

HELICON 9.750" 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)	15,918	12,548	11,276	10,427	8,848	7,887	7,208	6,335	5,548	4,794		
	OUTPUT TORQUE (Nm)	1,798	1,418	1,274	1,178	1,000	891	814	716	627	542		
	EFFICIENCY (%)	87.9	91.9	93.0	93.6	94.6	95.1	95.5	95.9	96.3	96.7		
8 1/6	OUTPUT TORQUE (in lb)	14,765	11,667	10,474	9,676	8,193	7,292	6,655	5,839	5,105	4,403		
	OUTPUT TORQUE (Nm)	1,668	1,318	1,183	1,093	926	824	752	660	577	497		
	EFFICIENCY (%)	84.1	89.5	90.8	91.6	92.9	93.6	94.1	94.7	95.2	95.7		
10 1/5	OUTPUT TORQUE (in lb)	16,437	12,737	11,367	10,463	8,801	7,802	7,102	6,210	5,412	4,654		
	OUTPUT TORQUE (Nm)	1,857	1,439	1,284	1,182	994	882	802	702	611	526		
	EFFICIENCY (%)	80.3	86.7	88.3	89.3	90.9	91.8	92.4	93.2	93.8	94.4		
12 1/4	OUTPUT TORQUE (in lb)	21,120	16,066	14,253	13,068	10,915	9,637	8,745	7,618	6,616	5,671		
	OUTPUT TORQUE (Nm)	2,386	1,815	1,610	1,476	1,233	1,089	988	861	748	641		
	EFFICIENCY (%)	76.2	83.7	85.6	86.8	88.8	89.9	90.6	91.5	92.3	93.0		
14 2/3	OUTPUT TORQUE (in lb)	22,997	17,165	15,132	13,817	11,455	10,068	9,108	7,902	6,838	5,841		
	OUTPUT TORQUE (Nm)	2,598	1,939	1,710	1,561	1,294	1,138	1,029	893	773	660		
	EFFICIENCY (%)	70.9	79.7	82.0	83.4	85.8	87.2	88.1	89.2	90.2	91.1		
17 1/3	OUTPUT TORQUE (in lb)	23,049	17,134	15,082	13,758	11,384	9,993	9,032	7,827	6,765	5,772		
	OUTPUT TORQUE (Nm)	2,604	1,936	1,704	1,554	1,286	1,129	1,020	884	764	652		
	EFFICIENCY (%)	67.2	76.7	79.3	80.9	83.5	85.1	86.1	87.4	88.5	89.5		
21 1/2	OUTPUT TORQUE (in lb)	31,207	22,665	19,788	17,955	14,712	12,839	11,556	9,962	8,569	7,276		
	OUTPUT TORQUE (Nm)	3,526	2,561	2,236	2,029	1,662	1,451	1,306	1,126	968	822		
	EFFICIENCY (%)	59.7	70.7	73.7	75.6	78.9	80.7	82.0	83.6	84.9	86.3		
25 1/2	OUTPUT TORQUE (in lb)	33,723	24,368	21,230	19,234	15,714	13,688	12,304	10,586	9,090	7,706		
	OUTPUT TORQUE (Nm)	3,810	2,753	2,399	2,173	1,775	1,547	1,390	1,196	1,027	871		
	EFFICIENCY (%)	55.2	66.7	70.0	72.1	75.6	77.7	79.1	80.9	82.4	83.9		
31 1/2	OUTPUT TORQUE (in lb)	33,348	24,022	20,891	18,902	15,400	13,389	12,017	10,319	8,843	7,481		
	OUTPUT TORQUE (Nm)	3,768	2,714	2,360	2,136	1,740	1,513	1,358	1,166	999	845		
	EFFICIENCY (%)	50.2	62.0	65.5	67.7	71.6	73.8	75.4	77.4	79.2	80.9		
38 1/2	OUTPUT TORQUE (in lb)	32,915	23,613	20,486	18,503	15,021	13,028	11,672	9,998	8,547	7,212		
	OUTPUT TORQUE (Nm)	3,719	2,668	2,315	2,091	1,697	1,472	1,319	1,130	966	815		
	EFFICIENCY (%)	45.3	57.2	60.8	63.1	67.3	69.7	71.5	73.6	75.6	77.5		
47	OUTPUT TORQUE (in lb)	33,287	23,255	19,971	17,916	14,363	12,362	11,016	9,371	7,961	6,676		
	OUTPUT TORQUE (Nm)	3,761	2,627	2,256	2,024	1,623	1,397	1,245	1,059	899	754		
	EFFICIENCY (%)	37.5	49.6	53.4	55.9	60.4	63.1	65.0	67.5	69.7	71.9		
58	OUTPUT TORQUE (in lb)	32,782	22,813	19,530	17,479	13,942	11,959	10,629	9,009	7,627	6,373		
	OUTPUT TORQUE (Nm)	3,704	2,578	2,207	1,975	1,575	1,351	1,201	1,018	862	720		
	EFFICIENCY (%)	33.2	44.8	48.6	51.1	55.6	58.4	60.4	63.0	65.4	67.8		
71	OUTPUT TORQUE (in lb)	32,343	22,367	19,067	17,008	13,476	11,508	10,194	8,601	7,249	6,030		
	OUTPUT TORQUE (Nm)	3,654	2,527	2,154	1,922	1,523	1,300	1,152	972	819	681		
	EFFICIENCY (%)	29.3	40.2	43.9	46.3	50.9	53.7	55.8	58.5	61.0	63.5		
87	OUTPUT TORQUE (in lb)	31,953	21,899	18,558	16,483	12,944	10,989	9,692	8,130	6,813	5,635		
	OUTPUT TORQUE (Nm)	3,610	2,474	2,097	1,862	1,462	1,242	1,095	919	770	637		
	EFFICIENCY (%)	25.5	35.6	39.1	41.5	46.0	48.8	50.9	53.6	56.2	58.8		
106	OUTPUT TORQUE (in lb)	31,622	21,416	18,013	15,910	12,356	10,414	9,135	7,608	6,332	5,200		
	OUTPUT TORQUE (Nm)	3,573	2,420	2,035	1,798	1,396	1,177	1,032	860	715	588		
	EFFICIENCY (%)	22.1	31.4	34.7	37.0	41.3	44.1	46.1	48.9	51.5	54.1		

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.

