High Performance Drill Selection Chart



Our industry leading high performance drill with the same high quality that helped set the standard.



Multipurpose high quality drill for most drilling applications adding stability, hole quality, tool life, and finish (excludes some work hardening materials).



An economical choice perfect for job shop and batch production work requiring a high performance drill option.

												Application Recommendations							
Series	Drill Lgth	Size Range Inch	Size Range mm	Margin	D1 Tol.	D2 Tol.	Helix	Point Angle	Coolant Fed	DIN	Coating	TEMA* Sizes	Steel	Hardened Steel	Stainless Steel	PH Stainless Steel	Cast Iron	Titanium	High Temp Alloys
CXDSS	3X	#31-3/4	3.0-20.0	Double	m7	h6	30°	140°	N	6537K	ALtima® Plus	Х	1st	2nd	2nd	2nd	1st	2nd	2nd
CXDSR	5X	#31-5/8	3.0-16.0	Double	m7	h6	30°	140°	N	6537L	ALtima® Plus	Х	1st	2nd	2nd	2nd	1st	2nd	2nd
CXDCS	3X	#31-5/8	3.0-16.0	Double	m7	h6	30°	140°	Y	6537K	ALtima® Plus	Х	1st	2nd	1st	2nd	1st	1st	2nd
CXDCR	5X	#31-3/4	3.0-20.0	Double	m7	h6	30°	140°	Y	6537L	ALtima® Plus	Х	1st	2nd	1st	2nd	1st	1st	2nd
CXDCL	8X	#31-1/2	3.0-12.0	Double	m7	h6	30°	140°	Y		ALtima° Plus	Х	1st	2nd	1st	2nd	1st	1st	2nd
2XDSS	3X	#31-3/4	2.5-20.0	Single	h7	h6	30°	142°	N		ALtima®	Х	2nd	1st	1st	1st	2nd	1st	1st
2XDSR	5X	1/64-5/8	0.5-16.0	Single	h7	h6	30°	142°	N		ALtima®	Х	2nd	1st	1st	1st	2nd	1st	1st
2XDCS	3X	#31-5/8	3.0-16.0	Single	h7	h6	30°	142°	Υ	6537K	ALtima®	Х	2nd	1st	1st	1st	2nd	2nd	1st
2XDCR	5X	#31-3/4	3.0-20.0	Single	h7	h6	30°	142°	Υ		ALtima®	Х	2nd	1st	1st	1st	2nd	2nd	1st
2XDCL	7X+	#31-1/2	3.0-12.0	Single	h7	h6	30°	142°	Y		ALtima®	Х	2nd	1st	1st	1st	2nd	2nd	1st
2XDCE	12X- 25X**	1/4 - 1/2	5.0-12.0	Double	h7	h6	30°	142°	Y		ALtima®		2nd	1st	1st	1st	2nd	2nd	1st
HPDSR	5X	#31-5/8	3.0-16.0	Single	h7	h6	30°	140°	N	6537L	HP AlTiN		3rd	3rd	3rd	3rd	3rd	3rd	3rd
HPDCR	5X	#31-5/8	3.0-16.0	Single	h7	h6	30°	140°	Y	6537L	HP AlTiN		3rd	3rd	3rd	3rd	3rd	3rd	3rd

Note: For drilling applications involving cross holes and/or optimal hole finishes, use the CXD style drill.

Inch						
D1	Tolerance (m7)					
.00001181	+.00008/+.00047					
.11822362	+.00016/+.00063					
.23633937	+.00024/+.00083					
.39387087	+.00027/+.00098					
.70887500	+.00031/+.00114					

Metric (mm)						
D1	Tolerance (m7)					
0 - 3.0	+.002/+.012					
3.01 - 6.0	+.004/+.016					
6.01 - 10.0	+.006/+.021					
10.01 - 18.0	+.007/+.025					
18.01 - 20.0	+.008/+.029					

Inch						
D1	Tolerance (h7)					
.00001181	+0/00039					
.11822362	+0/00047					
.23633937	+0/00059					
.39387087	+0/00071					
7088 - 7500	+0/- 00083					

Metric (mm)						
D1	Tolerance (h7)					
0 - 3.0	+0/010					
3.01 - 6.0	+0/012					
6.01 - 10.0	+0/015					
10.01 - 18.0	+0/018					
18 01 - 20 0	+0/- 021					

Metric (mm)							
D2	Tolerance (h6)						
0 - 3.0	+0/006						
3.01 - 6.0	+0/008						
6.01 - 10.0	+0/009						
10.01 - 18.0	+0/011						
18.01 - 20.0	+0/013						

Inch

.0000 - .1181

.1182 - .2362

.2363 - .3937

.3938 - .7087

.7088 - .7500

Tolerance (h6)

+0/-.00024

+0/-.00031

+0/-.00035

+0/-.00043

+0/-.00051

M.A. Ford® Coating	Microhardness (HV)	Maximum Service Temp.	Friction Coefficient		
ALtima®	3100	1100° C / 2012° F	0.42		
ALtima® Plus	3200	1100° C / 2012° F	0.25		
HP AITIN	3000	927° C / 1700° F	0.25		

^{*}TEMA - Tubular Exchange Manufacturer's Association
**Length varies depending on size.