

HELICON 1.500" 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)	66	59	56	54	50	47	44	41	38	34	29	25
	OUTPUT TORQUE (Nm)	7.5	6.7	6.3	6.1	5.6	5.3	5.0	4.6	4.3	3.8	3.3	2.8
	EFFICIENCY (%)	89.1	91.1	91.7	92.2	93.0	93.5	93.9	94.4	94.9	95.3	95.9	96.5
6 1/8	OUTPUT TORQUE (in lb)	66	59	56	54	49	46	43	40	37	33	28	23
	OUTPUT TORQUE (Nm)	7.5	6.7	6.3	6.1	5.5	5.2	4.9	4.5	4.2	3.7	3.2	2.6
	EFFICIENCY (%)	83.5	86.5	87.5	88.2	89.5	90.2	90.8	91.5	92.2	92.9	93.8	94.6
8 1/5	OUTPUT TORQUE (in lb)	87	77	73	70	64	60	56	52	47	43	36	30
	OUTPUT TORQUE (Nm)	9.8	8.7	8.2	7.9	7.2	6.8	6.3	5.9	5.3	4.9	4.1	3.4
	EFFICIENCY (%)	78.4	82.4	83.7	84.6	86.3	87.3	88.0	89.0	89.9	90.8	91.9	93.0
10 1/4	OUTPUT TORQUE (in lb)	88	77	73	70	63	59	55	51	46	42	35	29
	OUTPUT TORQUE (Nm)	9.9	8.7	8.2	7.9	7.1	6.7	6.2	5.8	5.2	4.7	4.0	3.3
	EFFICIENCY (%)	73.0	77.8	79.4	80.5	82.5	83.7	84.6	85.8	86.9	88.0	89.5	90.8
12 1/3	OUTPUT TORQUE (in lb)	87	76	72	68	62	57	54	49	45	40	34	28
	OUTPUT TORQUE (Nm)	9.8	8.6	8.1	7.7	7.0	6.4	6.1	5.5	5.1	4.5	3.8	3.2
	EFFICIENCY (%)	67.5	73.0	74.8	76.1	78.4	79.9	81.0	82.4	83.7	85.1	86.8	88.5
14 2/3	OUTPUT TORQUE (in lb)	121	106	99	94	85	78	74	67	61	54	46	37
	OUTPUT TORQUE (Nm)	13.7	12.0	11.2	10.6	9.6	8.8	8.4	7.6	6.9	6.1	5.2	4.2
	EFFICIENCY (%)	62.9	68.8	70.9	72.2	74.9	76.5	77.7	79.3	80.8	82.3	84.4	86.3
17 1/2	OUTPUT TORQUE (in lb)	120	104	97	92	82	76	71	65	58	52	43	35
	OUTPUT TORQUE (Nm)	13.6	11.8	11.0	10.4	9.3	8.6	8.0	7.3	6.6	5.9	4.9	4.0
	EFFICIENCY (%)	56.5	62.9	65.2	66.7	69.7	71.6	72.9	74.8	76.5	78.3	80.7	82.9
21 1/2	OUTPUT TORQUE (in lb)	118	102	96	91	81	75	70	64	57	51	42	35
	OUTPUT TORQUE (Nm)	13.3	11.5	10.8	10.3	9.2	8.5	7.9	7.2	6.4	5.8	4.7	4.0
	EFFICIENCY (%)	51.4	58.0	60.4	62.0	65.1	67.2	68.6	70.7	72.6	74.6	77.2	79.8
25 1/2	OUTPUT TORQUE (in lb)	117	101	94	90	80	74	69	63	56	50	42	34
	OUTPUT TORQUE (Nm)	13.2	11.4	10.6	10.2	9.0	8.4	7.8	7.1	6.3	5.6	4.7	3.8
	EFFICIENCY (%)	47.1	53.7	56.1	57.8	61.1	63.2	64.7	66.9	68.9	71.1	74.0	76.7
31	OUTPUT TORQUE (in lb)	117	100	93	88	78	72	67	60	54	48	39	32
	OUTPUT TORQUE (Nm)	13.2	11.3	10.5	9.9	8.8	8.1	7.6	6.8	6.1	5.4	4.4	3.6
	EFFICIENCY (%)	39.4	46.1	48.6	50.3	53.8	56.1	57.8	60.1	62.3	64.7	68.0	71.1
38	OUTPUT TORQUE (in lb)	116	99	92	87	77	70	66	59	53	47	38	31
	OUTPUT TORQUE (Nm)	13.1	11.2	10.4	9.8	8.7	7.9	7.5	6.7	6.0	5.3	4.3	3.5
	EFFICIENCY (%)	35.1	41.4	43.9	45.6	49.0	51.3	53.0	55.4	57.7	60.2	63.6	67.0
47	OUTPUT TORQUE (in lb)	124	106	98	93	82	75	70	62	56	49	40	32
	OUTPUT TORQUE (Nm)	14.0	12.0	11.1	10.5	9.3	8.5	7.9	7.0	6.3	5.5	4.5	3.6
	EFFICIENCY (%)	30.4	36.4	38.7	40.4	43.7	45.9	47.7	50.0	52.4	54.9	58.5	62.1
58	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												
71	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												
87	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												
106	OUTPUT TORQUE (in lb)												
	OUTPUT TORQUE (Nm)												
	EFFICIENCY (%)												

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.

