# TABLES SHEWING THE SCREWS THAT CAN BE CUT ON SLIDE LATHES

Published @ 2017 Trieste Publishing Pty Ltd

#### ISBN 9780649228065

Tables shewing the screws that can be cut on slide lathes by H. L.

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H. L.

# TABLES SHEWING THE SCREWS THAT CAN BE CUT ON SLIDE LATHES



### TABLES

SHEWING .

## THE SCREWS

THAT CAN BE CUT ON

# SLIDE LATHES,

BΥ

H. L.

LONDON: E. AND F. N. SPON, 48, CHARING CROSS.

NEW YORK: 446, BROOME STREET.

THESE Tables are calculated for a leading screw with four threads to the inch. For one with two threads, the wheels which will cut double the number of threads required must be used. The whole of the screws which ordinary wheel work will cut with a 20 pinion wheel will be found in this Book, arranged in terms in the order of the screws, and not in the order of the wheel work, as in Morton's Tables. Thus it is possible at a glance to see what pitches can be cut, instead of having to work through ten pages to see whether the exact pitch required exists.

For example:—I want to match a thread which I find on exact measurement to contain 14.22 turns to the inch. Taking Morton's Tables I have to hant through ten pages of closely printed matter very carefully indeed before I can be sure that I have found the nearest pitch. But with these Tables I can at once pick out the nearest possible pitch without trouble.

In the Appendix will be found Whitworth's Standard threads and sizes.

H. L.

DRAGSÆT, 1873.

No.	<b>sign</b> ifles	the Number of Threads.								
M,	,,		reel on	Mandril.						
P.	,,		"	Pinion.						
In.	29		11	Intermediate.						
S.	,,,		,,	Screw.						

#### TABLES

FOR

#### CHANGE WHEELS,

FOR

### SCREW CUTTING,

BY

	30		- 10			28						
No.	M.	P.	În,	S.	No.	M.	P.	In.	S.			
110.4	25	20	115	120	80.5	30	20	105	115			
105.6	***	***	110	***	80	***	•••	100	120			
101-2	0.01	1000		115	79.8	25		95	105			
100.8			105	120	79.2	***		90	110			
96.6	****	***	***	115	78:857	35		115	120			
96	***	***	100	120	78-2	25	***	85	115			
92.4		7745	105	110	. 77	30		105	110			
92		200	100	115	76.8	25	***	80	120			
	30		115	120	76.6	30	***	110	115			
91.2	25	***	95	***	76	25	***	95	100			
88	10.799	***	100	110		30	000000	004042	120			
	30	***	110	120	75-6	25	***	90	105			
87.4	25		95	115	75.428	35	100	110	120			
86.4			90	120	74.8	25		85	110			
84.3	30		110	115	73.6	***	***	80	115			
84	25	443.	100	105	73-3	30	000000	100	110			
***	30	***	105	120	72.83		***	95	115			
83.6	25	222	95	110	72-285	35	***	110	***			
82.8			90	115	72	25	•••	75	120			
81.6	.,,		85	120		•••	***	90	100			

21				99	6				
No.	M.	P.	In.	S.	No.	M.	P.	In.	S.
72	30	20	90	120	62.428	***	20	95	115
	35		105		62.4	25		65	120
11.4	25	25.00	85	105	62.3	30	***	85	110
70-4	900	983	80	110	61-714	35	***	90	. 120
70	30	566	100	105	61.6	25		70	110
39·6		25.0	95	110	61.3	30		80	115
59	25	***	75	115	***	45	***	115	120
,,	30	900	90	***	61.2	25	***	85	90
**	35	3666	105	100	60.8	or.	***	80	95
	40	***	115	120	60.375	40	***	105	115
8.571	35	***	100		60	25	666	75	100
58-4	25		90	95		30	***	2527	120
88	***	(****)*	83	100	100%	55500 55500	***	90	100
	30	200	35.4	120	242	35	1964	100	105
7.2	25		70	***	174	40	***	***	120
			80	105	59-8	25	***	65	115
6.5	30	***	96		59.714	35	1500	95	110
6	25		75 1	110	59.5	30		85	105
	30	***	90	***	59:142	35	***	90	115
	35	***	105		58.8	25	***	70	105
	40	***	110	130	58-6	30	ese.	80	110
5.714	35		100	115	58.6	45		110	120
5.16	30	***	85		58 285	35		85	***
5.142	35	***	95	120	57.75	40	***	105	110
4.6	25	***	85	95	57-6	25	0.00	60	120
4.4	***	100	70	115	334		***	80	90
4		4	80	100	57.5	30	ou.	75	115
	30			120		40	***	100	
3.3	***	(800)	95	100	57.2	25	***	65	110
3.25	40	•••	110	115	57	30	***	90	95
33	25	9.7	75	105	3.05	25	***	75	***
	30		90		300	35	***	95	105
	40	***	105	120	***	40	***	***	120
32-857	35	***	100	110	56.6	30		85	100

No.         M.         P.         In.         S.         No.         M.         P.         In.         S.           56.571         35         20         90         110         52         30         20         65         120           56.2         45          110         115         51.75         40          90         115           56         25          70         100         51.428         35          75         120             80         105         51.3         30          70         110             45          105         120          45          100         115           45          100         115            100         115						58 7090					
56-2         45         110         115         5175         40         90         115           56         25         70         100         51428         35         75         120            30          120           90         100             80         105         51·3         30          110             45         105         120          45         105                 100         115 </th <th>No.</th> <th>M.</th> <th>P.</th> <th>In.</th> <th>1000</th> <th>No.</th> <th>M.</th> <th>P.</th> <th>In.</th> <th>S.</th> <th></th>	No.	M.	P.	In.	1000	No.	M.	P.	In.	S.	
56       25        70       100       51·428       35        75       120                 90       100                 90       100	56.571	35	20	90	110	52	30	20	65	120	
30 120 90 100 80 105 51·3 30 70 110 45 105 120 45 105 55·857 35 85 115 51·1 100 115 55·2 25 60 51 25 75 85 50 115 120 30 85 90 55 30 75 110 35 105 40 100 40 120 54·857 35 80 120 50·6 30 80 95 54·625 40 95 115 50 110 115 54·6 25 65 105 50·6 25 55 54·4 80 85 45 95 120 54·285 35 95 100 50·4 25 60 105 40 120 50·285 35 80 110 53·8 3 30 85 95 50·181 55 115 120 40 120 50·285 35 80 110 53·8 3 30 85 95 50·181 55 115 120 53·6 70 115 50 30 75 100 45 105 49·875 40 95 105 53·2 25 70 95 49·285 35 75 115 52·8 50 110 120 49·8 3 30 75 115 52·8 55 120 49 30 70 105 46 100 120 49·4 25 65 95 52·5 30 75 105 48·871 85 100 40 120 48·8 45 100 110 50 110 120 48·8 45 90 95 52·5 30 75 105 48·871 85 100 40 100 48·5 45 95 115 52·25 95 110 48·4 25 55 110	56.2	45	***	110	115	51.75	40	***	90	115	
80   105   51·3   30     70   110     45     105   120     45     105     55·857   35     85   115   51·1     100   115   55·2   25     60     51   25     75   85     50     115   120     30     85   90   55   30     75   110     35     105     40     100     40     120   54·857   35     80   120   50·8   30     80   95   54·625   40     95   115     50     110   115   54·6   25     65   105   50·6   25     55     54·4     80   85     45     95   120   54·285   35     95   100   50·4   25     60   105   54·285   35     95   100   50·4   25     60   105   54·285   35     90   105       70   90       70   90       40     120   50·285   35     80   110   53·83   30     85   95   50·181   55     115   120   53·6     70   115   50   30     75   100     45     105     49·875   40     95   105   53·428   35     85   110   49·83   30     65   95   55·32   25     70   93   49·285   35     75   115   52·8     55   120   49   30     70   105       60   110   48·8   45     100   110     50     110   120   48·875   40     85   100     40     100     48·5   45     95   115   52·25     95   110   48·4   25     55   110     40     100     48·5   45     95   115   52·25     95   110   48·4   25     55   110     40     100     48·5   45     95   115   52·25     95   110   48·4   25     55   110     40     40     100     48·5   45     95   115   52·25     95   110   48·4   25     55   110     40     40     100     48·5   45     95   115   48·571     40     40     100     48·5   45     95   115     40     40     40     40     40     40     40     40     40     40     40   .	56	25		70	100	51.428	35	***	75	120	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		30	222		120	4		10000	90	100	
45        105       120        45        105          55*857       35        85       115       51*1        100       115         55*2       25        60        51       25        75       85          50        115       120        30        85       90         55       30        75       110        35        105          40        100        40        120         54*857       35        80       120       50*6       30        80       95         54*625       40        95       115        50        110       115         54*4         80       85        45        95       120         54*285       35        95       100       50*4       25        60       105          .		V		80	105	51.3	30	555	70	110	
55·2         25          60          51         25          75         85            50          115         120          30          85         90           55         30          75         110          35          105            40          100          40          120           54:857         35          80         120         50·6         30          80         95           54:625         40          95         115          50          110         115           54:6         25          65         105         50·6         25          55            54:285         35          95         100         50·4         25          60         105            40          120         50·285         35         80         110            40		45	2000	105	120	į	45	44.6	105	***	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	55.857	35	***	85	115	51.1			100	115	
55       30        75       110        35        105          40        100        40        120         54:857       35        80       120       50.6       30        80       95         54:625       40        95       115        50        110       115         54:625       40        80       85         50	55.2	25	***	60	3888	51	25	***	75	85	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		50	3253	115	120	222	30	23310	85	90	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	55	30		75	110		35			105	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2000	40		100	250322	0.0578	40				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	54.857	35		80		- STEELER	30			95	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	54-625	40		95	115	377	50			115	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						\$1,00km@p.0	25				
54·285       35        95       100       50·4       25        60       105         54       25        75       90         70       90            90       105        50·285       35        80       110         53·83       30        85       95       50·181       55        80       110         53·6         70       115       50       30        75       100          45        105        49·875       40        95       105         53·428       35        85       110       49·83       30        65       115         53·3       30        80       100       49·4       25        65       95         53·2       25        70       93       49·285       35        75       115         52·8          60       110       48·8       46	54.4			80	85	9202					
54       25        75       90         70       90             50        105       120             120       50·285       35        80       110         53·83       30        85       95       50·181       55        115       120         53·6         70       115       50       30        75       100           45        105        49·87       40        95       105         .33·428       35        85       110       49·83       30        65       115         53·33       30        80       100       49·5       40        90       110           46        100       120       49·4       25        65       95         53·2       25        70       93       49·285       35        75	54.285			95	100	1000000			35030	355 TO 100	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					200000000000000000000000000000000000000	SALAN SEE				4 100 100	
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53·83     30      85     95     50·181     55      115     120       53·6       70     115     50     30      75     100        45      105      49·875     40      95     105       53·428     35      85     110     49·83     30      65     115       53·3     30      80     100     49·5     40      90     110        45      100     120     49·4     25      65     95       53·2     25      70     93     49·285     35      75     115       52·8       55     120     49     30      70     105         60     110     48·8     45      100     110        50      110     120     48·875     40      85     115       52·571     35      80     115     48·8571      85     100        40					1125E-201011	110000000000000000000000000000000000000	777.100				
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$						550000000000000000000000000000000000000	5000				(%)
53·428     35      85     110     49·83     30      65     115       53·3     30      80     100     49·5     40      90     110        46      100     120     49·4     25      65     95       53·2     25      70     93     49·283     35      75     115       52·8       55     120     49     30      70     105          60     110     48·8     45      100     110         50      110     120     48·875     40      85     115       52·571     35      80     115     48·857     35      90     95       52·5     30      75     105     48·571      85     100        40      100      48·5     45      95     115       52·25       95     110     48·4     25      55     110		50.50				157063		100000	35,1325		
53.3     30      80     100     49.5     40      90     110        46      100     120     49.4     25      65     95       53.2     25      70     93     49.283     35      75     115       52.8       55     120     49     30      70     105         60     110     48.8     45      100     110        50      110     120     48.875     40      85     115       52.571     35      80     115     48.857     35      90     95       52.5     30      75     105     48.571      85     100        40      100      48.5     45      95     115       52.25       95     110     48.4     25      55     110						10000000000000000000000000000000000000					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	17.75										
53·2     25      70     95     49·285     35      75     115       52·8       55     120     49     30      70     105          60     110     48·8     45      100     110        50      110     120     48·875     40      85     115       52·571     35      80     115     48·857     35      90     95       52·5     30      75     105     48·571      85     100        40      100      48·5     45      95     115       52·25       95     110     48·4     25      55     110											
52.8       55     120     49     30      70     105          60     110     48.8     46      100     110        50      110     120     48.875     40      85     115       52.571     35      80     115     48.857     35      90     95       52.55     30      75     105     48.571      85     100        40      100      48.5     45      95     115       52.25       95     110     48.4     25      55     110											
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							18353				
50 110 120 48-875 40 85 115 52-571 35 80 115 48-857 35 90 95 52-5 30 75 105 48-571 85 100 40 100 48-5 45 95 115 52-25 95 110	00707739700					William and	12123				
52:571     35      80     115     48:857     35      90     95       52:5     30      75     105     48:571      85     100        40      100      48:5     45      95     115       52:25       95     110     48:4     25      55     110						District States	100 ES				
52·5 30 75 105 48·571 85 100 40 100 48·5 45 95 115 52·25 95 110 48·4 25 55 110						3000					177
40 100 48.5 45 95 115 52.25 95 110											
52.25 95 110 48.4 25 55 110	2010/1905										
		37.7				5336335					
25 60 100   40.3 DO 105 115					0.0000000000000000000000000000000000000						
	93	20	***	90	100	40.3	00	***	105	115	

					o.				
No.	M:	P.	In.	S.	No.	M.	P.	In.	8.
48	25	20	50	120	45.714	35	20	80	100
100	100		60	100	45.6	25		60	95
***			75	80		50		95	120
***	30	***	60	120	45.5	30	***	65	105
•••	***		80	90	45 3	45		85	120
***	35	1.4	70	120	414	30	•••	80	85
***			80	105	45			75	90
45	40			120		35	***	***	105
328	45	***	90	***	22.0	40	***		120
***	50	***	100	***	***		•••	90	100
***	55	166	110		44.8	25		70	80
47.6	30		65	110	44.625	40		85	- 105
47.6	25	***	70	85	44.571	35	22.2	65	120
47.5	30		75	95	41.3	30	***	70	95
	40	***	95	100	44.3	45	144	95	105
47.25	***	***	90	105	44.2	25		65	85
47.142	35		75	110	44	1111	***	50	110
46.8	25	25.5	65	90		***		55	100
46.75	40	***	85	110	***	30	*9.*	***	120
46.6	30	***	70	100		***	4++	60	110
***	45	210	100	105	***	35	1100	70	***
46.4	•••	• • •	95	110		40		80	
46.2	25	***	55	105	***	45	•••	90	***
***	50	***	105	110	250	50	<b>***</b>	100	
46.142	35	144	85	95	***	60		110	120
46	25	***	50	115	43.908	55		105	115
***	30		60		43.714	35	•••	85	90
***	35	***	70		43.7	50		95	115
***	40	***	80		43.636	55	***	100	120
***	45		90	***	43.4	45	***	85	115
***	50		100		43.428	35		80	95
***	55		110		43.3	30		65	100
***	60	***	115	120	43.2	25	111	45	120
45.818	55	***	105	***				60	90