

SPIROID 3.750" OD

RATIO TO 1	OUTPUT SELECTION	Pinion Speed RPM											
		1	100	200	300	600	900	1,200	1,750	2,500	3,600	6,000	10,000
4 1/10	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												
6 1/8	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												
8 1/5	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												
10 1/4	OUTPUT TORQUE (in lb)	1,318	1,082	987	923	799	721	665	591	523	456	370	295
	OUTPUT TORQUE (Nm)	149	122	112	104	90.3	81.5	75.1	66.8	59.1	51.5	41.8	33.3
	EFFICIENCY (%)	72.1	79.2	81.2	82.6	84.8	86.2	87.1	88.3	89.3	90.3	91.6	92.6
12 1/3	OUTPUT TORQUE (in lb)	1,461	1,186	1,078	1,005	865	778	716	634	559	487	393	312
	OUTPUT TORQUE (Nm)	165	134	122	114	97.7	87.9	80.9	71.6	63.2	55.0	44.4	35.3
	EFFICIENCY (%)	66.9	74.9	77.3	78.8	81.5	83.1	84.2	85.6	86.8	88.0	89.5	90.8
14 2/3	OUTPUT TORQUE (in lb)	1,490	1,207	1,097	1,022	879	790	726	643	567	493	398	316
	OUTPUT TORQUE (Nm)	168	136	124	115	99.3	89.3	82.0	72.6	64.1	55.7	45.0	35.7
	EFFICIENCY (%)	63.2	71.7	74.3	75.9	78.9	80.6	81.8	83.4	84.7	86.1	87.8	89.3
17 1/2	OUTPUT TORQUE (in lb)	1,912	1,529	1,382	1,283	1,096	981	899	793	696	603	485	383
	OUTPUT TORQUE (Nm)	216	173	156	145	124	111	102	89.6	78.6	68.1	54.8	43.3
	EFFICIENCY (%)	57.4	66.7	69.6	71.4	74.7	76.7	78.1	79.9	81.5	83.1	85.1	86.9
21 1/2	OUTPUT TORQUE (in lb)	1,925	1,538	1,389	1,289	1,101	985	902	795	697	603	484	382
	OUTPUT TORQUE (Nm)	217	174	157	146	124	111	102	89.8	78.8	68.1	54.7	43.2
	EFFICIENCY (%)	52.8	62.3	65.4	67.3	70.9	73.1	74.6	76.6	78.4	80.2	82.5	84.5
25 1/2	OUTPUT TORQUE (in lb)	2,050	1,635	1,475	1,368	1,166	1,041	953	838	734	634	508	400
	OUTPUT TORQUE (Nm)	232	185	167	155	132	118	108	94.7	82.9	71.6	57.4	45.2
	EFFICIENCY (%)	48.5	58.2	61.4	63.4	67.2	69.5	71.2	73.4	75.3	77.3	79.8	82.1
31	OUTPUT TORQUE (in lb)	2,112	1,656	1,484	1,370	1,157	1,027	936	819	714	613	488	381
	OUTPUT TORQUE (Nm)	239	187	168	155	131	116	106	92.5	80.7	69.3	55.1	43.0
	EFFICIENCY (%)	41.0	50.9	54.2	56.5	60.6	63.1	65.0	67.4	69.6	71.9	74.8	77.5
38	OUTPUT TORQUE (in lb)	2,209	1,729	1,548	1,427	1,202	1,065	969	846	736	631	500	390
	OUTPUT TORQUE (Nm)	250	195	175	161	136	120	109	95.6	83.2	71.3	56.5	44.1
	EFFICIENCY (%)	36.5	46.1	49.4	51.6	55.9	58.5	60.4	63.0	65.4	67.8	70.9	73.9
47	OUTPUT TORQUE (in lb)	2,170	1,698	1,517	1,397	1,174	1,038	943	822	713	610	481	373
	OUTPUT TORQUE (Nm)	245	192	171	158	133	117	107	92.9	80.6	68.9	54.3	42.1
	EFFICIENCY (%)	32.3	41.4	44.7	46.9	51.1	53.8	55.7	58.4	60.9	63.4	66.8	70.0
58	OUTPUT TORQUE (in lb)	2,284	1,780	1,587	1,458	1,219	1,075	974	845	731	622	489	377
	OUTPUT TORQUE (Nm)	258	201	179	165	138	121	110	95.5	82.6	70.3	55.2	42.6
	EFFICIENCY (%)	28.1	36.6	39.7	41.9	46.0	48.7	50.7	53.3	55.9	58.5	62.1	65.5
71	OUTPUT TORQUE (in lb)	2,254	1,751	1,557	1,427	1,187	1,043	942	814	701	594	464	356
	OUTPUT TORQUE (Nm)	255	198	176	161	134	118	108	92.0	79.2	67.1	52.4	40.2
	EFFICIENCY (%)	24.6	32.4	35.4	37.4	41.4	44.0	45.9	48.6	51.2	53.9	57.6	61.2
87	OUTPUT TORQUE (in lb)	2,229	1,723	1,526	1,394	1,151	1,006	905	778	666	562	435	331
	OUTPUT TORQUE (Nm)	252	195	172	158	130	114	102	87.9	75.2	63.5	49.1	37.4
	EFFICIENCY (%)	21.3	28.4	31.1	33.0	36.8	39.3	41.2	43.8	46.4	49.0	52.8	56.5
106	OUTPUT TORQUE (in lb)	2,367	1,816	1,599	1,454	1,189	1,033	925	789	671	562	430	324
	OUTPUT TORQUE (Nm)	267	205	181	164	134	117	105	89.1	75.8	63.5	48.6	36.6
	EFFICIENCY (%)	18.2	24.6	27.1	28.9	32.4	34.8	36.6	39.1	41.6	44.2	47.9	51.6

The data in the chart above represents theoretical performance values for a given size and ratio range at various speeds. These values are not intended to represent actual gear sets that Spiroid maintains in stock. While Spiroid does maintain an inventory of cutting tools, our customer's specific applications will determine whether 'Stock' or 'Custom' cutting tools are appropriate. For more information on this, please see our 'Inquiry-to-Quote' Process.

