

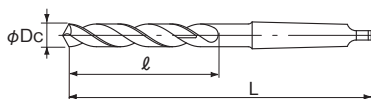
TD

Taper Shank Drills

HSS h8 118° 32°~34° 7.0-100.0

This drill is applied for general purpose.

もっとも広い用途で使用される汎用ドリルです。



LIST 602

How to order

TD Dc

Drilling Condition 切削条件 ▶▶▶A-178

Unit : mm

Dc 直径	ℓ 溝長	L 全長	MT No. シャンク	Stock 在庫
7.0	75	155	1	●
7.1	78	158		
7.2				
7.3				
7.4				
7.5				
7.6	82	162		
7.7				
7.8				
7.9				
8.0				
8.1	85	168		
8.2				
8.3				
8.4				
8.5				
8.6	88	172		
8.7				
8.8				
8.9				
9.0				
9.1	92	175		
9.2				
9.3				
9.4				
9.5				
9.6	95	178		
9.7				
9.8				
9.9				
10.0				
10.1	98	182		
10.2				
10.3				
10.4				
10.5				
10.6	102	185		
10.7				
10.8				
10.9				
11.0				
11.1	105	188		
11.2				
11.3				
11.4				
11.5				
11.6	108	192		
11.7				
11.8				
11.9				
12.0				
12.1	112	195		
12.2				
12.3				
12.4				
12.5				
12.6	115	198		
12.7				
12.8				
12.9				
13.0				
13.1	118	202		

Dc 直径	ℓ 溝長	L 全長	MT No. シャンク	Stock 在庫
13.2	118	202	1	●
13.3				
13.4				
13.5				
13.6				
13.7	122	205		
13.8				
13.9				
14.0				
14.1				
14.2	125	222	2	
14.3				
14.4				
14.5				
14.6				
14.7	128	225		
14.8				
14.9				
15.0				
15.1				
15.2	130	228		
15.3				
15.4				
15.5				
15.6				
15.7	132	230		
15.8				
15.9				
16.0				
16.1				
16.2	135	232		
16.3				
16.4				
16.5				
16.6				
16.7	140	235		
16.8				
16.9				
17.0				
17.1				
17.2	145	240		
17.3				
17.4				
17.5				
17.6				
17.7	150	245		
17.8				
17.9				
18.0				
18.1				
18.2	155	250		
18.3				
18.4				
18.5				
18.6				
18.7	160	245		
18.8				
18.9				
19.0				
19.1				
19.2	165	250		
19.3				

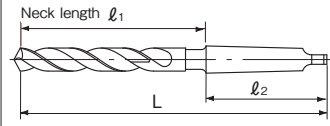
Refer to F-41 (Morse taper shank).

テーパシャンク寸法詳細は F-41 を参照ください。

Drill Diameter (mm)	Tolerance (μm)				
	Da 3	3<Da 6	6<Da 10	10<Da 18	18<Da 30
H7	0 ~ +6	0 ~ +8	0 ~ +9	0 ~ +11	0 ~ +13
H8	0 ~ +10	0 ~ +12	0 ~ +15	0 ~ +18	0 ~ +21
H9	0 ~ +14	0 ~ +18	0 ~ +22	0 ~ +27	0 ~ +33
js6	± 3	± 4	± 4.5	± 5.5	± 6.5
js8	± 3	± 4	± 4.5	± 5.5	± 6.5

How to calculate the neck length (ℓ_1)
 $\ell_1 = L - \ell_2$

MT No.	ℓ_2
1	65.5
2	80
3	99
4	124
5	156



Low-Carbon Steels SS400, S10C ~ 150HB	Carbon Steels Alloy Steels S45C, SCM440 ~ 225HB	Pre-Hardened Steels High Alloy Steels SUJ, NAK ~ 275HB	Heat treated Steels SKD, SKH 30 ~ 40HRC	Hardened Steels 40 ~ 50HRC
○	○	○		×
Stainless Steels		Ti/Ni Alloys	Cast Irons FC/FCD	Aluminum Alloys Copper Alloys Al/Cu
SUS304	SUS420		○	○

○: Excellent ○: Good ×: Not Used No mark: Not recommended

Unit : mm

Dc 直径	ℓ 満長	L 全長	MT No. シャंक	Stock 在庫
19.4	150	250	2	●
19.5				
19.6				
19.7				
19.8				
19.9				
20.0				
20.1				
20.2				
20.3				
20.4	155	255		
20.5				
20.6				
20.7				
20.8				
20.9				
21.0				
21.1				
21.2				
21.3				
21.4	160	260		
21.5				
21.6				
21.7				
21.8				
21.9				
22.0				
22.1				
22.2				
22.3				
22.4	165	265		
22.5				
22.6				
22.7				
22.8				
22.9				
23.0				
23.1				
23.2				
23.3				
23.4	165	285	3	
23.5				
23.6				
23.7				
23.8				
23.9				
24.0				
24.1				
24.2				
24.3				
24.4				
24.5				
24.6				
24.7				
24.8				
24.9				
25.0				
25.1				
25.2				
25.3				
25.4				
25.5				

Dc 直径	ℓ 溝長	L 全長	MT No. シャंक	Stock 在庫
25.6	165	285	3	●
25.7				
25.8				
25.9				
26.0				
26.1	170	290		
26.2				
26.3				
26.4				
26.5				
26.6				
26.7				
26.8				
26.9				
27.0				
27.1	175	295		
27.2				
27.3				
27.4				
27.5				
27.6				
27.7				
27.8				
27.9				
28.0				
28.1	180	300		
28.2				
28.3				
28.4				
28.5				
28.6				
28.7				
28.8				
28.9				
29.0				
29.1	185	305		
29.2				
29.3				
29.4				
29.5				
29.6				
29.7				
29.8				
29.9				
30.0				
30.1	190	310		
30.2				
30.3				
30.4				
30.5				
30.6				
30.7				
30.8				
30.9				
31.0				
31.1	195	315		
31.2				
31.3				
31.4				
31.5				
31.6				
31.7				

Next page

TD
Taper Shank Drills

HSS

h8

118°

32°
~34°

7.0-100.0

Drilling Condition 切削条件 ▶▶▶A-178

Unit : mm

Dc 直径	ℓ 溝長	L 全長	MT No. シャンク	Stock 在庫	Dc 直径	ℓ 溝長	L 全長	MT No. シャンク	Stock 在庫
31.8	195	315	3		39.0	215	360		
31.9					39.1				
32.0					39.2				
32.1					39.3				
32.2					39.4				
32.3					39.5				
32.4					39.6				
32.5					39.7				
32.6					39.8				
32.7					39.9				
32.8	200	345			40.0	220	365		
32.9					40.1				
33.0					40.2				
33.1					40.3				
33.2					40.4				
33.3					40.5				
33.4					40.6				
33.5					40.7				
33.6					40.8				
33.7					40.9				
33.8	205	350			41.0	225	370	4	
33.9					41.1				
34.0					41.2				
34.1					41.3				
34.2					41.4				
34.3					41.5				
34.4					41.6				
34.5					41.7				
34.6					41.8				
34.7					41.9				
34.8	210	355	4	●	42.0	230	375		
34.9					42.1				
35.0					42.2				
35.1					42.3				
35.2					42.4				
35.3					42.5				
35.4					42.6				
35.5					42.7				
35.6					42.8				
35.7					42.9				
35.8	215	360			43.0	235	380		
35.9					43.1				
36.0					43.2				
36.1					43.3				
36.2					43.4				
36.3					43.5				
36.4					43.6				
36.5					43.7				
36.6					43.8				
36.7					43.9				
36.8					44.0				
36.9					44.1				
37.0					44.2				
37.1					44.3				
37.2					44.4				
37.3					44.5				
37.4					44.6				
37.5					44.7				
37.6					44.8				
37.7					44.9				
37.8					45.0				
37.9					45.1				
38.0					45.2				
38.1					45.3				
38.2					45.4				
38.3					45.5				
38.4					45.6				
38.5					45.7				
38.6					45.8				
38.7					45.9				
38.8					46.0				
38.9					46.1				

		Tolerance (μm)				
Drill Diameter Tolerance	Drill Diameter (mm)					
	D≤3	3<D≤6	6<D≤10	10<D≤18	18<D≤30	30<D≤50
h6	0 ~ -6	0 ~ -8	0 ~ -9	0 ~ -11	0 ~ -13	0 ~ -16
h7	0 ~ -10	0 ~ -12	0 ~ -15	0 ~ -18	0 ~ -21	0 ~ -25
h8	0 ~ -14	0 ~ -18	0 ~ -22	0 ~ -27	0 ~ -33	0 ~ -39
js6	± 3	± 4	± 4.5	± 5.5	± 6.5	± 8

Unit : mm

Dc 直径	ℓ 溝長	L 全長	MT No. シャンク	Stock 在庫
46.2	235	380	4	●
46.3				
46.4				
46.5				
46.6				
46.7				
46.8				
46.9				
47.0				
47.1				
47.2	240	385		
47.3				
47.4				
47.5				
47.6				
47.7				
47.8				
47.9				
48.0				
48.1				
48.2	245	390		
48.3				
48.4				
48.5				
48.6				
48.7				
48.8				
48.9				
49.0				
49.1				
49.2	250	425		
49.3				
49.4				
49.5				
49.6				
49.7				
49.8				
49.9				
50.0				
50.5	255	430		
51.0				
51.5				
52.0				
52.5				
53.0				
53.5				
54.0				
54.5				
55.0	260	435		
55.5				
56.0				
56.5				
57.0				
57.5				
58.0				
58.5				
59.0				
59.5	265	440		
60.0				
60.5				
61.0				
61.5				
62.0				
62.5				
63.0				
63.5				
64.0	270	445		
64.5				
65.0				
65.5				
66.0				
66.5				
67.0				
67.5				
68.0				
68.5	275	450		
69.0				
69.5				
70.0				
70.5				
71.0				
71.5				
72.0				
72.5				
73.0	280	455		
73.5				
74.0				
74.5				
75.0				
75.5				
76.0				
76.5				
77.0				
77.5	285	460		
78.0				
78.5				
79.0				
79.5				
80.0				
80.5				
81.0				
81.5				
82.0	290	465		
82.5				
83.0				
83.5				
84.0				
84.5				
85.0				
85.5				
86.0				
86.5	295	470		
87.0				
87.5				
88.0				
88.5				
89.0				
89.5				
90.0				
90.5				
91.0	300	475		
91.5				
92.0				
92.5				
93.0				
93.5				
94.0				
94.5				
95.0				
95.5	305	480		
96.0				
96.5				
97.0				
97.5				
98.0				
98.5				
99.0				
99.5				
100.0	310	485		
100.5				
101.0				
101.5				
102.0				
102.5				
103.0				
103.5				
104.0				
104.5	315	490		
105.0				
105.5				
106.0				
106.5				
107.0				
107.5				
108.0				
108.5				
109.0	320	495		
109.5				
110.0				
110.5				
111.0				
111.5				
112.0				
112.5				
113.0				
113.5	325	500		
114.0				
114.5				
115.0				
115.5				
116.0				
116.5				
117.0				
117.5				
118.0	330	505		
118.5				
119.0				
119.5				
120.0				
120.5				
121.0				
121.5				
122.0				
122.5	335	510		
123.0				
123.5				
124.0				
124.5				
125.0				
125.5				
126.0				
126.5				
127.0	340	515		
127.5				
128.0				
128.5				
129.0				
129.5				
130.0				
130.5				
131.0				
131.5	345	520		
132.0				
132.5				
133.0				
133.5				
134.0				
134.5				
135.0				
135.5				
136.0	350	525		
136.5				
137.0				
137.5				
138.0				
138.5				
139.0				
139.5				
140.0				
140.5	355	530		
141.0				
141.5				
142.0				
142.5				
143.0				
143.5				
144.0				
144.5				
145.0	360	535		
145.5				
146.0				
146.5				
147.0				
147.5				
148.0				
148.5				
149.0				
149.5	365	540		
150.0				
150.5				
151.0				
151.5				
152.0				
152.5				
153.0				
153.5				
154.0	370	545		
154.5				
155.0				
155.5				
156.0				
156.5				
157.0				
157.5				
158.0				
158.5	375	550		
159.0				
159.5				
160.0				
160.5				
161.0				
161.5				
162.0				
162.5				
163.0	380	555		
163.5				
164.0				
164.5				
165.0				
165.5				
166.0				
166.5				
167.0				
167.5	385	560		
168.0				
168.5				
169.0				
169.5				
170.0				
170.5				
171.0				
171.5				
172.0	390	565		
172.5				
173.0				
173.5				
174.0				
174.5				
175.0				
175.5				
176.0				
176.5	395	570		
177.0				
177.5				
178.0				
178.5				
179.0				
179.5				
180.0				
180.5				
181.0	400	575		
181.5				
182.0				
182.5				
183.0				
183.5				
184.0				
184.5				
185.0				
185.5	405	580		
186.0				
186.5				
187.0				
187.5				
188.0				
188.5				
189.0				
189.5				
190.0	410	585		
190.5				
191.0				
191.5				
192.0				
192.5				
193.0				
193.5				
194.0				
194.5	415	590		
195.0				
195.5				
196.0				
196.5				
197.0				
197.5				
198.0				
198.5				
199.0	420	595		
199.5				
200.0				
200.5				
201.0				
201.5				
202.0				
202.5				
203.0				
203.5	425	600		
204.0				
204.5				
205.0				
205.5				
206.0				
206.5				
207.0				
207.5				
208.0	430	605		
208.5				
209.0				
209.5				
210.0				
210.5				
211.0				
211.5				
212.0				
212.5	435	610		
213.0				
213.5				
214.0				
214.5				
215.0				
215.5				
216.0				
216.5				
217.0	440	615		
217.5				
218.0				
218.5				
219.0				
219.5				
220.0				
220.5				
221.0				
221.5	445	620		
222.0				
222.5				
223.0				
223.5				
224.0				
224.5				
225.0				
225.5				
226.0	450	625		
226.5				
227.0				
227.5				
228.0				
228.5				
229.0				
229.5				
230.0				
230.5	455	630		
231.0				
231.5				
232.0				
232.5				
233.0				
233.5				
234.0				
234.5				
235.0	460	635		
235.5				
236.0				
236.5				
237.0				
237.5				
238.0				
238.5				
239.0				
239.5	465	640		
240.0				
240.5				
241.0				
241.5				
242.0				
242.5				
243.0				
243.5				
244.0	470	645		
244.5				
245.0				
245.5				
246.0				
246.5				
247.0				
247.5				
248.0				
248.5	475	650		
249.0				
249.5				
250.0				
250.5				
251.0				
251.5				
252.0				
252.5				
253.0	480	655		
253.5				
254.0				
254.5				
255.0				
255.5				
256.0				
256.5				
257.0				
257.5	485	660		
258.0				
258.5				
259.0				
259.5				
260.0				
260.5				
261.0				
261.5				
262.0	490	665		
262.5				
263.0				
263.5				
264.0				
264.5				
265.0				
265.5				
266.0				
266.5	495	670		
267.0				
267.5				
268.0				
268.5				
269.0				
269.5				
270.0				
270.5				
271.0	500	675		
271.5				
272.0				
272.5				
273.0				
273.5				
274.0				
274.5				
275.0				
275.5	505	680		
276.0				
276.5				
277.0				
277.5				
278.0				
278.5				
279.0				
279.5				
280.0	510	685		
280.5				
281.0				
281.5				
282.0				
282.5				
283.0				
283.5				
284.0				
284.5	515	690		
285.0				
285.5				
286.0				
286.5				
287.0				
287.5				
288.0				
288.5				
289.0	520	695		
289.5				
290.0				
290.5				
291.0				
291.5				
292.0				
292.5				
293.0				
293.5	525	700		
294.0				
294.5				
295.0				
295.5				
296.0				
296.5				
297.0				
297.5				
298.0	530	705		
298.5				
299.0				
299.5				
300.0				
300.5				
301.0				
301.5				
302.0				
302.5	535	710		
303.0				
303.5				
304.0				
304.5				
305.0				
305.5				
306.0				
306.5				
307.0	540	715		
307.5				
308.0				
308.5				
309.0				
309.5				
310.0				
310.5				
311.0				
311.5	545	720		
312.0				
312.5				
313.0				
313.5				
314.0				
314.5				
315.0				
315.5				
316.0	550	725		
316.5				
317.0				
317.5				
318.0				
318.5				
319.0				
319.5				
320.0				
320.5	555	730		
321.0				
321.5				
322.0				
322.5				
323.0				
323.5				
324.0				
324.5				
325.0	560	735		
325.5				
326.0				
326.5				
327.0				
327.5				
328.0				
328.5				
329.0				
329.5	565	740		
330.0				
330.5				
331.0				
331.5				
332.0				
332.5				
333.0				
333.5				
334.0	570	745		
334.5				
335.0				
335.5				
336.0				
336.5				
337.0				
337.5				
338.0				
338.5	575	750		
339.0				
339.5				
340.0				
340.5				
341.0				
341.5				
342.0				
342.5				
343.0	580	755		
343.5				
344.0				
344.5				
345.0				
345.5				
346.0				
346.5				
347.0				
347.5	585	760		
348.0				
348.5				
349.0				
349.5				
350.0				
350.5				
351.0				
351.5				
352.0	590	765		
352.5				
353.0				
353.5				
354.0				
354.5				
355.0				
355.5				
356.0				
356.5	595	770		
357.0				
357.5				
358.0				
358.5				
359.0				
359.5				
360.0				
360.5				
361.0	600	775		
361.5				
362.0				
362.5				
363.0				
363.5				
364.0				
364.5				
365.0				
365.5	605	780		
366.0				
366.5				
367.0				
367.5				
368.0				
368.5				
369.0				
369.5				
370.0	610	785		
370.5				
371.0				
371.5				
372.0				
372.5				
373.0				
373.5				
374.0				
374.5	615	790		
375.0				
375.5				
376.0				
376.5				
377.0				
377.5				
378.0				
378.5				
379.0	620	795		
379.5				
380.0				
380.5				
381.0				
381.5				
382.0				
382.5				
383.0				
383.5	625	800		
384.0				
384.5				
385.0				
385.5				
386.0				
386.5				
387.0				
387.5				
388.0	630	805		
388.5				
389.0				
389.5				
390.0				
390.5				
391.0				
391.5				
392.0				
392.5	635	810		
393.0				
393.5				
394.0				
394.5				
395.0				
395.5				
396.0				
396.5				
397.0	640	815		
397.5				
398.0				
398.5				
399.0				
399.5				
400.0				
400.5				
401.0				
401.5	645	820		
402.0				
402.5				
403.0				
403.5				
404.0				
404.5				
405.0				
405.5				
406.0	650	825		
406.5				
407.0				
407.5				
408.0				
408.5				
409.				

Dc 直径	ℓ 溝長	L 全長	MT No. シャンク	Stock 在庫
67.0	285	465	5	●
67.5				
68.0				
68.5				
69.0				
69.5				
70.0				
70.5				
71.0				
71.5				
72.0	295	475		
72.5				
73.0				
73.5				
74.0				
74.5				
75.0				
75.5				
76.0				
77.0				
78.0				
79.0				
80.0				
81.0				
82.0				
83.0				
84.0				
85.0				
86.0	305	485		
87.0				
88.0				
89.0				
90.0				
91.0				
92.0				
93.0				
94.0				
95.0			310	
96.0				
97.0				
98.0				
99.0				
100.0				
101.0				
102.0				
103.0				
104.0				
105.0	315	560		
106.0				
107.0				
108.0				
109.0				
110.0				
111.0				
112.0				
113.0				
114.0				
115.0	325	570		
116.0				
117.0				
118.0				
119.0				
120.0				
121.0				
122.0				
123.0				
124.0				
125.0	335	580		
126.0				
127.0				
128.0				
129.0				
130.0				
131.0				
132.0				
133.0				
134.0				
135.0	345	590		
136.0				
137.0				
138.0				
139.0				
140.0				
141.0				
142.0				
143.0				
144.0				
145.0	355	600		
146.0				
147.0				
148.0				
149.0				
150.0				
151.0				
152.0				
153.0				
154.0				

Sold one per package