Drilling Feed & Speed Chart for

Slot Drilling Applications

Recommended Tycom Drill Series: Series 100, 150, 700, 750

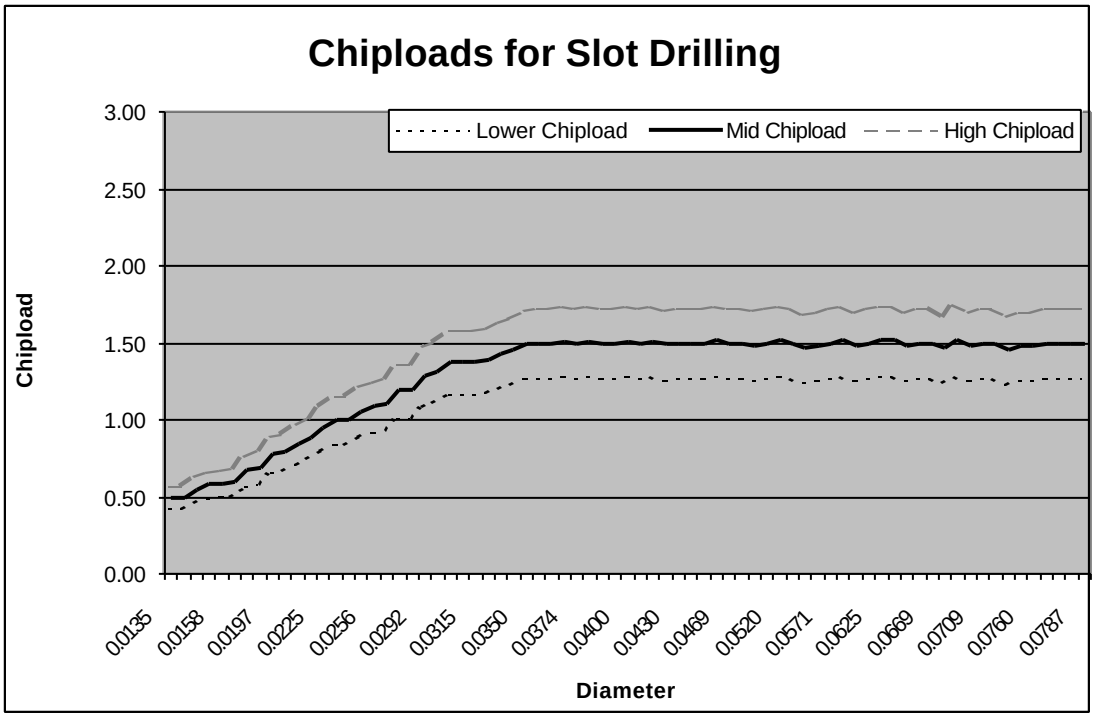
(Note: Chart is based on 120K RPM Spindle Capability. Please use maximum spindle speed if listed RPM is unattainable)

Size	Diameter	Feed	Speed	Retract	Z-Axis Offset	Max Hits	Chipload	SFM
	(inch)	*(Inches/min)*	*(k-rpm)*	*(inches/min)*	*(inches)*		*(mils/rev)*	
#80	0.0135	50	100	1000	-0.013	3000	0.50	353
0.35mm	0.0138	50	100	1000	-0.013	3000	0.50	361
#79	0.0145	55	100	1000	-0.013	3000	0.55	379
1/64	0.0156	58	100	1000	-0.014	3000	0.58	408
0.40mm	0.0158	59	100	1000	-0.014	3000	0.59	413
#78	0.0160	60	100	1000	-0.014	3000	0.60	419
0.45mm	0.0177	65	97	1000	-0.014	3000	0.67	450
#77	0.0180	66	95	1000	-0.014	3000	0.69	450
0.50mm	0.0197	68	87	1000	-0.015	3000	0.78	450
#76	0.0200	68	86	1000	-0.015	3000	0.79	450
#75	0.0210	69	82	1000	-0.015	3000	0.84	450
0.55mm	0.0217	70	79	1000	-0.015	3000	0.89	450
#74	0.0225	72	76	1000	-0.015	3000	0.95	450
0.60mm	0.0236	73	73	1000	-0.016	3000	1.00	450
#73	0.0240	72	72	1000	-0.016	3000	1.00	450
#72	0.0250	73	69	1000	-0.016	3000	1.06	450
0.65mm	0.0256	74	68	1000	-0.016	3000	1.09	450
#71	0.0260	74	67	1000	-0.016	3000	1.10	450
0.70mm	0.0276	75	63	1000	-0.016	3000	1.19	450
#70	0.0280	75	63	1000	-0.017	3000	1.19	450
#69	0.0292	76	59	1000	-0.017	3000	1.29	450
0.75mm	0.0295	76	58	1000	-0.017	3000	1.31	450
#68	0.0310	76	55	1000	-0.017	3000	1.38	450
1/32	0.0312	76	55	1000	-0.017	3000	1.38	450
0.80mm	0.0315	76	55	1000	-0.017	3000	1.38	450
#67	0.0320	75	54	1000	-0.017	3000	1.39	450
#66	0.0330	74	52	1000	-0.018	3000	1.42	450
0.85mm	0.0335	74	51	1000	-0.018	3000	1.45	450
#65	0.0350	73	49	1000	-0.018	3000	1.49	450
0.90mm	0.0354	72	48	1000	-0.018	3000	1.50	450
#64	0.0360	72	48	1000	-0.018	3000	1.50	450
#63	0.0370	71	47	1000	-0.019	3000	1.50	450
0.95mm	0.0374	69	46	1000	-0.019	3000	1.50	450
#62	0.0380	68	45	1000	-0.019	3000	1.50	450
#61	0.0390	66	44	1000	-0.019	3000	1.50	450
1.00mm	0.0394	66	44	1000	-0.019	3000	1.50	450

Size	Diameter	Feed	Speed	Retract	Z-Axis Offset	Hits	Chipload	SFM
	(inch)	*(Inches/min)*	*(k-rpm)*	*(inches/min)*	*(inches)*		*(mils/rev)*	
#60	0.0400	65	43	1000	-0.019	3000	1.50	450
#59	0.0410	63	42	1000	-0.020	3000	1.50	450
1.05mm	0.0413	62	41	1000	-0.020	3000	1.50	450
#58	0.0420	61	41	1000	-0.020	3000	1.50	450
#57	0.0430	60	40	1000	-0.020	3000	1.50	450
1.10mm	0.0433	60	40	1000	-0.020	3000	1.50	450
1.15mm	0.0453	57	38	1000	-0.021	3000	1.50	450
#56	0.0465	56	37	1000	-0.021	3000	1.50	450
3/64	0.0469	54	36	1000	-0.021	3000	1.50	450
1.20mm	0.0472	54	36	1000	-0.021	3000	1.50	450
1.25mm	0.0492	52	35	1000	-0.021	3000	1.50	450
1.30mm	0.0512	51	34	1000	-0.022	3000	1.50	450
#55	0.0520	50	33	1000	-0.022	3000	1.50	450
1.35mm	0.0531	48	32	1000	-0.022	3000	1.50	450
#54	0.0550	47	32	1000	-0.023	3000	1.50	450
1.40mm	0.0551	46	31	1000	-0.023	3000	1.50	450
1.45mm	0.0571	45	30	1000	-0.023	3000	1.50	450
1.50mm	0.0591	44	29	1000	-0.024	3000	1.50	450
#53	0.0595	43	29	1000	-0.024	3000	1.50	450
1.55mm	0.0610	42	28	1000	-0.024	3000	1.50	450
1/16	0.0625	41	27	1000	-0.025	3000	1.50	450
1.60mm	0.0630	41	27	1000	-0.025	3000	1.50	450
#52	0.0635	40	27	1000	-0.025	3000	1.50	450
1.65mm	0.0650	39	26	1000	-0.025	3000	1.50	450
1.70mm	0.0669	39	26	1000	-0.026	3000	1.50	450
#51	0.0670	38	26	1000	-0.026	3000	1.50	450
1.75mm	0.0689	38	25	1000	-0.026	3000	1.50	450
#50	0.0700	37	25	1000	-0.026	3000	1.50	450
1.80mm	0.0709	36	24	1000	-0.027	3000	1.50	450
1.85mm	0.0728	36	24	1000	-0.027	3000	1.50	450
#49	0.0730	35	24	1000	-0.027	3000	1.50	450
1.90mm	0.0748	34	23	1000	-0.027	3000	1.50	450
#48	0.0760	34	23	1000	-0.028	3000	1.50	450
1.95mm	0.0768	33	22	1000	-0.028	3000	1.50	450
5/64	0.0781	33	22	1000	-0.028	3000	1.50	450
#47	0.0785	33	22	1000	-0.028	3000	1.50	450
2.00mm	0.0787	33	22	1000	-0.028	3000	1.50	450

In some cases, there may be an opportunity to increase the chipload based on the application's robustness. Variables such as machine technology and condition, stack support materials, and Tycom design selection may allow the increased throughput with higher chiploads. Multiply the recommended chipload by 1.15 to reach the higher chipload.

If the application is not as robust due to heavy glass, high copper content, tight annular ring requirements, or similar, multiply the recommended chipload by 0.85.


Chiploads for Slot Drilling
Lower Chipload
Mid Chipload
High Chipload
Chipload
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.0135
0.0158
0.0197
0.0225
0.0256
0.0292
0.0315
0.0350
0.0374
0.0400
0.0430
0.0469
0.0520
0.0571
0.0625
0.0669
0.0709
0.0760
0.0787
Diameter