184
MH-10.6*121*184	10.6	121	184
MH-10.7*128*195	10.7	128	195
MH-10.8*128*195	10.8	128	195
MH-10.9*128*195	10.9	128	195
MH-11*128*195	11.0	128	195
MH-11.1*128*195	11.1	128	195
MH-11.2*128*195	11.2	128	195
MH-11.3*128*195	11.3	128	195
MH-11.4*128*195	11.4	128	195
MH-11.5*128*195	11.5	128	195
MH-11.6*128*195	11.6	128	195
MH-11.7*128*195	11.7	128	195
MH-11.8*128*195	11.8	128	195
MH-11.9*134*205	11.9	134	205
MH-12*134*205	12.0	134	205
MH-12.1*134*205	12.1	134	205
MH-12.2*134*205	12.2	134	205
MH-12.3*134*205	12.3	134	205
MH-12.4*134*205	12.4	134	205
MH-12.5*134*205	12.5	134	205
MH-12.6*134*205	12.6	134	205
MH-12.7*134*205	12.7	134	205
MH-12.8*134*205	12.8	134	205
MH-12.9*134*205	12.9	134	205
MH-13*134*205	13.0	134	205
MH-13.1*134*205	13.1	134	205
MH-13.2*134*205	13.2	134	205
MH-13.3*140*214	13.3	140	214
MH-13.4*140*214	13.4	140	214
MH-13.5*140*214	13.5	140	214
MH-13.6*140*214	13.6	140	214
MH-13.7*140*214	13.7	140	214
MH-13.8*140*214	13.8	140	214
MH-13.9*140*214	13.9	140	214
MH-14*140*214	14.0	140	214
MH-14.5*144*220	14.5	144	220
MH-15*144*220	15.0	144	220
MH-15.5*149*227	15.5	149	227
MH-16*149*227	16.0	149	227
MH-16.5*154*235	16.5	154	235
MH-17*154*235	17.0	154	235
MH-17.5*158*241	17.5	158	241
MH-18*158*241	18.0	158	241
MH-18.5*162*247	18.5	162	247
MH-19*162*247	19.0	162	247
MH-19.5*166*254	19.5	166	254
MH-20*166*254	20.0	166	254

HIGH SPEED STEEL PARABOLIC DEEP HOLE DRILL WITH COBALT M2 EXTRA LONG STRAIGHT SHANK DRILL (FULLY GROUND/MILLED)



M35/M2



118°/135°



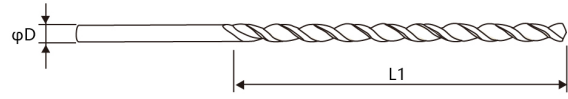
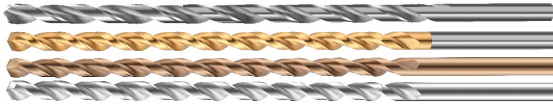
Baked yellow/coated/fully ground/oxynitriding

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

D(mm)	L=80	L=100	L=120	L=160	L=200	L=250	L=300	L=350	L=400	L=450	L=500	L=550	L=600
0.5-1.2	55	65	75										
1.3-1.5	55	65	75										
1.6-2.0		65	75	110									
2.1-2.5		65	75	110	145								
2.6-3.0			75	110	145	180	220	250	300				
3.1-3.3			75	110	145	180	220	250	300				
3.4-4.0				110	145	180	220	250	300				
4.1-4.5				110	145	180	220	250	300				
4.6-5.0				110	145	180	220	250	300				
5.1-5.5				110	145	180	220	250	300				
5.6-6.0				110	145	180	220	250	300	330	370		
6.1-6.5					145	180	220	250	300	330	370		
6.6-7.0					145	180	220	250	300	330	370		
7.1-7.5					145	180	220	250	300	330	370		
7.6-8.0					145	180	220	250	300	330	370	380	420
8.1-8.5					145	180	220	250	300	330	370	380	420
8.6-9.0					145	180	220	250	300	330	370	380	420
9.1-9.5					145	180	220	250	300	330	370	380	420
9.6-10.0					145	180	220	250	300	330	370	380	420
10.1-11.0					145	180	220	250	300	330	370	380	420
11.1-12.0					145	180	220	250	300	330	370	380	420
12.1-13.0					145	180	220	250	300	330	370	380	420
13.1-14.0					145	180	220	250	300	330	370	380	420
14.1-15.0							220	250	300	330	370	380	420
15.1-16.0							220	250	300	330	370	380	420

DIN1869 STRAIGHT SHANK EXTENSION DRILL TWIST DRILL



M35/6542



118°/135°



fully ground/oxy-nitriding

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	●	○	●	●	○

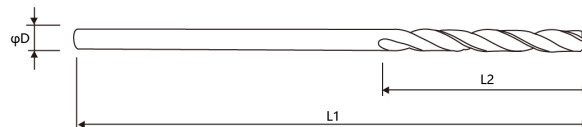
○ Can be used
● Suitable
● Not Recommended

type	specification	Total Length	Cutting Length
DIN1869-1	D(mm)	L1(mm)	L2(mm)
MH-2*85*125	2.0	85	125
MH-2.5*95*140	2.5	95	140
MH-3*100*150	3.0	100	150
MH-3.5*115*165	3.5	115	165
MH-4*120*175	4.0	120	175
MH-4.5*125*185	4.5	125	185
MH-5*135*195	5.0	135	195
MH-5.5*140*205	5.5	140	205
MH-6*140*205	6.0	140	205
MH-6.5*150*215	6.5	150	215
MH-7*155*225	7.0	155	225
MH-7.5*155*225	7.5	155	225
MH-8*165*240	8.0	165	240
MH-8.5*165*240	8.5	165	240
MH-9*175*250	9.0	175	250
MH-9.5*175*250	9.5	175	250
MH-10*185*265	10.0	185	265
MH-10.5*185*265	10.5	185	265
MH-11*195*280	11.0	195	280
MH-11.5*195*280	11.5	195	280
MH-12*205*295	12.0	205	295
MH-12.5*205*295	12.5	205	295
MH-13*205*295	13.0	205	295

type	specification	Total Length	Cutting Length
DIN1869-2	D(mm)	L1(mm)	L2(mm)
MH-2*110*160	2.0	110	160
MH-2.5*120*180	2.5	120	180
MH-3*130*190	3.0	130	190
MH-3.5*145*210	3.5	145	210
MH-4*150*220	4.0	150	220
MH-4.5*160*235	4.5	160	235
MH-5*170*245	5.0	170	245
MH-5.5*180*260	5.5	180	260
MH-6*180*260	6.0	180	260
MH-6.5*190*275	6.5	190	275
MH-7*200*290	7.0	200	290
MH-7.5*200*290	7.5	200	290
MH-8*210*305	8.0	210	305
MH-8.5*210*305	8.5	210	305
MH-9*220*320	9.0	220	320
MH-9.5*220*320	9.5	220	320
MH-10*235*340	10.0	235	340
MH-10.5*235*340	10.5	235	340
MH-11*250*365	11.0	250	365
MH-11.5*250*365	11.5	250	365
MH-12*260*375	12.0	260	375
MH-12.5*260*375	12.5	260	375
MH-13*260*375	13.0	260	375

type	specification	Total Length	Cutting Length
DIN1869-3	D(mm)	L1(mm)	L2(mm)
MH-2*135*200	2.0	135	200
MH-2.5*150*225	2.5	150	225
MH-3*160*240	3.0	160	240
MH-3.5*180*265	3.5	180	265
MH-4*190*280	4.0	190	280
MH-4.5*200*295	4.5	200	295
MH-5*210*315	5.0	210	315
MH-5.5*225*330	5.5	225	330
MH-6*225*330	6.0	225	330
MH-6.5*235*350	6.5	235	350
MH-7*250*370	7.0	250	370
MH-7.5*250*370	7.5	250	370
MH-8*265*390	8.0	265	390
MH-8.5*265*390	8.5	265	390
MH-9*280*410	9.0	280	410
MH-9.5*280*410	9.5	280	410
MH-10*295*430	10.0	295	430
MH-10.5*295*430	10.5	295	430
MH-11*310*455	11.0	310	455
MH-11.5*310*455	11.5	310	455
MH-12*330*480	12.0	330	480
MH-12.5*330*480	12.5	330	480
MH-13*330*480	13.0	330	480

HIGH SPEED STEEL STRAIGHT SHANK EXTENDED AVIATION DRILL



M2/M35



118°/135°

Double rear Angle self-centering
fully ground/oxy-nitriding

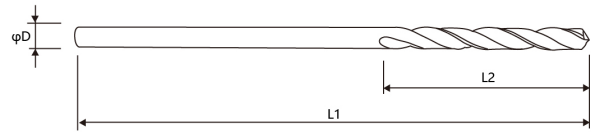
P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

petiole D(mm)	Total Length L1(mm)	Cutting Length L2(mm)
1/16"	6"	7/8"
5/64"	6"	1"
3/32"	6"	1-1/4"
7/64"	6"	1-1/2"
1/8"	6"	1-5/8"
9/64"	6"	1-3/4"
5/32"	6"	2"
11/64"	6"	2-1/8"
3/16"	6"	2-5/16"
13/64"	6"	2-7/16"
7/32"	6"	2-1/2"
15/64"	6"	2-5/8"
1/4"	6"	2-3/4"
17/64"	6"	2-7/8"
9/32"	6"	2-15/16"
19/64"	6"	3-1/16"
5/16"	6"	3-3/16"
21/64"	6"	3-5/16"
11/32"	6"	3-7/16"
23/64"	6"	3-1/2"
3/8"	6"	3-5/8"
25/64"	6"	3-3/4"
13/32"	6"	3-7/8"
27/64"	6"	3-15/16"
7/16"	6"	4-1/16"
15/32"	6"	4-3/16"
29/64"	6"	4-5/16"
31/64"	6"	4-3/8"
1/2"	6"	4-1/2"

petiole D(mm)	Total Length L1(mm)	Cutting Length L2(mm)
1/16"	12"	7/8"
5/64"	12"	1"
3/32"	12"	1-1/4"
7/64"	12"	1-1/2"
1/8"	12"	1-5/8"
9/64"	12"	1-3/4"
5/32"	12"	2"
11/64"	12"	2-1/8"
3/16"	12"	2-5/16"
13/64"	12"	2-7/16"
7/32"	12"	2-1/2"
15/64"	12"	2-5/8"
1/4"	12"	2-3/4"
17/64"	12"	2-7/8"
9/32"	12"	2-15/16"
19/64"	12"	3-1/16"
5/16"	12"	3-3/16"
21/64"	12"	3-5/16"
11/32"	12"	3-7/16"
23/64"	12"	3-1/2"
3/8"	12"	3-5/8"
25/64"	12"	3-3/4"
13/32"	12"	3-7/8"
27/64"	12"	3-15/16"
7/16"	12"	4-1/16"
15/32"	12"	4-3/16"
29/64"	12"	4-5/16"
31/64"	12"	4-3/8"
1/2"	12"	4-1/2"

HIGH SPEED STEEL STRAIGHT SHANK EXTENDED AVIATION DRILL



M2/M35



118°/135°

Double rear Angle self-centering
fully ground/oxynitriding

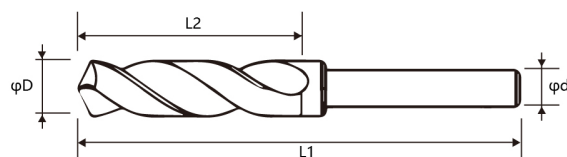
P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

petiole D(mm)	Total Length L1(mm)	Cutting Length L2(mm)
1	6"	2-5/8"
2	6"	2-5/8"
3	6"	2-1/2"
4	6"	2-1/2"
5	6"	2-1/2"
6	6"	2-1/2"
7	6"	2-7/16"
8	6"	2-7/16"
9	6"	2-7/16"
10	6"	2-7/16"
11	6"	2-5/16"
12	6"	2-5/16"
13	6"	2-5/16"
14	6"	2-3/16"
15	6"	2-3/16"
16	6"	2-3/16"
17	6"	2-3/16"
18	6"	2-1/8"
19	6"	2-1/8"
20	6"	2-1/8"
21	6"	2-1/8"
22	6"	2"
23	6"	2"
24	6"	2"
25	6"	1-7/8"
26	6"	1-7/8"
27	6"	1-7/8"
28	6"	1-3/4"
29	6"	1-3/4"
30	6"	1-5/8"
31	6"	1-5/8"
32	6"	1-5/8"
33	6"	1-1/2"
34	6"	1-1/2"
35	6"	1-1/2"
36	6"	1-7/16"
37	6"	1-7/16"
38	6"	1-7/16"
39	6"	1-3/8"
40	6"	1-3/8"
41	6"	1-3/8"
42	6"	1-1/4"
43	6"	1-1/4"
44	6"	1-1/8"
45	6"	1-1/8"
46	6"	1-1/8"
47	6"	1"
48	6"	1"
49	6"	1"
50	6"	1"

petiole D(mm)	Total Length L1(mm)	Cutting Length L2(mm)
1	12"	2-5/8"
2	12"	2-5/8"
3	12"	2-1/2"
4	12"	2-1/2"
5	12"	2-1/2"
6	12"	2-1/2"
7	12"	2-7/16"
8	12"	2-7/16"
9	12"	2-7/16"
10	12"	2-7/16"
11	12"	2-5/16"
12	12"	2-5/16"
13	12"	2-5/16"
14	12"	2-3/16"
15	12"	2-3/16"
16	12"	2-3/16"
17	12"	2-3/16"
18	12"	2-1/8"
19	12"	2-1/8"
20	12"	2-1/8"
21	12"	2-1/8"
22	12"	2"
23	12"	2"
24	12"	2"
25	12"	1-7/8"
26	12"	1-7/8"
27	12"	1-7/8"
28	12"	1-3/4"
29	12"	1-3/4"
30	12"	1-5/8"
31	12"	1-5/8"
32	12"	1-5/8"
33	12"	1-1/2"
34	12"	1-1/2"
35	12"	1-1/2"
36	12"	1-7/16"
37	12"	1-7/16"
38	12"	1-7/16"
39	12"	1-3/8"
40	12"	1-3/8"
41	12"	1-3/8"
42	12"	1-1/4"
43	12"	1-1/4"
44	12"	1-1/8"
45	12"	1-1/8"
46	12"	1-1/8"
47	12"	1"
48	12"	1"
49	12"	1"
50	12"	1"

1/2 EQUAL SHANK DRILL



M35/6542



118°/135°

Double rear Angle self-centering
fully ground/oxy-nitriding

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

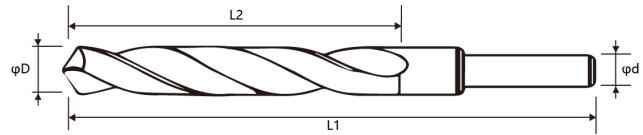
○ Can be used
● Suitable
● Not Recommended

Cutting Dia. D(mm)	Cutting Length L2(mm)	Shank diameter d(mm)	Total Length L1(mm)
10.00	76	9.5	152
10.50	76	9.5	152
11.00	76	9.5	152
11.50	76	9.5	152
12.00	76	9.5	152
12.50	76	9.5	152
13.00	76	12.7	152
13.50	76	12.7	152
14.00	76	12.7	152
14.50	76	12.7	152
15.00	76	12.7	152
15.50	76	12.7	152
16.00	76	12.7	152
16.50	76	12.7	152
17.00	76	12.7	152
17.50	76	12.7	152
18.00	76	12.7	152
18.50	76	12.7	152
19.00	76	12.7	152
19.50	76	12.7	152
20.00	76	12.7	152
20.50	76	12.7	152
21.00	76	12.7	152
21.50	76	12.7	152
22.00	76	12.7	152
22.50	76	12.7	152
23.00	76	12.7	152
23.50	76	12.7	152
24.00	76	12.7	152
24.50	76	12.7	152
25.00	76	12.7	152
25.50	76	12.7	152
26.00	76	12.7	152
26.50	76	12.7	152
27.00	76	12.7	152
27.50	76	12.7	152
28.00	76	12.7	152
28.50	76	12.7	152
29.00	76	12.7	152
29.50	76	12.7	152
30.00	76	12.7	152
31.00	76	12.7(19.05)	152
32.00	76	12.7(19.05)	152
33.00	76	12.7(19.05)	152
34.00	76	12.7(19.05)	152
35.00	76	12.7(19.05)	152
36.00	76	12.7(19.05)	152
37.00	76	12.7(19.05)	152
38.00	76	12.7(19.05)	152
39.00	76	12.7(19.05)	152
40.00	76	12.7(19.05)	152

Cutting Dia. D(mm)	Cutting Length L2(mm)	Shank diameter d(mm)	Total Length L1(mm)
33/64"	3"	1/2"	6"
17/32"	3"	1/2"	6"
35/64"	3"	1/2"	6"
9/16"	3"	1/2"	6"
37/64"	3"	1/2"	6"
19*32"	3"	1/2"	6"
39/64"	3"	1/2"	6"
5/8"	3"	1/2"	6"
41/64"	3"	1/2"	6"
21/32"	3"	1/2"	6"
43/64"	3"	1/2"	6"
11/16"	3"	1/2"	6"
45/64"	3"	1/2"	6"
23/32"	3"	1/2"	6"
47/64"	3"	1/2"	6"
23/32"	3"	1/2"	6"
47/64"	3"	1/2"	6"
25/32"	3"	1/2"	6"
47/64"	3"	1/2"	6"
3/4"	3"	1/2"	6"
49/64"	3"	1/2"	6"
25/32"	3"	1/2"	6"
51/64"	3"	1/2"	6"
13/16"	3"	1/2"	6"
53/64"	3"	1/2"	6"
27/32"	3"	1/2"	6"
55/64"	3"	1/2"	6"
7/8"	3"	1/2"	6"
57/64"	3"	1/2"	6"
29/32"	3"	1/2"	6"
59/64"	3"	1/2"	6"
15/16"	3"	1/2"	6"
61/64"	3"	1/2"	6"
31/32"	3"	1/2"	6"
63/64"	3"	1/2"	6"
1"	3"	1/2"	6"
1-1/64"	3"	1/2"	6"
1-1/32"	3"	1/2"	6"
1-3/64"	3"	1/2"	6"
1-1/16"	3"	1/2"	6"
1-5/64"	3"	1/2"	6"
1-3/32"	3"	1/2"	6"
1-7/64"	3"	1/2"	6"
1-1/8"	3"	1/2"	6"
1-9/64"	3"	1/2"	6"
1-5/32"	3"	1/2"	6"
1-11/64"	3"	1/2"	6"
1-3/16"	3"	1/2"	6"
1-13/64"	3"	1/2"	6"
1-7/32"	3"	1/2"	6"
1-15/64"	3"	1/2"	6"
1-1/4"	3"	1/2"	6"
1-17/64"	3"	1/2"	6"

Cutting Dia. D(mm)	Cutting Length L2(mm)	Shank diameter d(mm)	Total Length L1(mm)
1-9/32"	3"	1/2"	6"
1-19/64"	3"	1/2"	6"
1-5/16"	3"	1/2"	6"
1-21/64"	3"	1/2"	6"
1-11/32"	3"	1/2"	6"
1-23/64"	3"	1/2"	6"
1-3/8"	3"	1/2"	6"
1-25/64"	3"	1/2"	6"
1-13/32"	3"	1/2"	6"
1-27/64"	3"	1/2"	6"
1-7/16"	3"	1/2"	6"
1-29/64"	3"	1/2"	6"
1-15/32"	3"	1/2"	6"
1-31/64"	3"	1/2"	6"
1-1/2"	3"	1/2"	6"
1"	3"	3/4"	6"
1-1/32"	3"	3/4"	6"
1-1/16"	3"	3/4"	6"
1-3/32"	3"	3/4"	6"
1-1/8"	3"	3/4"	6"
1-5/32"	3"	3/4"	6"
1-3/16"	3"	3/4"	6"
1-7/32"	3"	3/4"	6"
1-1/4"	3"	3/4"	6"
1-9/32"	3"	3/4"	6"
1-5/16"	3"	3/4"	6"
1-11/32"	3"	3/4"	6"
1-3/8"	3"	3/4"	6"
1-13/32"	3"	3/4"	6"
1-7/16"	3"	3/4"	6"
1-15/32"	3"	3/4"	6"
1-1/2"	3"	3/4"	6"
1-17/32"	3"	3/4"	6"
1-9/16"	3"	3/4"	6"
1-9/32"	3"	3/4"	6"
1-5/8"	3"	3/4"	6"
1-21/32"	3"	3/4"	6"
1-11/16"	3"	3/4"	6"
1-23/32"	3"	3/4"	6"
1-3/4"	3"	3/4"	6"
1-25/32"	3"	3/4"	6"
1-3/4"	3"	3/4"	6"
1-25/32"	3"	3/4"	6"
1-13/16"	3"	3/4"	6"
1-27/32"	3"	3/4"	6"
1-7/8"	3"	3/4"	6"
1-29/32"	3"	3/4"	6"
1-15/16"	3"	3/4"	6"
1-31/32"	3"	3/4"	6"
2"	3"	3/4"	6"

DIN338 EQUAL SHANK DRILL



M35/6542



118°/135°

Double rear Angle self-centering
fully ground/oxy-nitriding

P	M	K	N	S	H
steel	Stainless Steel	Cast Iron	Graphite/Aluminum/ copper	Titanium	High Hardened Steel
●	○	●	●	●	○

○ Can be used
● Suitable
● Not Recommended

Art.Number	Cutting Dia.	Cutting Length	Shank diameter	Total Length
	D(mm)	L2(mm)	d(mm)	L1(mm)
MH-8.5*75*8*117	8.5	75	8	117
MH-9*81*8*125	9	81	8	125
MH-9.5*81*8*125	9.5	81	8	125
MH-10*87*8*133	10	87	8	133
MH-10.5*87*8*133	10.5	87	8	133
MH-11*94*8*142	11	94	8	142
MH-11.5*94*8*142	11.5	94	8	142
MH-12*101*8*151	12	101	8	151
MH-12.5*101*8*151	12.5	101	8	151
MH-13*101*8*151	13	101	8	151

Art.Number	Cutting Dia.	Cutting Length	Shank diameter	Total Length
	D(mm)	L2(mm)	d(mm)	L1(mm)
MH-10.5*87*10*133	10.5	87	10	133
MH-11*94*10*142	11	94	10	142
MH-11.5*94*10*142	11.5	94	10	142
MH-12*101*10*151	12	101	10	151
MH-12.5*101*10*151	12.5	101	10	151
MH-13*101*10*151	13	101	10	151
MH-13.5*108*10*160	13.5	108	10	160
MH-14*108*10*160	14	108	10	160
MH-14.5*114*10*169	14.5	114	10	169
MH-15*114*10*169	15	114	10	169
MH-15.5*120*10*178	15.5	120	10	178
MH-16*120*10*178	16	120	10	178
MH-16.5*125*10*184	16.5	125	10	184
MH-17*125*10*184	17	125	10	184
MH-17.5*130*10*191	17.5	130	10	191
MH-18*130*10*191	18	130	10	191
MH-18.5*135*10*198	18.5	135	10	198
MH-19*135*10*198	19	135	10	198
MH-19.5*140*10*205	19.5	140	10	205
MH-20*140*10*205	20	140	10	205

Art.Number	Cutting Dia.	Cutting Length	Shank diameter	Total Length
	D(mm)	L2(mm)	d(mm)	L1(mm)
MH-13.5*13*108*160	13.5	108	13(12.7)	160
MH-14*13*108*160	14	108	13(12.7)	160
MH-14.5*13*114*169	14.5	114	13(12.7)	169
MH-15*13*114*169	15	114	13(12.7)	169
MH-15.5*13*120*178	15.5	120	13(12.7)	178
MH-16*13*120*178	16	120	13(12.7)	178
MH-16.5*13*125*184	16.5	125	13(12.7)	184
MH-17*13*125*184	17	125	13(12.7)	184
MH-17.5*13*130*191	17.5	130	13(12.7)	191
MH-18*13*130*191	18	130	13(12.7)	191
MH-18.5*13*135*198	18.5	135	13(12.7)	198
MH-19*13*135*198	19	135	13(12.7)	198
MH-19.5*13*140*205	19.5	140	13(12.7)	205
MH-20*13*140*205	20	140	13(12.7)	205
MH-21*13*145*205	21	145	13(12.7)	205
MH-22*13*150*210	22	150	13(12.7)	210
MH-23*13*155*215	23	155	13(12.7)	215
MH-24*13*160*220	24	160	13(12.7)	220
MH-25*13*160*220	25	160	13(12.7)	220
MH-26*13*165*235	26	165	13(12.7)	235
MH-27*13*170*235	27	170	13(12.7)	235
MH-28*13*170*235	28	170	13(12.7)	235
MH-29*13*175*240	29	175	13(12.7)	240
MH-30*13*175*240	30	175	13(12.7)	240

Bit cutting conditions selection table-1

Note: The above value is the Spindle speed N(rpm)
The following values are Feed rateF(mn/rev)

Work Material		Bit diameter D(mm)														Drill Material
Material	Tensile Strength N/mm²	Cutting Speed M/min	1	2	3	4	5	6	7	8	9	10	12	16	20	
General Structural Steel																
SS34,SS41	300-500	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
SS50	500-800	25	8000	4000	2650	2000	1600	1330	1440	1000	880	660	660	500	400	HSS
			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
Feed Cut Steel																
SUN21,SUM22L	360-550	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.315	
SUM32	600-850	25	8000	4000	2650	2000	1600	1330	1140	1000	880	660	660	500	400	HSS
			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
Spring Steel																
SUP3, SUP10	HB240-330	4	1280-	640-	420-	320-	160-	210-	180-	160-	140-	130-	105-	80-	65-	HSCO
			3200	1600	1070	800	640	530	460	400	360	320	270	200	160	
SUP12			0.013	0.025	0.038	0.05	0.05	0.06	0.07	0.08	0.09	0.1	0.1	0.125	0.16	
Carbon Steel																
S10C-S20C	340-600	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
S35C-S45C	600-800	20	6400	3200	2120	1600	1280	1060	910	800	710	640	530	400	320	HSS
			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
S50C-S58C	800-1000	16	5000	2500	1700	1250	1020	850	730	630	570	510	430	320	260	HSS
			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
Alloy Steel																
SCR415 SCR420	500-800	16	5000	2500	1700	1250	1020	850	730	630	570	510	430	320	260	HSS
SCR435 SCR440 SCM440			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
SCM430-SCM445	600-900	16	5000	2500	1700	1250	1020	850	730	630	570	510	430	320	260	HSS
			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
SNCM420	900-1200	10	3200	1600	1070	800	640	530	460	400	360	320	270	200	160	HSCO
SNCM439			0.013	0.025	0.038	0.05	0.05	0.06	0.07	0.08	0.09	0.1	0.1	0.125	0.16	
Bearing Steel																
SUJ1,SUJ2.SUJ3	750-850		5000	2500	1700	1250	1020	850	730	630	570	510	430	320	260	HSCO
			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	

Bit cutting conditions selection table-2

Note: The above value is the Spindle speed N(rpm)
The following values are Feed rateF(mn/rev)

Work Material		Bit diameter D(mm)														Drill Material
Material	Tensile Strength N/mm²	Cutting Speed M/min	1	2	3	4	5	6	7	8	9	10	12	16	20	
Alloy Tool Steel																
SKD11 SKD12 SKD4	800-1000	10	3200	1600	1070	800	640	530	460	400	360	320	270	200	160	HSCO
SKD6 SKD2 SKD3 SKT5			0.013	0.025	0.038	0.05	0.05	0.06	0.07	0.08	0.09	0.1	0.1	0.125	0.16	
SKD61 SKD62 SKS7	700-850	16	5000	2500	1700	1250	1020	850	730	630	570	510	430	320	260	
SKS21 SKS41 SKS42			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
High Speed Tool Steel																
SKH51,SKH55	900-1050	10	3200	1600	1070	800	640	530	460	400	360	320	270	200	160	HSCO
SKH57			0.013	0.025	0.038	0.05	0.05	0.06	0.07	0.08	0.09	0.1	0.1	0.125	0.16	
Stainless Steel																
SUS410 SUS405 SUS420	500-900	16	3800	1900	1270	960	760	630	540	480	420	380	320	210	190	HSCO
SUS430 SUS430F			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
SUS303 SUS304 SUS316	500-750	10	3200	1600	1070	800	640	530	460	400	360	320	270	200	160	HSCO
SUS316T1			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
Heat-resistant Steel																
SUH660	500-800	6	1920	960	640	480	380	320	270	240	210	190	160	120	95	HSCO
			0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1	0.1	0.125	0.16	
Grey Cast Iron																
FC15, FC20	HB180-240	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.315	
FC30	HB240-300	20	6400	3200	2120	1600	1280	1060	910	800	710	640	530	400	320	HSS
			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.315	
Ductile Cast Iron																
FCD45,FCD60	HB160-140	25	8000	4000	2650	2000	1600	1330	1140	1000	880	660	660	500	400	HSS
			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.315	
Titanium&Titanium Alloy																
Ti99.5-99.8 TiA15 SnZr5	350-800	10	3200	1600	1070	800	640	530	460	400	360	320	270	200	160	HSCO
			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.315	
TiA15V4,TiCu2	700-1200	5	1600	800	540	400	320	270	230	200	180	160	130	100	80	HSS
			0.013	0.025	0.038	0.05	0.05	0.06	0.07	0.08	0.09	0.1	0.1	0.125	0.16	

Bit cutting conditions selection table-3

Note: The above value is the Spindle speed N(rpm)
The following values are Feed rateF(mn/rev)

Work Material		Bit diameter D(mm)														Drill Material
Material	Tensile Strength N/mm ²	Cutting Speed M/min	1	2	3	4	5	6	7	8	9	10	12	16	20	
Pure Aluminum																
A1050T,A2024P	40-450	80	25600	12800	8500	6400	5100	4250	3360	3200	2840	2560	2130	1600	1280	HSS
TiMg7			0.032	0.038	0.063	0.125	0.125	0.16	0.175	0.2	0.225	0.25	0.25	0.315	0.4	
Aluminum Alloy																
ADC10	170-280	63	20000	10000	6700	5000	4000	3300	2860	2500	2200	2000	1670	1250	1000	HSS
ADC1,ADC3			0.032	0.038	0.063	0.125	0.125	0.16	0.175	0.2	0.225	0.25	0.25	0.315	0.4	
ADC12	180-300	50	25600	12800	8500	6400	5100	4250	3360	3200	2840	2560	2130	1600	1280	HSS
			0.032	0.038	0.063	0.125	0.125	0.16	0.175	0.2	0.225	0.25	0.25	0.315	0.4	
Copper																
Dcu,C1220P	220-370	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.315	
Brass																
YBSC3,C2710P		32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
C2400P			0.025	0.05	0.075	0.1	0.1	0.12	0.14	0.16	0.18	0.2	0.2	0.25	0.31	
Phosphoric Bronze																
CuNi115Si	250-800	25	8000	4000	2650	2000	1600	1330	1140	1000	880	660	660	500	400	HSS
CuNi3Si			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
C715P(T)	300-500	20	6400	3200	2120	1600	1280	1060	910	800	710	640	530	400	320	HSCO
C7060P(T)			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
CuA15,CuA18	300-500	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
C6161P(B)	400-650	15	4800	2400	1600	1200	960	800	690	600	530	480	400	300	240	HSCO
C6191B			0.016	0.032	0.038	0.063	0.063	0.075	0.088	0.1	0.113	0.125	0.125	0.16	0.2	
C5210P	250-350	32	10200	5100	3400	2550	2050	1700	1450	1280	1130	1020	850	640	510	HSS
			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	
G-CuSn10Zn	250-350	20	6400	3200	2120	1600	1280	1060	910	800	710	640	530	400	320	HSCO
G-CuSn7ZnPb			0.02	0.04	0.06	0.08	0.08	0.096	0.112	0.125	0.144	0.16	0.16	0.2	0.25	

Bit using the matters needing attention-1

Problem	Probable Causes	Correction
Drill breaks during drilling	Excessive fee	Reduce feed rate
	Chips jammed	"1.Increase flute width ratio 2.Select correct helical angle"
	Insufficient drill rigidity	"1.Reduce feed rate 2.Reduce drill length forincreasing rigidity 3.Increase web thickness"
	Poor stability when drilling through(Workpiece not clamped completely)	"1.Reduce feed per revolution while drilling through 2.Rold workpiece firmly3.Increase rigidity of machine"
Outside corner worn out	Too fast drilling speed	"1.Reduce drilling speed 2.Increase clearance angle 3.Supply sufficient cutting fluid 4.Upgrade drill material"
Lip breaks	Too fast feed speed	Reduce feed rate
	"Insufficient strength of cutting edges (Too mach learance angle)"	"1.Reduce clearance angle 2.Reduce build up edge 3.Reduce feed rate while drilling through 4.Hold workpiece firmly"
	Too fast feed speed	"1.Increase point angle 2.Reduce cutting speed 3.Use three or four flute drill"
Shank tonguet twisted or broken	Shank is damaged	"1.Repair damaged part of shank 2.Check fitting condition of shank"
	Sleeve is worn out or damaged	Repair or replace sleeve
Hole enlarged	"Point anqleis not symmetric, diffent edge height orcutting angle is offset"	"1.Resharpen 2.Thinning web for concentricity 3.Reduce point angle 4.Use bushing"
	Melt chips exist on flanks	"1.Resharpen 2.Supply sufficient cutting fluid 3.Increase back taper 4.Change drill design"

Bit using the matters needing attention-2

Problem	Probable Causes	Correction
Surface	Drill edge is worn out	Resharpen
	Too fast feed rate	Reduce feed rate
	Chips jammed	Increase drill intermittent
	Flank is melted	Resharpen
	Others	"1.Thinning web for concentricity 2.Use proper bushing 3.Increase rigidity of machine"
Elliptic hole	Rifle circles	"1.Use proper bushing 2.Reduce clearance angle"
	Chattering;Vibration	"1.Reduce clearance angle 2.Thinning web 3.Reduce drill length for increasing rigidity 4.Check if point angle is correct or not 5.Check contact condition between chuck and drill 6.Pre-drill center hole 7.Increase rigidity of machine"
	Poor chip exhaust	"1.Increase feed rate 2.Select correct helical angle 3.Increase flute width ratio 4.Apply intermittent feed"
Skew hole	Poor drill infeed	"1.Use proper bushin 2.Reduce drill infeed rate 3.Pre-drill center hole"
	Poor rigidity of drill	Reduce drill length for increasing rigidity
	Incorrect drill angle Resharpen	Resharpen



MingHong

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