

**HELICON 13.125" 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 1/6	OUTPUT TORQUE (in lb)	47,014	37,524	32,191	28,450	21,551	17,602	14,991	11,910	9,411	7,286		
	OUTPUT TORQUE (Nm)	5,312	4,240	3,637	3,214	2,435	1,989	1,694	1,346	1,063	823		
	EFFICIENCY (%)	86.9	91.0	92.4	93.1	94.5	95.3	95.9	96.4	96.9	97.3		
10 1/5	OUTPUT TORQUE (in lb)	38,121	28,653	25,280	23,093	19,156	16,842	15,240	13,228	11,452	9,787		
	OUTPUT TORQUE (Nm)	4,307	3,237	2,856	2,609	2,164	1,903	1,722	1,495	1,294	1,106		
	EFFICIENCY (%)	81.2	87.8	89.4	90.4	91.9	92.7	93.3	93.9	94.5	95.1		
12 1/4	OUTPUT TORQUE (in lb)	49,172	36,197	31,730	28,866	23,771	20,810	18,775	16,236	14,008	11,934		
	OUTPUT TORQUE (Nm)	5,556	4,090	3,585	3,261	2,686	2,351	2,121	1,834	1,583	1,348		
	EFFICIENCY (%)	77.3	85.1	87.0	88.1	90.0	91.0	91.6	92.5	93.2	93.8		
14 1/4	OUTPUT TORQUE (in lb)	53,988	39,402	34,448	31,285	25,682	22,442	20,221	17,456	15,038	12,792		
	OUTPUT TORQUE (Nm)	6,100	4,452	3,892	3,535	2,902	2,536	2,285	1,972	1,699	1,445		
	EFFICIENCY (%)	74.2	82.7	84.9	86.1	88.2	89.4	90.2	91.1	91.9	92.7		
17 1/3	OUTPUT TORQUE (in lb)	54,422	39,030	33,927	30,699	25,035	21,790	19,579	16,843	14,464	12,266		
	OUTPUT TORQUE (Nm)	6,149	4,410	3,833	3,469	2,829	2,462	2,212	1,903	1,634	1,386		
	EFFICIENCY (%)	68.6	78.6	81.1	82.6	85.2	86.6	87.6	88.7	89.7	90.7		
21 1/3	OUTPUT TORQUE (in lb)	80,076	56,712	49,080	44,280	35,917	31,161	27,935	23,960	20,520	17,355		
	OUTPUT TORQUE (Nm)	9,047	6,408	5,545	5,003	4,058	3,521	3,156	2,707	2,318	1,961		
	EFFICIENCY (%)	63.2	74.3	77.2	79.0	81.9	83.6	84.7	86.1	87.3	88.4		
25 1/2	OUTPUT TORQUE (in lb)	80,263	55,726	47,898	43,023	34,621	29,895	26,711	22,814	19,465	16,403		
	OUTPUT TORQUE (Nm)	9,069	6,296	5,412	4,861	3,912	3,378	3,018	2,578	2,199	1,853		
	EFFICIENCY (%)	56.7	69.0	72.3	74.3	77.8	79.7	81.1	82.7	84.2	85.5		
31 1/2	OUTPUT TORQUE (in lb)	79,483	54,990	47,173	42,311	33,947	29,256	26,102	22,249	18,945	15,932		
	OUTPUT TORQUE (Nm)	8,980	6,213	5,330	4,781	3,835	3,305	2,949	2,514	2,140	1,800		
	EFFICIENCY (%)	51.7	64.4	68.0	70.2	74.0	76.2	77.6	79.5	81.2	82.7		
38 1/2	OUTPUT TORQUE (in lb)	78,501	54,048	46,242	41,397	33,087	28,442	25,329	21,535	18,292	15,345		
	OUTPUT TORQUE (Nm)	8,869	6,107	5,225	4,677	3,738	3,214	2,862	2,433	2,067	1,734		
	EFFICIENCY (%)	46.8	59.7	63.5	65.8	69.9	72.3	73.9	76.0	77.9	79.6		
47	OUTPUT TORQUE (in lb)	79,482	53,068	44,898	39,902	31,474	26,845	23,776	20,075	16,946	14,130		
	OUTPUT TORQUE (Nm)	8,980	5,996	5,073	4,508	3,556	3,033	2,686	2,268	1,915	1,596		
	EFFICIENCY (%)	38.9	52.1	56.1	58.7	63.2	65.9	67.7	70.1	72.2	74.3		
58	OUTPUT TORQUE (in lb)	78,226	51,986	43,831	38,852	30,482	25,907	22,884	19,252	16,194	13,453		
	OUTPUT TORQUE (Nm)	8,838	5,874	4,952	4,390	3,444	2,927	2,586	2,175	1,830	1,520		
	EFFICIENCY (%)	34.6	47.3	51.3	53.9	58.6	61.3	63.3	65.8	68.1	70.4		
71	OUTPUT TORQUE (in lb)	77,123	50,875	42,689	37,707	29,376	24,852	21,877	18,319	15,342	12,688		
	OUTPUT TORQUE (Nm)	8,714	5,748	4,823	4,260	3,319	2,808	2,472	2,070	1,733	1,434		
	EFFICIENCY (%)	30.5	42.6	46.6	49.1	53.9	56.7	58.8	61.4	63.8	66.2		
87	OUTPUT TORQUE (in lb)	76,121	49,684	41,419	36,414	28,105	23,634	20,713	17,242	14,358	11,807		
	OUTPUT TORQUE (Nm)	8,601	5,614	4,680	4,114	3,175	2,670	2,340	1,948	1,622	1,334		
	EFFICIENCY (%)	26.7	38.0	41.8	44.3	49.0	51.9	54.0	56.7	59.2	61.8		
106	OUTPUT TORQUE (in lb)	75,289	48,446	40,050	35,000	26,699	22,283	19,422	16,052	13,276	10,842		
	OUTPUT TORQUE (Nm)	8,507	5,474	4,525	3,954	3,017	2,518	2,194	1,814	1,500	1,225		
	EFFICIENCY (%)	23.2	33.6	37.3	39.7	44.3	47.1	49.2	52.0	54.6	57.1		

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.

