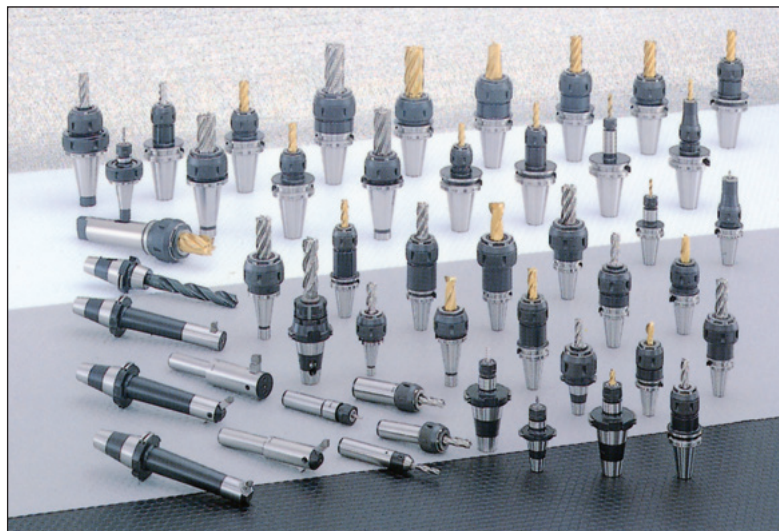


MICRON CHUCK



HARD CHUCK



NEW SUPER DRILL

DEEP BORING
UP TO 15 TIMES
THE DIAMETER!



 **SHOWA TOOL CO., LTD.**

7-18, Imzaike-cho, Toyonaka / Osaka, 561-0842 Japan
Phone : (81)6-6866-5711 Fax : (81)6-6866-5710
e-mail : sales@showatool.com
URL : <http://www.showatool.com>

• Subject to change without notice.



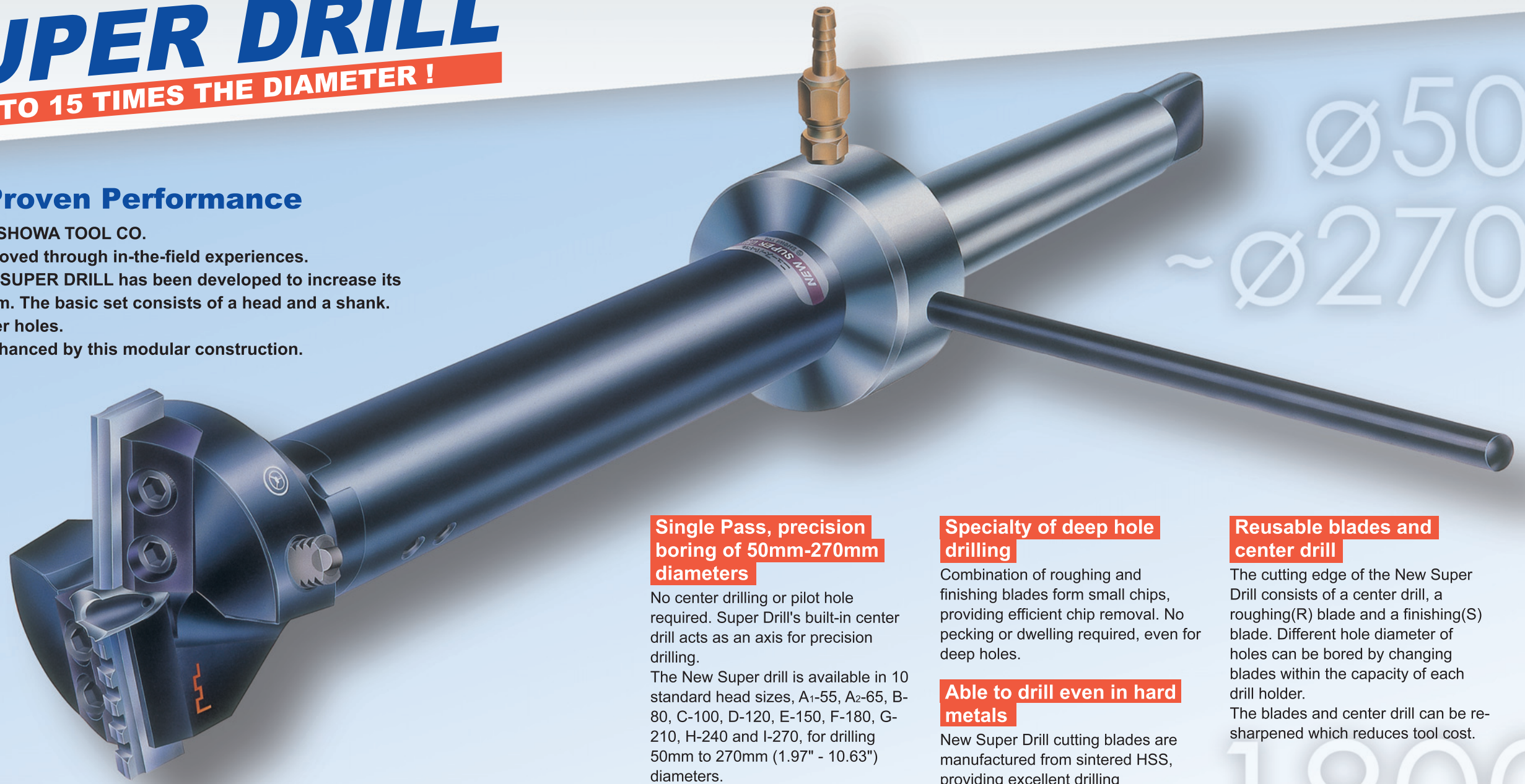
 **SHOWA TOOL CO., LTD.**

NEW SUPER DRILL

DEEP BORING UP TO 15 TIMES THE DIAMETER!

High Reliability and Proven Performance

SUPER DRILL was put on the market by SHOWA TOOL CO. Since that time, it was continuously improved through in-the-field experiences. In response to customer demands, NEW SUPER DRILL has been developed to increase its flexibility, by employing a modular system. The basic set consists of a head and a shank. Extension arbors can be added for deeper holes. SUPER DRILL's ease-of-use is further enhanced by this modular construction.



Single Pass, precision boring of 50mm-270mm diameters

No center drilling or pilot hole required. Super Drill's built-in center drill acts as an axis for precision drilling.

The New Super drill is available in 10 standard head sizes, A1-55, A2-65, B-80, C-100, D-120, E-150, F-180, G-210, H-240 and I-270, for drilling 50mm to 270mm (1.97" - 10.63") diameters.

Specialty of deep hole drilling

Combination of roughing and finishing blades form small chips, providing efficient chip removal. No pecking or dwelling required, even for deep holes.

Able to drill even in hard metals

New Super Drill cutting blades are manufactured from sintered HSS, providing excellent drilling performance even in hard metals.

Reusable blades and center drill

The cutting edge of the New Super Drill consists of a center drill, a roughing(R) blade and a finishing(S) blade. Different hole diameter of holes can be bored by changing blades within the capacity of each drill holder.

The blades and center drill can be re-sharpened which reduces tool cost.

1800

Oil ring



Oil ring is used to supply coolant through the drill in rotational applications.

T/C Guides (for through hole)



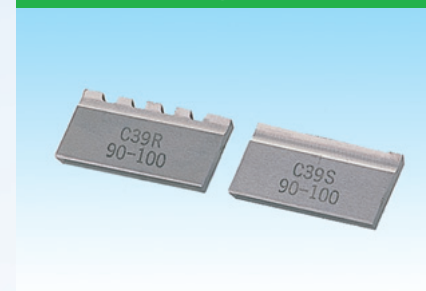
In case of through hole drilling, the drill may vibrate immediately before breaking through, depending upon hole diameter, cutting speed, feed rate, and rigidity of the machine spindle. This can result in damage of the cutting blades. Using T/C guides when boring through holes will minimize vibration and help prevent tool damage.

Re-sharpening fixture



A pair of roughing and finishing blades can be sharpened utilizing the sharpening fixture on the surface grinder.

Sharpening the blades



- ① Grind the "R" and "S" blades to the same height.
- ② Grind both blades in a straight line, making first and second clearances.
- ③ Grind the center drill to the point angle of 140° with thinning.



STANDARD HEAD TYPE NEW SUPER DRILL

ST45 - A155 - 200 ORDERING EXAMPLE

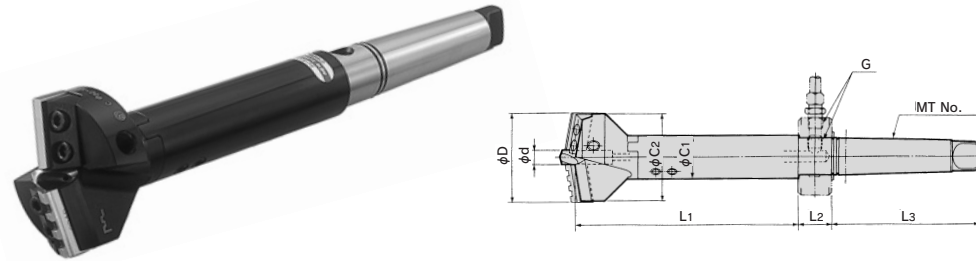
L₁
DRILL CODE øD Max.
Shank Size

MORSE TAPER SHANK SET (Standard)

MT^{No.}-DRILL CODE^{øD}MAX-L₁

A to D set consists of :

- 1. Standard head 1pc
- 2. MT Drill arbor 1pc
- 3. Center drill 1pc
- 4. Drill blade 2sets
- 5. Oil plug 1pc
- 6. Wrenches 1set
- 7. Steel case 1pc



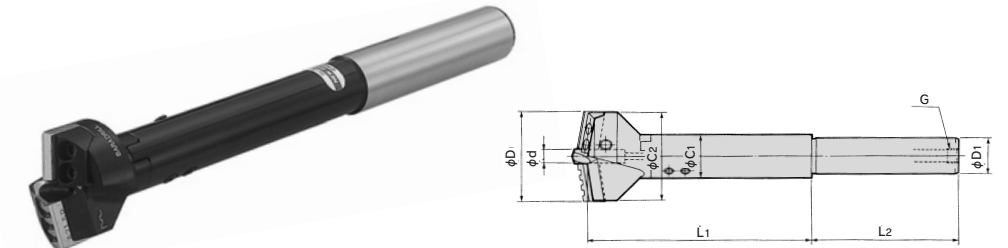
CODE	Hole dia. øD	Set blade	ød	L1	L2	L3	øC1	øC2	MT No.	G	N/W (kg)			
MT4	-A ₁ 55-200S	54000	50~55	BK50	BK53	12	200	30	130	MT4	PT1/4	2.1		
	-A ₂ 65-200S	54001	55~65	BK55	BK60							29	48	2.2
	-B 80-200S	54002	65~80	BK65	BK73							35	63	2.7
	-C 100-200S	54003	80~100	BK80	BK90							38	78	3.2
	-D 120-200S	54004	100~120	BK100	BK110							45	98	4.3
MT5	-E 150-200S	54005	120~150	Center drill and blades sold separately	20	200	30	163	MT5	PT1/4	7.0			
	-F 180-200S	54006	150~180								55	118	9.4	
	-G 210-200S	54007	180~210								65	148	12.5	
MT6	-H 240-300S	54008	210~240	20	300	40	228	MT6	PT3/8	23.9				
	-I 270-300S	54009	240~270							85	207	28.6		
							95	237						

STRAIGHT SHANK SET (Standard)

ST^{øD}-DRILL CODE^{øD}MAX-200

A to D set consists of :

- 1. Standard head 1pc
- 2. MT Drill arbor 1pc
- 3. Center drill 1pc
- 4. Drill blade 2sets
- 5. Oil plug 1pc
- 6. Wrenches 1set
- 7. Steel case 1pc



CODE	Hole dia. øD	Set blade	ød	L1	L2	øC1	øC2	øD1	G	N/W (kg)			
ST32 (ST125)	-A ₁ 55-200S	54500*	50~55	BK50	BK53	12	200	130	32 (1-1/4")	PT1/4	2.1		
	-A ₂ 65-200S	54501*	55~65	BK55	BK60						29	48	2.2
	-B 80-200S	54502*	65~80	BK65	BK73						35	63	2.7
	-C 100-200S	54503*	80~100	BK80	BK90						38	78	3.2
	-D 120-200S	54504*	100~120	BK100	BK110						45	98	4.3
ST42	-A ₁ 55-200S	54510	50~55	BK50	BK53	12	200	130	42	PT1/4	7.0		
	-A ₂ 65-200S	54511	55~65	BK55	BK60						29	48	9.4
	-B 80-200S	54512	65~80	BK65	BK73						35	63	12.5
	-C 100-200S	54513	80~100	BK80	BK90						38	78	23.9
	-D 120-200S	54514	100~120	BK100	BK110						45	98	28.6

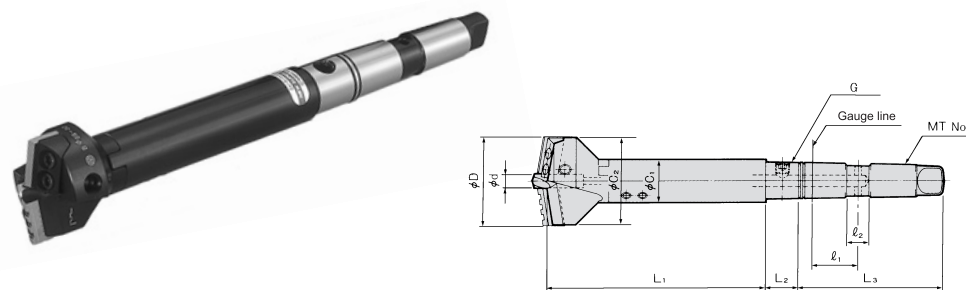
* When ordering inch size diameters, please add "S" to the part number - 54500S.

MORSE TAPER SHANK SET (For Oil-Hole Adapter)

MT^{No.}-DRILL CODE^{øD}MAX-L₁-OH

A to D set consists of :

- 1. Standard head 1pc
- 2. MT Drill arbor 1pc
- 3. Center drill 1pc
- 4. Drill blade 2sets
- 5. Oil plug 1pc
- 6. Wrenches 1set
- 7. Steel case 1pc



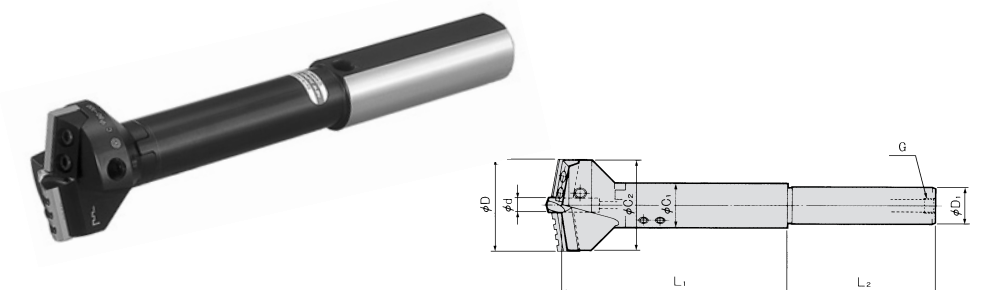
CODE	Hole dia. øD	Set blade	ød	L1	L2	L3	ø1	ø2	C1	C2	MT No.	G	N/W (kg)		
MT4	-A ₁ 55-200-OHS	54530	50~55	BK50	BK53	12	200	30	130	41	20	PT1/4	2.1		
	-A ₂ 65-200-OHS	54531	55~65	BK55	BK60								29	48	2.2
	-B 80-200-OHS	54532	65~80	BK65	BK73								35	63	2.7
	-C 100-200-OHS	54533	80~100	BK80	BK90								38	78	3.2
	-D 120-200-OHS	54534	100~120	BK100	BK110								45	98	4.3

STRAIGHT SHANK SET (For Turret Lathe)

ST^{øD}-DRILL CODE^{øD}MAX-200

A to D set consists of :

- 1. Standard head 1pc
- 2. MT Drill arbor 1pc
- 3. Center drill 1pc
- 4. Drill blade 2sets
- 5. Oil plug 1pc
- 6. Wrenches 1set
- 7. Steel case 1pc



CODE	Hole dia. øD	Set blade	ød	L1	L2	C1	C2	øD1	H	G	N/W (kg)			
ST45 (ST175)	-A ₁ 55-200S	54550*	50~55	BK50	BK53	12	200	140	45 (1-3/4")	42	PT1/4	2.1		
	-A ₂ 65-200S	54551*	55~65	BK55	BK60							29	48	2.2
	-B 80-200S	54552*	65~80	BK65	BK73							35	63	2.7
	-C 100-200S	54553*	80~100	BK80	BK90							38	78	3.2
	-D 120-200S	54554*	100~120	BK100	BK110							45	98	4.3

* When ordering inch size diameters, please add "S" to the part number - 54550S.

STANDARD HEAD TYPE

NEW SUPER DRILL

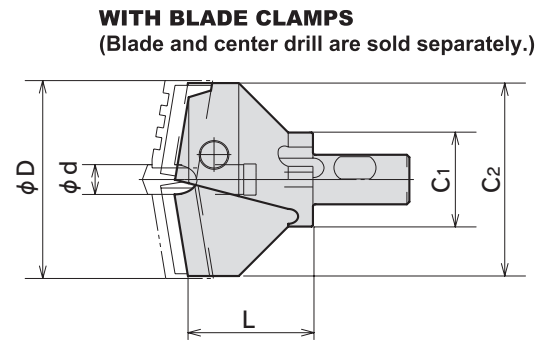
ORDERING EXAMPLE

EXT - A - 150

L
Head type
Name

STANDARD HEAD ASS'Y

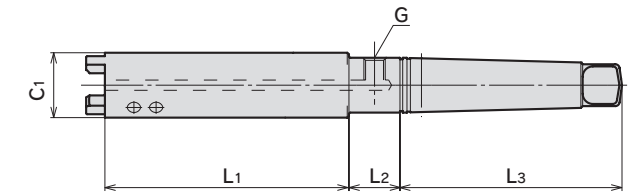
HD-DRILL CODE[®]MAX



CODE	phi D Hole dia.		phi d	phi C1	phi C2	L	N/W (kg)
	MIN.	MAX.					
HD	-A1 55	54020	50	29	48	40	0.4
	-A2 65	54021	55	29	53	41.5	0.5
	-B 80	54022	65	35	63	47	0.7
	-C 100	54023	80	38	78	50.5	1.0
	-D 120	54024	100	45	98	62	1.7
	-E 150	54025	120	55	118	55	2.6
	-F 180	54026	150	65	148	63.5	4.3
	-G 210	54027	180	75	178	75	6.7
	-H 240	54028	210	85	207	75.5	10.0
	-I 270	54029	240	95	237	76	11.8

MT DRILL ARBOR

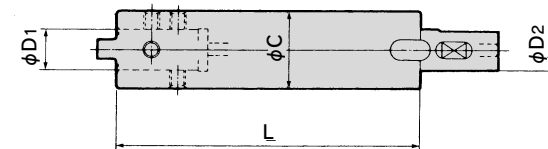
MT[®]No.-DRILL CODE-200 or 300



CODE	MT No.	C1	L1	L2	L3	G	DRILL HEAD	N/W (kg)
MT4-A-200	54041	29	157	30	130	PT1/4	A1-55	1.4
MT4-B-200	54042		150					
MT4-C-200	54043		144					
MT4-D-200	54044		131					
MT5-E-200	54055	55	137	40	228	PT3/8	E150	3.8
MT5-F-200	54056		126					
MT5-G-200	54067		112					
MT6-H-300	54068	85	300	40	228	PT3/8	H240	7.8
MT6-I-300	54069						95	

EXTENTION ARBOR (For Standard Head)

EXT-DRILL CODE-L

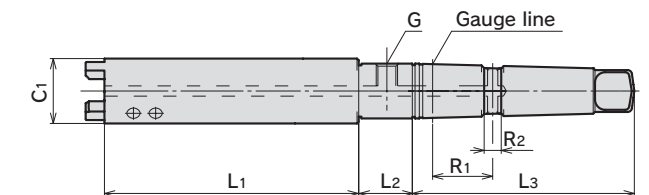


CODE	L	phi D1, D2	phi C	HEAD	N/W (kg)
-A-150	54151	150	16	A1s55 · A265	0.8
-300	54301	300	16	A1s55 · A265	1.6
-B-150	54152	150	18	B 80	1.2
-300	54302	300	18	B 80	2.3
-C-150	54153	150	20	C 100	1.4
-300	54303	300	20	C 100	2.7
-D-150	54154	150	22	D 120	1.9
-300	54304	300	22	D 120	3.8
-E-150	54155	150	30	E 150	2.8
-300	54305	300	30	E 150	5.5
-F-150	54156	150	35	F 180	3.9
-300	54306	300	35	F 180	7.8
-G-150	54157	150	40	G 210	5.1
-300	54307	300	40	G 210	10.2
-H-150	54158	150	45	H 240	6.4
-300	54308	300	45	H 240	12.8
-I-150	54159	150	50	I 270	7.9
-300	54309	300	50	I 270	16.0

Extensions are not recommended for flat head Superdrill.

OH MT DRILL ARBOR

MT[®]No.-DRILL CODE-200-OH



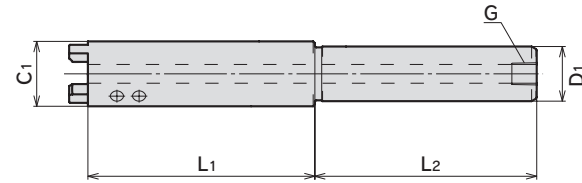
CODE	MT No.	C1	L1	L2	L3	l1	l2	G	DRILL HEAD	N/W (kg)
MT4-A-200-OH	54141	29	157	30	130	41	20	PT1/4	A1-55	1.4
MT4-B-200-OH	54142		150							
MT4-C-200-OH	54143		144							
MT4-D-200-OH	54144		131							

STANDARD HEAD TYPE

NEW SUPER DRILL

ST DRILL ARBOR

ST[®]-DRILL CODE-200

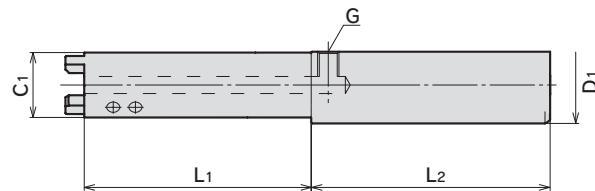


CODE			D1	C1	L1	L2	G	DRILL HEAD	N/W (kg)
ST32 (ST125)	-A-200	54321*	32 (1-1/4")	29	157	130	PT1/4	A1-55	1.6
	-B-200	54322*		35	150			B80	
	-C-200	54323*		38	144			C100	
	-D-200	54324*		45	131			D120	
ST42	-A-200	54421*	42	29	157	130	PT3/8	A1-55	1.8
	-B-200	54422*		35	150			B80	
	-C-200	54423*		38	144			C100	
	-D-200	54424*		45	131			D120	

* When ordering inch size diameters, please add "S" to the part number - 54321S.

ST DRILL ARBOR (FOR LATHE)

ST[®]-DRILL CODE-200



CODE			D1	C1	L1	L2	G	DRILL HEAD	N/W (kg)
ST45 (ST175)	-A-200	54451*	45 (1-3/4")	29	157	140	PT1/4	A1-55	1.9
	-B-200	54452*		35	150			B80	
	-C-200	54453*		38	144			C100	
	-D-200	54454*		45	131			D120	

* When ordering inch size diameters, please add "S" to the part number - 54451S.

CENTER DRILL

CD-DIAMETER

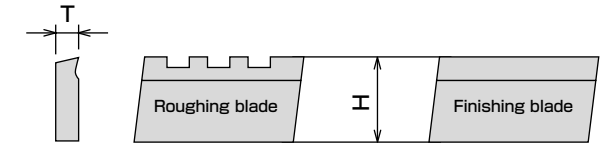


CODE	DIA.	HEAD
CD-12	51062	12mm A1-55, A2-65, B80, C100, D120
CD-12C*	51061	12mm A1-55, A2-65, B80, C100, D120
CD-20	51066	20mm E150, F180, G210, H240, I270

* "C" denotes TiN coating.

BLADE (For Standard Heads)

BK[®]



Each set consists of a roughing blade (R) and a finishing blade (S).

CODE	Hole dia Dmm	T	H	Blade	Head
BK50	52002	50 (50~53)*	5	A19 R & S	A1-55
BK51	52032	51		A19.5 R & S	
BK52	52034	52		A20 R & S	
BK53	52004	53 (53~55)*		A20.5 R & S	
BK54	52036	54		A21 R & S	
BK55	52006	55		A21.5 R & S	
BK55	52006	55 (55~60)*		A21.5 R & S	
BK56	52038	56		A22 R & S	
BK57	52040	57		A22.5 R & S	
BK58	52042	58		A23 R & S	
BK59	52044	59	A23.5 R & S	A2-65	
BK60	52008	60 (60~65)*	A24 R & S		
BK61	52046	61	A24.5 R & S		
BK62	52048	62	A25 R & S		
BK63	52050	63	A25.5 R & S		
BK64	52052	64	A26 R & S		
BK65	52010	65	B26.5 R & S		
BK65	52010	65 (65~73)*	B26.5 R & S		
BK66	52054	66	B27 R & S		
BK67	52056	67	B27.5 R & S		
BK68	52058	68	B28 R & S	B-80	
BK69	52060	69	B28.5 R & S		
BK70	52062	70	B29 R & S		
BK71	52064	71	B29.5 R & S		
BK72	52066	72	B30 R & S		
BK73	52012	73 (73~80)*	B30.5 R & S		
BK74	52068	74	B31 R & S		
BK75	52070	75	B31.5 R & S		
BK76	52072	76	B32 R & S		
BK77	52074	77	B32.5 R & S		
BK78	52076	78	B33 R & S	C-100	
BK79	52078	79	B33.5 R & S		
BK80	52014	80	C34 R & S		
BK80	52014	80 (80~90)*	C34 R & S		
BK81	52080	81	C34.5 R & S		
BK82	52082	82	C35 R & S		
BK83	52084	83	C35.5 R & S		
BK84	52086	84	C36 R & S		
BK85	52088	85	C36.5 R & S		
BK86	52090	86	C37 R & S		
BK87	52092	87	C37.5 R & S		
BK88	52094	88	C38 R & S	H-240	
BK89	52096	89	C38.5 R & S		
BK90	52016	90 (90~100)*	C39 R & S		
BK91	52098	91	C39.5 R & S		
BK92	52100	92	C40 R & S		
BK93	52102	93	C40.5 R & S		
BK94	52104	94	C41 R & S		
BK95	52106	95	C41.5 R & S		
BK96	52108	96	C42 R & S		
BK97	52110	97	C42.5 R & S		
BK98	52112	98	C43 R & S	I-270	
BK99	52114	99	C43.5 R & S		
BK100	52018	100	D44 R & S		
BK100	52018	100 (100~110)*	D44 R & S		
BK101	52116	101	D44.5 R & S		
BK102	52118	102	D45 R & S		
BK103	52120	103	D45.5 R & S		
BK104	52122	104	D46 R & S		
BK105	52124	105	D46.5 R & S		
BK106	52126	106	D47 R & S		
BK107	52128	107	D47.5 R & S		
BK108	52130	108	D48 R & S		
BK109	52132	109	D48.5 R & S		
BK110	52020	110 (110~120)*	D49 R & S		
BK111	52134	111	D49.5 R & S		
BK112	52136	112	D50 R & S		
BK113	52138	113	D50.5 R & S		
BK114	52140	114	D51 R & S		
BK115	52142	115	D51.5 R & S		
BK116	52144	116	D52 R & S		
BK117	52146	117	D52.5 R & S		
BK118	52148	118	D53 R & S		
BK119	52150	119	D53.5 R & S		
BK120D	52152	120	D54 R & S		
BK120E	52154	120			
BK125	52156	125			
BK130	52158	130			
BK135	52160	135			
BK140	52162	140			
BK145	52164	145			
BK150E	52166	150			
BK150F	52168	150			
BK155	52170	155			
BK160	52172	160			
BK165	52174	165			
BK170	52176	170			
BK175	52178	175			
BK180	52180	180			
BK180	52180	180			
BK190	52182	190			
BK200	52184	200			
BK210	52186	210			
BK210	52186	210			
BK220	52188	220			
BK230	52190	230			
BK240	52192	240			
BK240	52192	240			
BK250	52194	250			
BK260	52196	260			
BK270	52198	270			

* Indicates that the stated range may be achieved by adjusting ONLY the finishing blade to the desired diameter in the stated range"

Do not shift the roughing blade in any circumstance as it is used to prevent rotation of the center drill"

FLAT HEAD TYPE

NEW SUPER DRILL
For counter sink and metal plate

ST45 - A155 - 200 - FT ORDERING EXAMPLE

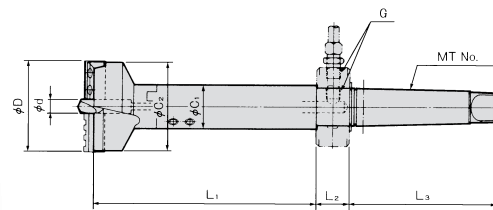


MORSE TAPER SHANK SET (Flat Head Type)

MT^{No.}-DRILL CODE^{ØD}MAX-^{L1}-FT

A to D set consists of :

1. Standard head	1pc
2. MT Drill arbor	1pc
3. Center drill	1pc
4. Drill blade	2sets
5. Oil plug	1pc
6. Wrenches	1set
7. Steel case	1pc



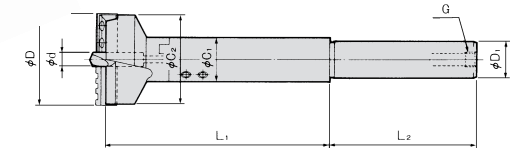
CODE		Hole dia. ϕD	Set blade		ϕd	L1	L2	L3	C1	C2	MT No.	G	N/W (kg)
MT4	-A1 55-200-FT-S	54540	50~55	BK50F BK53F	12	200	30	130	29	48	MT4	PT1/4	
	-A2 65-200-FT-S	54541	55~65	BK55F BK60F					53				
	-B 80-200-FT-S	54542	65~80	BK65F BK73F					35	63			
	-C 100-200-FT-S	54543	80~100	BK80F BK90F					38	78			
-D 120-200-FT-S	54544	100~120	BK100F BK110F	45	98								

STRAIGHT SHANK SET (Flat Head Type)

ST^Ø-DRILL CODE^{ØD}MAX-200-FT

A to D set consists of :

1. Standard head	1pc
2. MT Drill arbor	1pc
3. Center drill	1pc
4. Drill blade	2sets
5. Oil plug	1pc
6. Wrenches	1set
7. Steel case	1pc



CODE		Hole dia. ϕD	Set blade		ϕd	L1	L2	C1	C2	$\phi d1$	G	N/W (kg)
ST32 (ST125)	-A1 55-200-FT-S	54570	50~55	BK50F BK53F	12	200	130	29	48	32 (1-1/4")	PT1/4	
	-A2 65-200-FT-S	54571	55~65	BK55F BK60F				53				
	-B 80-200-FT-S	54572	65~80	BK65F BK73F				35	63			
	-C 100-200-FT-S	54573	80~100	BK80F BK90F				38	78			
-D 120-200-FT-S	54574	100~120	BK100F BK110F	45	98							
ST42	-A1 55-200-FT-S	54580	50~55	BK50F BK53F	12	200	130	29	48	42	PT1/4	
	-A2 65-200-FT-S	54581	55~65	BK55F BK60F				53				
	-B 80-200-FT-S	54582	65~80	BK65F BK73F				35	63			
	-C 100-200-FT-S	54583	80~100	BK80F BK90F				38	78			
-D 120-200-FT-S	54584	100~120	BK100F BK110F	45	98							

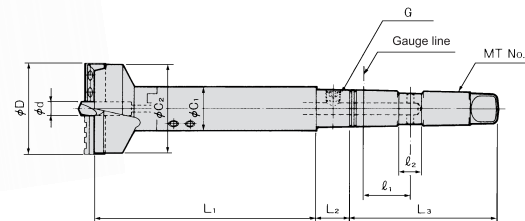
* When ordering inch size diameters, please add "S" to the part number - 54570S.

MORSE TAPER SHANK SET (Flat Head Type For Oil-Hole Adapter)

MT^{No.}-DRILL CODE^{ØD}MAX-200-FOH

A to D set consists of :

1. Standard head	1pc
2. MT Drill arbor	1pc
3. Center drill	1pc
4. Drill blade	2sets
5. Oil plug	1pc
6. Wrenches	1set
7. Steel case	1pc



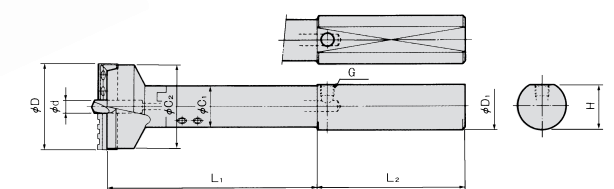
CODE		Hole dia. ϕD	Set blade		ϕd	L1	L2	L3	$l1$	$l2$	C1	C2	MT No.	G	N/W (kg)
MT4	-A1 55-200-FOH-S	54560	50~55	BK50F BK53F	12	200	30	130	41	20	29	48	MT4	PT1/4	
	-A2 65-200-FOH-S	54561	55~65	BK55F BK60F							53				
	-B 80-200-FOH-S	54562	65~80	BK65F BK73F							35	63			
	-C 100-200-FOH-S	54563	80~100	BK80F BK90F							38	78			
-D 120-200-FOH-S	54564	100~120	BK100F BK110F	45	98										

STRAIGHT SHANK SET (Flat Head Type for Turret Lathe)

ST^Ø-DRILL CODE^{ØD}MAX-200

A to D set consists of :

1. Standard head	1pc
2. MT Drill arbor	1pc
3. Center drill	1pc
4. Drill blade	2sets
5. Oil plug	1pc
6. Wrenches	1set
7. Steel case	1pc



CODE		Hole dia. ϕD	Set blade		ϕd	L1	L2	C1	C2	$\phi d1$	H	G	N/W (kg)
ST45 (ST175)	-A1 55-200-FT-S	54590	50~55	BK50F BK53F	12	200	140	29	48	45 (1-3/4")	42	PT1/4	
	-A2 65-200-FT-S	54591	55~65	BK55F BK60F				53					
	-B 80-200-FT-S	54592	65~80	BK65F BK73F				35	63				
	-C 100-200-FT-S	54593	80~100	BK80F BK90F				38	78				
-D 120-200-FT-S	54594	100~120	BK100F BK110F	45	98								

* When ordering inch size diameters, please add "S" to the part number - 54590S.

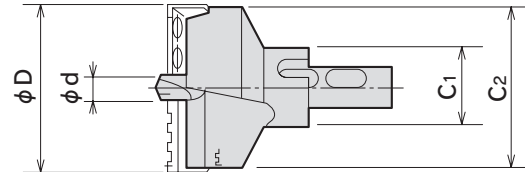
FLAT HEAD TYPE NEW SUPER DRILL

FLAT HEAD ASS'Y HD-DRILL CODE[®]MAX.FT



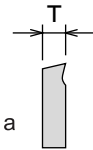
Same drill arbors are used for standard drills and flat drills. Please refer to Page 8 & 9 for drill arbors.

WITH BLADE CLAMPS
(Blade and center drill are sold separately.)

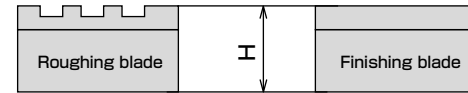


CODE	φ D Hole dia.		φ d	φ C1	φ C2	L	N/W (kg)
	MIN.	MAX.					
HD	-A ₁ 55FT	54030	50	29	48	43	0.4
	-A ₂ 65FT	54031	55		53	45	0.5
	-B 80FT	54032	65	80	51	0.7	
	-C 100FT	54033	80	100	56	1.0	
	-D 120FT	54034	100	120	69	1.7	

BLADE (For Flat Head) BK[®]FT



Each set consists of a roughing blade (R) and a finishing blade (S).



CODE	Hole dia. φ Dmm	T	H	R & S	Head	
						50FT
53FT	52202	53(53~55)	A20.5RF & F			
55FT	52203	55(55~60)	5	20	A21.5RF & SF	A2 -65FT
60FT	52204	60(60~65)			A24 RF & SF	
65FT	52205	65(65~73)	5	20	B26.5RF & SF	B- 80FT
73FT	52206	73(73~80)			B30.5RF & SF	
80FT	52207	80(80~90)	5	20	C34 RF & SF	C-100FT
90FT	52208	90(90~100)			C39 RF & SF	
100FT	52210	100(100~110)	5	20	D44 RF & SF	C-100FT
110FT	52212	110(110~120)			D49 RF & SF	

COOLANT RING CR-MT[®](No.)



COOLANT RING SET	
Coolant ring	1pc
Stopper	1pc
Snap ring	2pc

Oil plug is sold separately.

Coolant ring

CODE	ID(mm)	Oil Plug
CR	-MT4 51022	32
	-MT5 51024	45
	-MT6 51026	65

Oil plug

CODE	Coolant Ring
PT	1/4 51054
	3/8 51056

Coolant ring is used to supply coolant through the drill in rotational applications.

T/C GUIDE (For Through Hole with Standard Head) DG-DRILL CODE

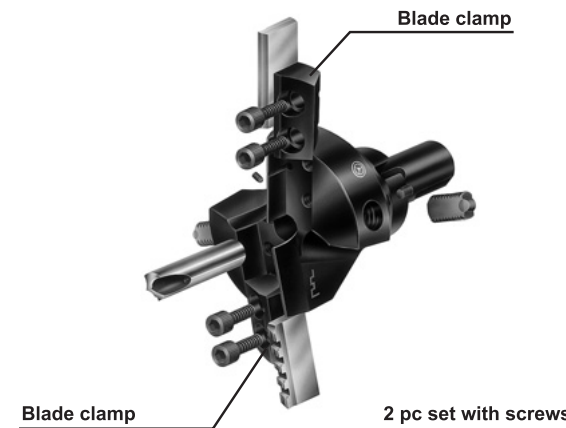


2pc/set

CODE	HEAD	WRENCH	
DG	-B80-S 51031	B-80 (φ 65-φ 73)	No wrench
	-B80-L 51034	B-80 (φ 73-φ 80)	
	-C/D 51036	C-100/D-120	w/wrench
	-E/F 51038	E-150/F-180	
	-G/H/I 51040	G-210/H-240/I-270	

T/C guides will minimize vibration when drill goes through the other end.

SPARE BLADE CLAMP BC-DRILL CODE[®]MAX



Blade clamp

Blade clamp

2 pc set with screws

FOR STANDARD HEAD

CODE	
BC	-A ₁ 55 51003
	-A ₂ 65 51004
	-B 80 51006
	-C 100 51008
	-D 120 51010
	-E 150 51012
	-F 180 51014
	-G210 51016
	-H240 51018
-I 270 51020	

FOR FLAT HEAD

CODE	
BC	-A ₁ 55FT 51045
	-A ₂ 65FT 51046
	-B 80FT 51047
	-C 100FT 51048
	-D 120FT 51049

RE-GRINDING FIXTURE SBG-100 or 200



SBG-100

CODE	HOLE DIA
SBG	-100 51042
	-200 51044