

**SPIROID 4.500" 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)	2,360	1,903	1,725	1,604	1,376	1,234	1,133	1,002	882	766	618	489
	OUTPUT TORQUE (Nm)	267	215	195	181	155	139	128	113	99.7	86.5	69.8	55.2
	EFFICIENCY (%)	72.4	79.8	82.0	83.3	85.5	86.9	87.8	88.9	89.9	90.8	92.0	93.1
12 1/3	OUTPUT TORQUE (in lb)	2,484	1,982	1,789	1,660	1,417	1,268	1,161	1,024	899	779	626	495
	OUTPUT TORQUE (Nm)	281	224	202	188	160	143	131	116	102	88.0	70.7	55.9
	EFFICIENCY (%)	67.6	75.9	78.3	79.8	82.5	84.0	85.1	86.4	87.6	88.7	90.2	91.4
14 2/3	OUTPUT TORQUE (in lb)	2,538	2,021	1,824	1,691	1,443	1,290	1,181	1,041	913	790	635	501
	OUTPUT TORQUE (Nm)	287	228	206	191	163	146	133	118	103	89.3	71.7	56.6
	EFFICIENCY (%)	64.0	72.8	75.4	77.1	80.0	81.7	82.9	84.3	85.7	87.0	88.6	90.0
17 1/2	OUTPUT TORQUE (in lb)	3,267	2,565	2,302	2,126	1,801	1,603	1,463	1,284	1,122	967	773	607
	OUTPUT TORQUE (Nm)	369	290	260	240	203	181	165	145	127	109	87.3	68.6
	EFFICIENCY (%)	58.1	67.8	70.8	72.7	76.0	77.9	79.3	81.0	82.6	84.1	86.0	87.7
21 1/2	OUTPUT TORQUE (in lb)	3,291	2,582	2,317	2,139	1,810	1,610	1,461	1,288	1,125	969	773	606
	OUTPUT TORQUE (Nm)	372	292	262	242	205	182	165	146	127	109	87.3	68.5
	EFFICIENCY (%)	53.6	63.6	66.7	68.7	72.3	74.5	76.0	77.9	79.6	81.3	83.5	85.4
25 1/2	OUTPUT TORQUE (in lb)	3,510	2,747	2,461	2,271	1,917	1,703	1,552	1,358	1,184	1,019	811	635
	OUTPUT TORQUE (Nm)	397	310	278	257	217	192	175	153	134	115	91.6	71.7
	EFFICIENCY (%)	49.3	59.5	62.8	64.9	68.7	71.0	72.6	74.7	76.7	78.5	81.0	83.1
31	OUTPUT TORQUE (in lb)	3,632	2,791	2,482	2,278	1,906	1,683	1,527	1,329	1,152	986	780	606
	OUTPUT TORQUE (Nm)	410	315	280	257	215	190	173	150	130	111	88.1	68.5
	EFFICIENCY (%)	41.6	52.2	55.7	57.9	62.1	64.7	66.5	68.9	71.1	73.3	76.1	78.7
38	OUTPUT TORQUE (in lb)	3,796	2,912	2,586	2,371	1,978	1,743	1,579	1,372	1,187	1,013	799	619
	OUTPUT TORQUE (Nm)	429	329	292	268	223	197	178	155	134	114	90.3	69.9
	EFFICIENCY (%)	37.2	47.4	50.9	53.2	57.5	60.2	62.1	64.6	67.0	69.3	72.4	75.2
47	OUTPUT TORQUE (in lb)	3,726	2,856	2,533	2,319	1,929	1,697	1,534	1,330	1,148	977	767	592
	OUTPUT TORQUE (Nm)	421	323	286	262	218	192	173	150	130	110	86.7	66.9
	EFFICIENCY (%)	33.0	42.7	46.1	48.4	52.7	55.5	57.4	60.1	62.6	65.0	68.4	71.4
58	OUTPUT TORQUE (in lb)	3,920	2,992	2,646	2,417	2,001	1,753	1,581	1,365	1,174	996	777	597
	OUTPUT TORQUE (Nm)	443	338	299	273	226	198	179	154	133	113	87.8	67.5
	EFFICIENCY (%)	28.7	37.9	41.2	43.4	47.7	50.4	52.4	55.1	57.7	60.3	63.8	67.1
71	OUTPUT TORQUE (in lb)	3,867	2,941	2,592	2,362	1,944	1,697	1,526	1,312	1,124	949	736	562
	OUTPUT TORQUE (Nm)	437	332	293	267	220	192	172	148	127	107	83.2	63.5
	EFFICIENCY (%)	25.2	33.6	36.7	38.9	43.0	45.7	47.7	50.4	53.0	55.7	59.3	62.8
87	OUTPUT TORQUE (in lb)	4,097	3,094	2,714	2,464	2,012	1,747	1,564	1,336	1,138	955	735	556
	OUTPUT TORQUE (Nm)	463	350	307	278	227	197	177	151	129	108	83.0	62.8
	EFFICIENCY (%)	21.6	29.4	32.3	34.3	38.2	40.8	42.8	45.4	48.0	50.7	54.5	58.1
106	OUTPUT TORQUE (in lb)	4,058	3,041	2,652	2,397	1,939	1,672	1,490	1,265	1,070	891	679	509
	OUTPUT TORQUE (Nm)	458	344	300	271	219	189	168	143	121	101	76.7	57.5
	EFFICIENCY (%)	18.7	25.6	28.3	30.2	33.9	36.4	38.2	40.8	43.4	46.0	49.8	53.4

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.

