

HELICON 6.750" 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 1/12	OUTPUT TORQUE (in lb)	6,221	5,059	4,606	4,297	3,711	3,344	3,080	2,736	2,419	2,110		
	OUTPUT TORQUE (Nm)	703	572	520	485	419	378	348	309	273	238		
	EFFICIENCY (%)	91.0	93.8	94.5	95.0	95.7	96.1	96.4	96.8	97.1	97.4		
6 1/8	OUTPUT TORQUE (in lb)	5,476	4,452	4,050	3,778	3,258	2,934	2,701	2,397	2,117	1,845		
	OUTPUT TORQUE (Nm)	619	503	458	427	368	331	305	271	239	208		
	EFFICIENCY (%)	87.2	91.0	92.0	92.7	93.8	94.4	94.8	95.3	95.7	96.2		
8 1/5	OUTPUT TORQUE (in lb)	5,182	4,202	3,814	3,550	3,049	2,738	2,515	2,225	1,960	1,703		
	OUTPUT TORQUE (Nm)	585	475	431	401	344	309	284	251	221	192		
	EFFICIENCY (%)	82.6	87.9	89.3	90.2	91.6	92.4	93.0	93.7	94.3	94.8		
10 1/4	OUTPUT TORQUE (in lb)	7,138	5,665	5,105	4,730	4,029	3,599	3,294	2,900	2,544	2,201		
	OUTPUT TORQUE (Nm)	806	640	577	534	455	407	372	328	287	249		
	EFFICIENCY (%)	78.1	84.5	86.3	87.3	89.2	90.2	90.9	91.8	92.5	93.2		
12 1/4	OUTPUT TORQUE (in lb)	7,377	5,820	5,235	4,844	4,116	3,672	3,357	2,952	2,585	2,234		
	OUTPUT TORQUE (Nm)	833	658	591	547	465	415	379	334	292	252		
	EFFICIENCY (%)	74.8	81.9	83.9	85.1	87.2	88.3	89.2	90.2	91.1	91.9		
14 2/3	OUTPUT TORQUE (in lb)	7,417	5,772	5,166	4,765	4,025	3,577	3,262	2,859	2,496	2,150		
	OUTPUT TORQUE (Nm)	838	652	584	538	455	404	369	323	282	243		
	EFFICIENCY (%)	69.6	77.8	80.2	81.6	84.1	85.5	86.5	87.7	88.8	89.8		
17 2/3	OUTPUT TORQUE (in lb)	7,933	6,137	5,481	5,048	4,252	3,772	3,435	3,005	2,620	2,253		
	OUTPUT TORQUE (Nm)	896	693	619	570	480	426	388	340	296	255		
	EFFICIENCY (%)	65.5	74.4	76.9	78.5	81.3	83.0	84.1	85.5	86.7	87.9		
21 1/2	OUTPUT TORQUE (in lb)	10,667	8,093	7,177	6,579	5,491	4,845	4,394	3,824	3,318	2,840		
	OUTPUT TORQUE (Nm)	1,205	914	811	743	620	547	496	432	375	321		
	EFFICIENCY (%)	57.9	68.1	71.1	73.0	76.3	78.3	79.6	81.3	82.9	84.3		
25 1/2	OUTPUT TORQUE (in lb)	10,592	8,022	7,107	6,509	5,424	4,780	4,331	3,765	3,262	2,789		
	OUTPUT TORQUE (Nm)	1197	906	803	735	613	540	489	425	369	315		
	EFFICIENCY (%)	53.9	64.3	67.5	69.5	73.1	75.2	76.7	78.6	80.3	81.9		
31 1/2	OUTPUT TORQUE (in lb)	11,363	8,561	7,565	6,917	5,742	5,048	4,566	3,959	3,422	2,918		
	OUTPUT TORQUE (Nm)	1,284	967	855	782	649	570	516	447	387	330		
	EFFICIENCY (%)	48.3	59.0	62.4	64.5	68.4	70.8	72.4	74.6	76.5	78.4		
38	OUTPUT TORQUE (in lb)	10,564	7,794	6,831	6,210	5,102	4,456	4,011	3,457	2,971	2,520		
	OUTPUT TORQUE (Nm)	1,194	881	772	702	576	503	453	391	336	285		
	EFFICIENCY (%)	40.8	51.8	55.4	57.7	62.0	64.6	66.4	68.8	71.0	73.2		
47	OUTPUT TORQUE (in lb)	11,325	8,319	7,271	6,597	5,396	4,698	4,220	3,625	3,106	2,626		
	OUTPUT TORQUE (Nm)	1,280	940	822	745	610	531	477	410	351	297		
	EFFICIENCY (%)	35.9	46.6	50.2	52.5	56.9	59.6	61.6	64.1	66.5	68.8		
58	OUTPUT TORQUE (in lb)	11,161	8,174	7,125	6,451	5,252	4,559	4,084	3,497	2,986	2,515		
	OUTPUT TORQUE (Nm)	1,261	924	805	729	593	515	461	395	337	284		
	EFFICIENCY (%)	31.7	41.8	45.3	47.7	52.1	54.8	56.8	59.5	61.9	64.4		
71	OUTPUT TORQUE (in lb)	11,022	8,032	6,976	6,297	5,095	4,404	3,933	3,352	2,850	2,389		
	OUTPUT TORQUE (Nm)	1,245	907	788	711	576	498	444	379	322	270		
	EFFICIENCY (%)	27.8	37.3	40.6	42.9	47.3	50.0	52.0	54.7	57.3	59.9		
87	OUTPUT TORQUE (in lb)	10,901	7,887	6,814	6,127	4,917	4,226	3,759	3,185	2,692	2,244		
	OUTPUT TORQUE (Nm)	1,232	891	770	692	556	477	425	360	304	254		
	EFFICIENCY (%)	24.2	32.9	36.0	38.2	42.4	45.1	47.1	49.8	52.4	55.1		
106	OUTPUT TORQUE (in lb)	10,798	7,738	6,642	5,943	4,221	4,030	3,565	2,999	2,518	2,084		
	OUTPUT TORQUE (Nm)	1,220	874	750	671	477	455	403	339	284	235		
	EFFICIENCY (%)	20.9	28.8	31.8	33.8	37.8	40.4	42.4	45.1	47.6	50.3		

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.

