HENDEY

Index Plates for Hendey Lathes Cone and Geared Head

Bulletin 250-L-I-P-4

The Hendey Machine Co., Torrington, Conn., U.S.A.

Branch Offices:

THE HENDEY MACHINE CO.
149 Broadway
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Ryder Bldg., 1130 Bay St.
Toronto 5, Ont., Canada

J. H. RYDER MACHINERY CO.
15 Moliere St.
Montreal 14, Que., Canada

Special Index

For 18", 20" and 24" Lathes with Lead Screw 4 Threads Per Inch

$\frac{I \times C}{D}$ = Threads per inch with handles in position I.

(See heading page 5

Stud	Sector	Hole	Threads per Inch.											
48	44	1	51 1/3	47 2/3	44	40 4/3	36 2/3	33	29 1/3	25 2/3	22	18 1/3	16 1/2	14 2/3
"	45	"	52 1/2	48 3/4	45	41 1/4	37 1/2	33 3/4	30	26 1/4	22 1/2	18 3/4	16 7/8	15
"	46	"	53 5/6	49 5/6	46	42 1/6	38 1/3	34 1/2	30 5/6	26 5/6	23	19 1/6	17 1/4	15 1/3
"	47	"	54 5/6	50 11/12	47	43 1/12	39 1/6	35 1/4	31 1/3	27 1/12	23 1/2	19 7/12	17 5/8	15 2/3
"	49	"	57 1/6	53 1/12	49	44 11/12	40 5/6	36 3/4	32 2/3	28 7/12	24 1/2	20 5/12	18 3/8	16 1/3
"	50	"	58 1/3	54 1/6	50	45 5/6	41 2/3	37 1/2	33 1/3	29 1/6	25	20 5/6	18 3/4	16 2/3
"	51	"	59 1/2	55 1/4	51	46 3/4	42 1/2	38 1/4	34	29 3/4	25 1/2	21 1/4	19 1/8	17
"	52	"	60 2/3	56 1/3	52	47 1/3	43 1/3	39	34 2/3	30 1/3	26	21 2/3	19 1/2	17 1/3
"	53	"	61 5/6	57 5/12	53	48 7/12	44 1/6	39 3/4	35 1/3	30 11/12	26 1/2	22 1/12	19 7/8	17 2/3
"	54	"	63	58 1/2	54	49 1/2	45	40 1/2	36	31 1/2	27	22 1/2	20 1/4	18
"	55	"	64 1/6	59 7/12	55	50 5/12	45 5/6	41 1/4	36 2/3	32 1/12	27 1/2	22 11/12	20 5/8	18 1/3
"	56	"	65 1/3	60 2/3	56	51 1/3	46 2/3	42	37 1/3	32 2/3	28	23 1/3	21	18 2/3
"	57	"	66 1/2	61 3/4	57	52 1/4	47 1/2	42 3/4	38	33 1/4	28 1/2	23 3/4	21 3/8	19
"	58	"	67 2/3	62 5/6	58	53 1/6	48 1/3	43 1/2	38 2/3	33 5/6	29	24 1/6	21 3/4	19 1/3
"	59	"	68 5/6	63 11/12	59	54 1/12	49 1/6	44 1/4	39 1/3	34 5/12	29 1/2	24 7/12	22 1/8	19 2/3
"	60	"	70	65	60	55	50	45	40	35	30	25	22 1/2	20
"	61	"	71 1/6	66 1/12	61	55 11/12	50 5/6	45 3/4	40 2/3	35 7/12	30 1/2	25 5/12	22 7/8	20 1/3
"	62	"	72 1/3	67 1/6	62	56 5/6	51 2/3	46 1/2	41 1/3	36 1/6	31	25 5/6	23 1/4	20 2/3
"	63	"	73 1/2	68 1/4	63	57 3/4	52 1/2	47 1/4	42	36 3/4	31 1/2	26 1/4	23 5/8	21
"	64	"	74 2/3	69 1/3	64	58 2/3	53 1/3	48	42 2/3	37 1/3	32	26 2/3	24	21 1/3
"	65	"	75 5/6	70 5/12	65	59 7/12	54 1/6	48 3/4	43 1/3	37 11/12	32 1/2	27 1/12	24 3/8	21 2/3
"	66	"	77	71 1/2	66	60 1/2	55	49 1/2	44	38 1/2	33	27 1/2	24 3/4	22
"	67	"	78 1/6	72 7/12	67	61 5/12	55 5/6	50 1/4	44 2/3	39 1/12	33 1/2	27 11/12	25 1/8	22 1/3
"	68	"	79 1/3	73 2/3	68	62 1/3	56 2/3	51	45 1/3	39 2/3	34	28 1/3	25 1/2	22 2/3
"	69	"	80 1/2	74 3/4	69	63 1/4	57 1/2	51 3/4	46	40 1/4	34 1/2	28 3/4	25 7/8	23
"	70	"	81 2/3	75 5/6	70	64 1/6	58 1/3	52 1/2	46 2/3	40 5/6	35	29 1/6	26 1/4	23 1/3
"	72	"	84	78	72	66	60	54	48	42	36	30	27	24
"	80	"	93 1/3	86 2/3	80	73 1/3	66 2/3	60	43 1/3	46 2/3	40	33 1/3	30	26 2/3
"	96	"	112	104	96	88	80	72	64	56	48	40	36	32

Stud	Sector	Hole	Threads per Inch.											
48	44	2	12 5/6	11 1/12	11	10 1/12	9 1/6	8 1/4	7 1/3	6 5/12	5 1/2	4 7/12	4 1/8	3 2/3
"	45	"	13 1/8	12 3/16	11 1/4	10 5/16	9 3/8	8 7/16	7 1/2	6 9/16	5 5/8	4 11/16	4 7/32	3 3/4
"	46	"	13 5/12	12 11/24	11 1/2	10 13/24	9 7/12	8 5/8	7 2/3	6 17/24	5 3/4	4 19/24	4 5/16	3 5/6
"	47	"	13 17/24	12 35/48	11 3/4	10 37/48	9 19/24	8 13/16	7 5/6	6 41/48	5 7/8	4 43/48	4 13/32	3 11/12
"	49	"	14 7/24	13 13/48	12 1/4	11 11/48	10 5/24	9 3/16	8 1/6	7 7/48	6 1/8	5 5/48	4 9/32	4 1/12
"	50	"	14 7/12	13 13/24	12 1/2	11 1/24	10 5/12	9 3/8	8 1/3	7 7/24	6 1/4	5 5/24	4 11/16	4 1/6
"	51	"	14 7/8	13 13/16	12 3/4	11 11/16	10 5/8	9 9/16	8 1/2	7 7/16	6 3/8	5 5/16	4 25/32	4 1/4
"	52	"	15 1/6	14 1/12	13	11 11/12	10 5/6	9 3/4	8 2/3	7 7/12	6 1/2	5 5/12	4 7/8	4 1/3
"	53	"	15 11/24	14 17/48	13 1/4	12 7/48	11 1/24	9 15/16	8 5/6	7 35/48	6 5/8	5 25/48	4 31/32	4 5/12
"	54	"	15 3/4	14 5/8	13 1/2	12 3/8	11 1/4	10 1/8	9	7 7/8	6 3/4	5 5/8	5 1/16	4 1/2
"	55	"	16 1/24	14 43/48	13 3/4	12 29/48	11 11/24	10 5/16	9 1/6	8 17/48	6 7/8	5 35/48	5 5/32	4 7/12
"	56	"	16 1/3	15 1/6	14	12 5/6	11 2/3	10 1/2	9 1/3	8 1/6	7	5 5/6	5 1/4	4 2/3
"	57	"	16 5/8	15 7/16	14 1/4	13 1/16	11 7/8	10 11/16	9 1/2	8 5/16	7 1/8	5 15/16	5 11/32	4 3/4
"	58	"	16 11/12	15 17/24	14 1/2	13 7/24	12 1/12	10 7/8	9 2/3	8 11/24	7 1/4	6 1/24	5 7/16	4 5/6
"	59	"	17 5/24	15 47/48	14 3/4	13 25/48	12 7/24	11 1/16	9 5/6	8 29/48	7 3/8	6 7/48	5 17/32	4 11/12
"	60	"	17 1/2	16 1/4	15	13 3/4	12 1/2	11 1/4	10	8 3/4	7 1/2	6 1/4	5 5/8	5
"	61	"	17 19/24	16 25/48	15 1/4	13 47/48	12 17/24	11 7/16	10 1/6	8 23/48	7 5/8	6 17/48	5 23/32	5 1/12
"	62	"	18 1/12	16 19/24	15 1/2	14 5/24	12 11/12	11 5/8	10 1/3	9 1/24	7 3/4	6 11/24	5 13/16	5 1/6
"	63	"	18 3/8	17 1/16	15 3/4	14 7/16	13 1/8	11 13/16	10 1/2	9 3/16	7 7/8	6 9/16	5 29/32	5 1/4
"	64	"	18 2/3	17 1/3	16	14 2/3	13 1/3	12	10 2/3	9 1/3	8	6 2/3	6	5 1/3
"	65	"	18 23/24	17 29/48	16 1/4	14 43/48	13 13/24	12 1/16	10 5/6	9 23/48	8 1/8	6 37/48	6 3/32	5 5/12
"	66	"	19 1/4	17 7/8	16 1/2	15 1/8	13 3/4	12 3/8	11	9 5/8	8 1/4	6 7/8	6 3/16	5 1/2
"	67	"	19 13/24	18 35/48	16 3/4	15 17/48	13 23/24	12 9/16	11 1/6	9 37/48	8 3/8	6 47/48	6 9/32	5 7/12
"	68	"	19 5/6	18 5/12	17	15 1/12	14 1/6	12 3/4	11 1/3	9 11/12	8 1/2	7 1/12	6 3/8	5 2/3
"	69	"	20 1/8	18 11/16	17 1/4	15 13/16	14 3/8	12 15/16	11 1/2	10 1/16	8 5/8	7 3/16	6 15/32	5 3/4
"	70	"	20 5/12	18 23/24	17 1/2	16 1/24	14 7/12	13 1/8	11 2/3	10 5/24	8 3/4	7 7/24	6 9/16	5 5/6
"	72	"	21	19 1/2	18	16 1/2	15	13 1/2	12	10 1/2	9	7 1/2	6 3/4	6
"	80	"	23 1/3	21 2/3	20	18 1/3	16 2/3	15	13 1/3	11 2/3	10	8 1/3	7 1/2	6 2/3
"	96	"	28	26	24	22	20	18	16	14	12	10	9	8

Stud	Sector	Hole	Threads per Inch.											
48	44	3	3 5/24	2 47/48	2 3/4	2 23/48	2 7/24	2 1/16	1 5/6	1 29/48	1 3/8	1 7/48	1 1/32	11/12
"	45	"	3 9/32	3 3/64	2 13/16	2 37/64	2 11/32	2 7/64	1 7/8	1 41/64	1 13/32	1 11/64	1 7/128	45/48
"	46	"	3 17/48	3 11/96	2 7/8	2 61/96	2 19/48	2 5/32	1 11/12	1 65/96	1 7/16	1 19/96	1 5/64	23/24
"	47	"	3 41/96	3 35/192	2 15/16	2 133/192	2 43/96	2 13/64	1 23/24	1 137/192	1 15/32	1 43/192	1 13/128	47/48
"	49	"	3 55/96	3 61/192	3 1/16	2 155/192	2 53/96	2 19/64	2 1/24	1 151/192	1 17/32	1 53/192	1 19/128	1 1/48
"	50	"	3 31/48	3 37/96	3 1/8	2 83/96	2 29/48	2 11/32	2 1/12	1 79/96	1 9/16	1 27/96	1 11/64	1 1/24
"	51	"	3 23/32	3 29/64	3 3/16	2 59/64	2 21/32	2 25/64	2 1/8	1 55/64	1 19/32	1 21/64	1 25/128	1 1/16
"	52	"	3 19/24	3 25/48	3 1/4	2 47/48	2 17/24	2 7/16	2 1/6	1 43/48	1 5/8	1 17/48	1 7/32	1 1/12
"	53	"	3 83/96	3 113/192	3 5/16	3 7/192	2 73/96	2 31/64	2 5/24	1 179/192	1 21/32	1 29/192	1 31/128	1 5/48
"	54	"	3 15/16	3 21/32	3 3/8	3 3/32	2 13/16	2 17/32	2 1/4	1 31/32	1 11/16	1 13/32	1 17/64	1 1/8
"	55	"	4 1/96	3 139/192	3 7/16	3 29/192	2 83/96	2 37/64	2 7/24	2 1/192	1 23/32	1 83/192	1 37/128	1 7/48
"	56	"	4 1/12	3 19/24	3 1/2	3 5/24	2 11/12	2 5/8	2 1/3	2 1/24	1 3/4	1 11/24	1 5/16	1 1/6
"	57	"	4 5/32	3 55/64	3 9/16	3 17/64	2 31/32	2 43/64	2 3/8	2 5/64	1 25/32	1 31/64	1 43/128	1 3/16
"	58	"	4 11/48	3 89/96	3 5/8	3 31/96	3 1/48	2 23/32	2 5/12	2 11/96	1 13/16	1 49/96	1 23/64	1 5/24
"	59	"	4 29/96	3 191/192	3 11/16	3 73/192	3 7/96	2 49/64	2 11/24	2 29/192	1 27/32	1 103/192	1 49/128	1 11/48
"	60	"	4 3/8	4 1/16	3 3/4	3 7/16	3 1/8	2 13/16	2 1/2	2 3/16	1 7/8	1 9/16	1 13/32	1 1/4
"	61	"	4 43/96	4 65/192	3 13/16	3 95/192	3 17/96	2 55/64	2 13/24	2 43/192	1 29/32	1 113/192	1 55/128	1 13/48
"	62	"	4 25/48	4 19/96	3 7/8	3 53/96	3 11/48	2 29/32	2 7/12	2 25/96	1 15/16	1 59/96	1 29/64	1 7/24
"	63	"	4 19/32	4 17/64	3 15/16	3 39/64	3 9/32	2 61/64	2 5/8	2 19/64	1 31/32	1 41/64	1 61/128	1 5/16
"	64	"	4 2/3	4 1/3	4	3 2/3	3 1/3	3	2 2/3	2 1/3	2	1 2/3	1 1/2	1 1/3
"	65	"	4 77/96	4 77/192	4 1/16	3 139/192	3 37/96	3 3/64	2 17/24	2 71/192	2 1/32	1 133/192	1 67/128	1 17/48
"	66	"	4 13/16	4 15/32	4 1/8	3 25/32	3 7/16	3 3/32	2 3/4	2 13/32	2 1/16	1 23/32	1 35/64	1 3/8
"	67	"	4 95/96	4 103/192	4 3/16	3 161/192	3 47/96	3 9/64	2 19/24	2 85/192	2 3/32	1 143/192	1 73/128	1 19/48
"	68	"	4 23/24	4 29/48	4 1/4	3 43/48	3 13/24	3 1/16	2 5/6	2 23/48	2 1/8	1 37/48	1 19/32	1 5/12
"	69	"	5 1/32	4 43/64	4 5/16	3 61/64	3 19/32	3 15/64	2 7/8	2 33/64	2 5/32	1 61/64	1 79/128	1 7/16
"	70	"	5 5/48	4 71/96	4 3/8	4 1/96	3 31/48	3 9/32	2 11/12	2 53/96	2 3/16	1 79/96	1 41/64	1 11/24
"	72	"	5 1/4	4 7/8	4 1/2	4 1/8	3 3/4	3 3/8	3	2 5/8	2 1/4	1 7/8	1 11/16	1 1/2
"	80	"	5 5/6	5 5/12	5	4 7/12	4 1/6	3 3/4	3 1/3	2 11/12	2 1/2	2 1/12	1 7/8	1 2/3
"	96	"	7	6 1/2	6	5 1/2	5	4 1/2	4	3 1/2	3	2 1/2	2 1/4	2

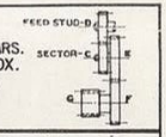
THE HENDEY MACHINE COMPANY, Torrington, Conn.

INDEX PLATES FOR HENDEY LATHES

Printed in U.S.A., 8/3/50—2000
Heminway Corp.
Waterbury, Conn.

INDEX FOR SOME EXTRA CHANGE GEARS FOR 18"-20"-24" LATHES.-LEAD SCREW 2 THREADS PER INCH.

FORMULA FOR THE DIFFERENT THREADS CUT WITH GIVEN CHANGE GEARS.
I-REPRESENTING A NUMBER TAKEN FROM REGULAR INDEX ON GEAR BOX.
C- " NUMBER OF TEETH IN CHANGE GEAR ON SECTOR.
D- " " " " " " STUD.
$\frac{I \times C}{D \times 2}$ = THREADS PER INCH WITH HANDLES IN POSITION I.



D STUD	C SECTOR	HOLE	THREADS PER INCH											
36	60	1	46 2/3	43 1/3	40	36 2/3	33 1/3	30	26 2/3	23 1/3	20	16 2/3	15	13 1/3
"	61	"	47 4/9	44 4/18	40 7/9	37 8/18	33 8/9	30 1/2	27 1/9	23 10/18	20 5/9	16 17/18	15 4/9	13 5/9
"	62	"	48 8/9	44 4/9	41 1/9	37 8/9	34 4/9	31	27 7/9	24 1/9	20 5/9	17 7/9	15 2/9	13 7/9
"	63	"	49	45 1/2	42	38 1/2	35	31 1/2	28	24 1/2	21	17 1/2	15 3/4	14
"	64	"	49 7/9	46 2/9	42 8/9	39 1/9	35 5/9	32	28 4/9	24 8/9	21 1/9	17 7/9	16	14 2/9
"	65	"	50 5/9	46 10/18	43 1/9	39 10/18	36 1/9	32 1/2	28 8/9	25 5/18	21 5/9	18 1/18	16 1/4	14 4/9
"	66	"	51 1/3	47 2/3	44	40 1/3	36 2/3	33	29 1/3	25 2/3	22	18 1/3	16 1/2	14 2/3
"	67	"	52 1/9	48 7/18	44 5/9	40 11/18	37 2/9	33 1/2	29 8/9	26 1/18	22 1/9	18 11/18	16 3/4	14 8/9
"	68	"	52 8/9	49 1/9	45 1/9	41 2/9	37 1/9	34	30 5/9	26 2/9	22 8/9	18 8/9	17	15 1/9
"	69	"	53 7/9	49 16/18	46	42 1/9	38 1/9	34 1/2	30 7/9	26 8/9	23	19 1/9	17 1/4	15 1/3
"	70	"	54 4/9	50 8/9	46 5/9	42 7/9	38 8/9	35	31 1/9	27 5/9	23 10/9	19 4/9	17 1/2	15 5/9
"	71	"	55 2/9	51 5/18	47 1/9	43 10/18	39 5/9	35 1/2	31 4/9	27 11/18	23 8/9	19 10/18	17 3/4	15 7/9
"	72	"	56	52	48	44	40	36	32	28	24	20	18	16
"	73	"	56 8/9	52 10/18	48 8/9	44 10/18	40 8/9	36 1/2	32 4/9	28 7/18	24 1/9	20 5/18	18 1/4	16 4/9
"	74	"	57 5/9	53 2/9	49 1/9	45 8/9	41 4/9	37	32 8/9	28 9/9	24 5/9	20 8/9	18 1/2	16 4/9
"	75	"	58 1/3	54 1/6	50	45 5/6	41 2/3	37 1/2	33 1/3	29 1/6	25	20 5/6	18 3/4	16 2/3
"	76	"	59 1/9	54 8/9	50 5/9	46 2/9	42 8/9	38	33 1/9	29 5/9	25 2/9	21 1/9	19	16 8/9
"	77	"	59 8/9	55 10/18	51 2/9	47 10/18	42 7/9	38 1/2	34 4/9	29 17/18	25 2/9	21 7/18	19 1/4	17 1/9
"	78	"	60 2/3	56 1/3	52	47 2/3	43 1/3	39	34 2/3	30 1/3	26	21 2/3	19 1/2	17 1/3
"	79	"	61 4/9	57 10/18	52 7/9	48 5/18	43 8/9	39 1/2	35 1/9	30 10/18	26 4/9	21 17/18	19 3/4	17 5/9
"	80	"	62 1/9	57 7/9	53 1/9	48 4/9	44 1/9	40	35 5/9	31 2/9	26 8/9	22 2/9	20	17 7/9
"	81	"	63	58 1/2	54	49 1/2	45	40 1/2	36	31 1/2	27	22 1/2	20 1/4	18
"	82	"	63 7/9	59 4/9	54 8/9	50 2/9	45 5/9	41	36 4/9	31 8/9	27 1/9	22 7/9	20 1/2	18 2/9
"	83	"	64 5/9	59 17/18	55 4/9	50 11/18	46 2/9	41 1/2	36 8/9	32 5/18	27 7/9	23 1/18	20 3/4	18 4/9
"	84	"	65 1/3	60 2/3	56	51 1/3	46 2/3	42	37 1/3	32 2/3	28	23 1/3	21	18 2/3
"	85	"	66 1/9	61 7/18	56 8/9	51 17/18	47 5/9	42 1/2	37 8/9	33 1/18	28 4/9	23 11/18	21 1/4	18 8/9
"	86	"	66 8/9	62 1/9	57 1/9	52 8/9	47 7/9	43	38 2/9	33 5/9	28 8/9	23 8/9	21 1/2	19 1/9
"	87	"	67 2/3	62 5/6	58	53 1/6	48 1/3	43 1/2	38 2/3	33 5/6	29	24 1/6	21 3/4	19 1/3
"	88	"	68 4/9	63 8/9	58 8/9	53 7/9	48 8/9	44	39 1/9	34 2/9	29 4/9	24 8/9	22	19 5/9
"	89	"	69 2/9	64 7/18	59 1/9	54 7/18	49 4/9	44 1/2	39 5/9	34 11/18	29 8/9	24 13/18	22 1/4	19 7/9
"	90	"	70	65	60	55	50	45	40	35	30	25	22 1/2	20
"	91	"	70 7/9	65 10/18	60 5/9	55 10/18	50 2/9	45 1/2	40 4/9	35 7/18	30 1/9	25 5/18	22 3/4	20 4/9
"	92	"	71 5/9	66 4/9	61 1/9	56 8/9	51 4/9	46	40 8/9	35 5/9	30 8/9	25 2/9	23	20 5/9
"	93	"	72 1/3	67 1/6	62	56 5/6	51 2/3	46 1/2	41 1/3	36 1/6	31	25 5/6	23 1/4	20 2/3
"	94	"	73 1/9	67 8/9	62 7/9	57 8/9	52 8/9	47	41 2/9	36 5/9	31 4/9	26 1/9	23 1/2	20 8/9
"	95	"	73 8/9	68 10/18	63 1/9	58 10/18	52 7/9	47 1/2	42 5/9	36 17/18	31 2/9	26 7/18	23 3/4	21 1/9
"	96	"	74 2/3	69 1/3	64	58 2/3	53 1/3	48	42 2/3	37 1/3	32	26 2/3	24	21 1/3
"	97	"	75 4/9	70 10/18	64 7/9	59 10/18	53 8/9	48 1/2	43 1/9	37 10/18	32 1/9	26 17/18	24 1/4	21 5/9
"	98	"	76 1/9	70 7/9	65 1/9	59 8/9	54 4/9	49	43 5/9	38 2/9	32 8/9	27 5/9	24 1/2	21 7/9
"	99	"	77	71 1/2	66	60 1/2	55	49 1/2	44	38 1/2	33	27 1/2	24 3/4	22
"	100	"	77 7/9	72 2/9	66 7/9	61 5/9	55 5/9	50	44 4/9	38 8/9	33 1/9	27 7/9	25	22 2/9
"	101	"	78 5/9	72 17/18	67 2/9	61 13/18	56 1/9	50 1/2	44 8/9	39 7/18	33 5/9	28 1/18	25 1/4	22 4/9
"	102	"	79 1/3	73 2/3	68	62 1/3	56 2/3	51	45 1/3	39 2/3	34	28 1/3	25 1/2	22 2/3

D STUD	C SECTOR	HOLE	THREADS PER INCH											
36	60	2	11 2/3	10 5/6	10	9 1/6	8 1/3	7 1/2	6 2/3	5 5/6	5	4 1/6	3 3/4	3 1/3
"	61	"	11 31/36	11 1/12	10 1/6	9 23/72	8 17/36	7 5/8	6 7/9	5 67/72	5 1/12	4 17/24	3 13/16	3 7/18
"	62	"	12 1/18	11 7/36	10 1/3	9 11/36	8 11/18	7 3/4	6 8/9	6 5/36	5 1/6	4 11/36	3 7/8	3 4/9
"	63	"	12 1/6	11 1/6	10 1/2	9 1/6	8 1/3	7 1/6	6 1/6	5 1/4	4 1/6	3 13/16	3 1/2	
"	64	"	12 5/9	11 2/9	10 2/3	9 7/9	8 8/9	8	7 1/9	6 7/9	5 1/3	4 4/9	4	3 5/9
"	65	"	12 13/36	11 23/72	10 5/6	9 37/72	9 1/36	8 1/6	7 1/6	6 13/72	5 5/12	4 37/72	4 1/16	3 11/16
"	66	"	12 2/3	11 11/12	11	10 1/12	9 1/6	8 1/4	7 1/3	6 5/6	5 1/2	4 7/12	4 1/8	3 2/3
"	67	"	13 1/36	12 7/72	11 1/6	10 11/72	9 1/36	8 3/8	7 4/9	6 31/72	5 7/12	4 41/72	4 3/16	3 13/16
"	68	"	13 1/3	12 1/36	11 1/3	10 1/36	9 1/9	8 1/2	7 1/9	6 1/36	5 2/3	4 13/36	4 1/4	3 7/9
"	69	"	13 5/18	12 11/36	11 1/2	10 13/36	9 7/18	8 5/8	7 2/3	6 17/36	5 3/4	4 23/36	4 5/16	3 5/8
"	70	"	13 11/18	12 35/36	11 2/3	10 29/36	9 13/18	8 3/4	7 7/9	6 29/36	5 5/6	4 31/36	4 3/8	3 5/9
"	71	"	13 29/36	12 49/72	11 5/6	10 61/72	9 35/36	8 7/8	7 8/9	6 65/72	5 11/12	4 67/72	4 7/16	3 17/36
"	72	"	14	13	12	11	10	9	8	7	6	5	4 1/2	4
"	73	"	14 7/36	13 19/72	12 1/6	11 11/72	10 5/36	9 1/8	8 1/9	7 7/72	6 1/12	5 5/72	4 9/16	4 1/8
"	74	"	14 7/18	13 5/36	12 1/3	11 1/36	10 1/18	9 1/4	8 2/9	7 7/36	6 1/6	5 5/36	4 5/8	4 1/9
"	75	"	14 7/12	13 5/24	12 1/2	11 11/24	10 7/12	9 3/8	8 1/3	7 7/24	6 1/4	5 5/24	4 11/16	4 1/6
"	76	"	14 2/3	13 1/18	12 2/3	11 11/18	10 5/9	9 1/2	8 4/9	7 7/18	6 1/3	5 5/18	4 3/4	4 2/9
"	77	"	14 35/36	13 49/72	12 5/6	11 59/72	10 23/36	9 5/8	8 5/9	7 47/72	6 5/12	5 37/72	4 13/16	4 5/18
"	78	"	15 1/6	14 1/12	13	11 11/12	10 5/6	9 3/4	8 2/3	7 7/12	6 1/2	5 5/12	4 7/8	4 1/3
"	79	"	15 13/36	14 25/72	13 1/6	12 5/72	10 29/36	9 7/8	8 7/9	7 49/72	6 7/12	5 29/72	4 15/16	4 7/18
"	80	"	15 5/9	14 4/9	13 1/3	12 2/9	11 1/9	10	8 8/9	7 7/9	6 2/3	5 5/9	5	4 4/9
"	81	"	15 3/4	14 5/8	13 1/2	12 3/8	11 1/4	10 1/8	9	7 7/8	6 3/4	5 5/8	5 1/16	4 1/2
"	82	"	15 17/36	14 35/72	13 1/3	12 13/72	11 1/36	10 1/4	9 1/9	7 31/72	6 5/12	5 55/72	5 1/8	4 5/9
"	83	"	16 1/36	14 71/72	13 5/6	12 47/72	11 25/36	10 5/8	9 7/9	8 5/72	6 11/12	5 67/72	5 3/16	4 11/18
"	84	"	16 1/3	15 1/6	14	12 5/6	11 2/3	10 1/2	9 1/3	8 1/6	7	5 5/6	5 1/4	4 2/3
"	85	"	16 13/36	15 17/72	14 1/6	12 31/72	11 11/36	10 5/8	9 4/9	8 13/72	7 1/12	5 67/72	5 5/16	4 13/18
"	86	"	16 5/18	15 5/36	14 1/3	13 1/36	11 7/18	10 3/4	9 2/9	8 13/36	7 1/6	5 35/36	5 3/8	4 7/9
"	87	"	16 11/36	15 41/72	14 1/2	13 7/72	12 1/36	10 7/8	9 7/9	8 41/72	7 1/12	6 7/72	5 7/16	4 5/9
"	88	"	17 1/9	15 8/9	14 4/9	13 1/9	12 2/9	11	9 7/9	8 4/9	7 1/3	6 1/9	5 1/2	4 8/9
"	89	"	17 13/36	16 7/72	14 5/6	13 29/72	12 13/36	11 1/8	9 8/9	8 47/72	7 7/12	6 19/72	5 9/16	4 17/18
"	90	"	17 1/2	16 1/4	15	13 3/4	12 1/2	11 1/4	10	8 3/4	7 1/2	6 1/4	5 5/8	5
"	91	"	17 35/36	16 37/72	15 1/6	13 59/72	12 13/36	11 3/8	10 1/9	8 61/72	7 7/12	6 17/72	5 11/16	5 1/18
"	92	"	17 7/9	16 5/9	15 1/3	14 1/9	12 7/9	11 1/2	10 2/9	8 7/9	7 2/3	6 7/9	5 3/4	5 1/9
"	93	"	18 1/6	16 23/36	15 1/2	14 5/36	12 11/18	11 5/8	10 1/3	9 1/36	7 3/4	6 11/36	5 13/16	5 1/6
"	94	"	18 5/9	16 35/36	15 2/3	14 13/36	13 1/18	11 3/4	10 4/9	9 5/36	7 5/6	6 25/36	5 7/8	5 2/9
"	95	"	18 13/36	17 1/18	15 5/6	14 37/72	13 7/36	11 7/8	10 7/9	9 17/72	7 11/12	6 49/72	5 15/16	5 5/18
"	96	"	18 2/3	17 1/3	16	14 2/3	13 1/3	12	10 2/3	9 1/3	8	6 2/3	6	5 1/3
"	97	"	18 25/36	17 11/72	16 1/6	14 47/72	13 13/36	12 1/8	10 7/9	9 31/72	8 1/12	6 67/72	6 1/16	5 5/18
"	98	"	19 1/18	17 13/36	16 1/3	14 25/36	13 5/18	12 1/4	10 8/9	9 13/36	8 1/6	6 35/36	6 1/8	5 4/9
"	99	"	19 1/4	17 7/8	16 1/2	15 1/8	13 3/4	12 3/8	11	9 5/8	8 1/4	6 7/8	6 3/16	5 1/2
"	100	"	19 4/9	18 1/18	16 2/3	15 5/18	13 8/9	12 1/2	11 1/9	9 13/18	8 1/3	6 11/18	6 1/4	5 5/9
"	101	"	19 35/36	18 17/72	16 5/6	15 31/72	14 1/36	12 7/8	11 5/9	9 67/72	8 5/12	7 1/72	6 7/16	5 11/18
"	102	"	19 5/6	18 1/6	17	15 1/6	14 1/3	12 3/4	11 1/3	9 11/12	8 1/2	7 1/12	6 3/8	5 2/3

D STUD	C SECTOR	HOLE	THREADS PER INCH											
36	60	3	2 11/12	2 17/24	2 5/6	2 7/24	2 1/3	1 7/8	1 5/6	1 11/24	1 1/4	1 1/24	15/16	5/6
"	61	"	2 122/144	2 37/288	2 13/144	2 25/288	2 1/72	1 43/96	1 37/144	1 17/288	1 1/48	61/24	61/72	
"	62	"	3 1/12	2 109/144	2 7/72	2 23/144	2 11/72	1 11/16	1 13/144	1 23/144	1 7/24	1 1/144	31/32	31/36
"	63	"	3 1/6	2 37/72	2 5/8	2 13/72	2 5/36	1 25/32	1 5/72	1 13/72	1 3/8	1 5/72	23/24	7/8
"	64	"	3 1/3	2 5/9	2 2/3	2 4/9	2 2/9	2	1 5/6	1 2/3	1 5/9	1 5/6	1	5/6
"	65	"	3 23/36	2 109/144	2 13/144	2 23/144	2 5/36	1 33/32	1 107/144	1 17/288	1 1/48	1 31/288	1 1/24	49/72
"	66	"	3 2/3	2 7/12	2 3/8	2 5/24	2 1/6	1 5/8	1 7/24	1 1/8	1 1/8	1 1/24	1 1/12	11/12
"	67	"	3 37/36	2 73/144	2 17/144	2 25/144	2 5/36	1 41/32	1 131/144	1 17/288	1 1/48	1 47/288	1 1/24	67/72
"	68	"	3 11/9	2 5/9	2 7/9	2 17/72	2 1/9	1 3/8	1 7/72	1 1/9	1 1/9	1 1/72	1 1/18	17/18
"	69	"	3 17/36	2 11/36	2 7/36	2 5/36	2 5/36	1 11/16	1 25/144	1 1/36	1 1/36	1 1/144	1 1/24	23/24
"	70	"	3 7/12	2 23/144	2 1/9	2 23/144	2 7/36	2 1/8	1 13/16	1 1/18	1 1/18	1 1/144	1 1/24	35/36
"	71	"	3 25/36	2 35/144	2 1/18	2 35/144	2 7/36	2 1/8	1 13/16	1 1/18	1 1/18	1 1/144	1 1/24	71/72
"	72	"	3 1/2	3 1/4	3	2 3/4	2 1/2	2 1/4	2	1 3/4	1 1/2	1 1/4	1 1/8	1
"	73	"	3 23/36	3 19/144	3 1/4	2 35/144	2 7/36	2 1/8	1 13/16	1 7/36	1 1/12	1 1/144	1 1/24	1 1/18
"	74	"	3 17/18	3 5/36	3 1/12	2 19/144	2 5/36	2 1/16	1 23/144	1 7/36	1 1/12	1 1/144	1 1/24	1 1/36
"	75	"	3 31/36	3 37/144	3 1/8	2 43/144	2 7/36	2 1/16	1 23/144	1 7/36	1 1/12	1 1/144	1 1/24	1 1/36
"	76	"	3 35/36	3 31/144	3 1/8	2 41/144	2 5/36	2 1/8	1 13/16	1 7/36	1 1/12	1 1/144	1 1/24	1 1/36
"	77	"	3 107/144	3 103/288	3 1/4	2 73/288	2 7/144	2 1/8	2 5/288	1 23/36	1 1/12	1 7/288	1 1/24	1 1/36
"	78	"	3 13/18	3 7/36	3 1/4	2 11/36	2 5/36	2 1/8	1 13/16	1 5/36	1 1/12	1 1/144	1 1/24	1 1/36
"	79	"	3 131/144	3 103/288	3 1/4	3 5/288	2 17/144	2 1/8	2 5/288	1 23/36	1 1/12	1 7/288	1 1/24	1 1/36
"	80	"	3 8/9	3 11/18	3 1/3	3 1/18	2 7/9	2 1/2	2 2/9	1 7/18	1 5/9	1 7/18	1 1/4	1 1/9
"	81	"	3 119/144	3 71/72	3 5/8	3 5/72	2 13/18	2 5/8	2 1/4	1 31/72	1 11/16	1 5/72	1 1/24	1 1/36
"	82	"	3 7/9	3 101/144	3 5/8	3 13/144	2 8/9	2 13/16	2 5/16	1 101/144	1 7/24	1 101/144	1 1/24	1 1/36
"	83	"	4 5/24	3 155/288	3 11/24	3 25/288	2 17/24	2 7/8	2 5/16	1 155/288	1 7/48	1 155/288	1 1/24	1 1/18
"	84	"	4 1/6	3 19/24	3 1/2	3 5/24	2 5/6	2 5/8	2 1/3	2 1/24	1 3/4	1 1/24	1 1/36	1 1/9
"	85	"	4 25/144	3 241/288	3 23/144	3 31/288	2 103/144	2 21/32	2 13/48	2 1/288	1 31/48	1 101/288	1 1/24	1 1/18
"	86	"	4 1/9	3 107/144	3 7/12	3 41/144	2 7/9	2 11/16	2 7/48	2 1/144	1 7/24	1 1/144	1 1/24	1 1/36
"	87	"	4 11/36	3 89/144	3 5/8	3 31/144	3 1/36	2 23/32	2 5/12	2 1/144	1 13/48	1 49/288	1 1/24	1 1/36
"	88	"	4 5/18	3 35/72	3 1/2	3 13/72	3 1/18	2 3/4	2 1/3	2 1/36	1 5/8	1 1/72	1 1/24	1 1/36
"	89	"	4 41/144	4 1/288	3 37/144	3 11/288	3 17/144	2 25/32	2 17/48	2 1/288	1 31/48	1 37/288	1 1/24	1 1/36
"	90	"	4 1/3	4 1/6	3 1/3	3 1/6	3 1/3	2 13/16	2 1/2	2 1/6	1 7/8	1 1/6	1 1/24	1 1/36
"	91	"	4 85/144	4 31/288	3 49/144	3 17/288	3 35/144	2 27/32	2 19/48	2 1/288	1 41/48	1 37/288	1 1/24	1 1/36
"	92	"	4 7/9	4 11/18	3 2/3	3 7/18	3 1/9	2 7/8	2 5/12	2 1/18	1 11/12	1 1/18	1 1/24	1 1/36
"	93	"	4 43/144	4 49/288	3 7/12	3 25/288	3 11/144	2 29/32	2 7/48	2 1/288	1 15/48	1 1/288	1 1/24	1 1/36
"	94	"	4 49/144	4 55/288	3 11/12	3 31/288	3 17/144	2 15/16	2 11/48	2 1/144	1 23/48	1 1/144	1 1/24	1 1/36
"	95	"	4 55/144	4 61/288	3 23/24	3 37/288	3 25/144	2 31/32	2 13/48	2 1/288	1 47/48	1 1/288	1 1/24	1 1/36
"	96	"	4 2/3	4 1/3	4	3 2/3	3 1/3	3	2 2/3	2 1/3	2	1 2/3	1 1/2	1 1/3
"	97	"	4 109/144	4 97/288	4 1/4	3 101/144	3 35/144	3 1/32	2 25/48	2 7/288	2 1/48	1 97/288	1 1/24	1 1/18
"	98	"	4 11/9	4 5/9	4 1/6	3 7/9	3 7/18	3 1/16	2 13/24	2 1/9	2 1/24	1 5/24	1 1/12	1 1/9
"	99	"	4 13/4	4 11/8	4 1/8	3 17/72	3 7/36	3 1/32	2 7/24	2 1/18	2 1/16	1 17/72	1 1/12	1 1/9
"	100	"	4 31/36	4 37/72	4 1/8	3 37/72	3 11/36	3 1/8	2 7/8	2 11/72	2 1/16	1 37/72	1 1/12	1 1/18
"	101	"	4 121/144	4 139/288	4 5/24	3 101/144	3 23/144	3 5/32	2 25/48	2 13/288	2 1/48	1 137/288	1 1/24	1 1/18
"	102	"	4 5/6	4 7/6	4 1/4	3 5/6	3 5/12	3 1/16	2 5/8	2 1/12	2 1/8	1 7/48	1 1/12	1 1/9

Index for Extra Change Gears on Hendey Engine Lathes
12″ – 14″ and 16″ Only

$$\frac{I \times C}{D} = \text{Threads per inch with handles in position I.}$$

(See heading page 5)

STUD	SECTOR	HOLE	Threads Per Inch.											
48	44	1	73 1/3	66	58 2/3	51 1/3	47 2/3	44	40 1/3	36 2/3	33	29 1/3	25 2/3	22
..	45	..	75	67 1/2	60	52 1/2	48 3/4	45	41 1/4	37 1/2	33 3/4	30	26 1/4	22 1/2
..	46	..	76 2/3	69	61 1/3	53 2/3	49 5/6	46	42 1/6	38 1/3	34 1/2	30 2/3	26 5/6	23
..	47	..	78 1/3	70 1/2	62 2/3	54 5/6	50 11/12	47	43 1/12	39 1/6	35 1/4	31 1/3	27 5/12	23 1/2
..	49	..	81 2/3	73 1/2	65 1/3	57 1/6	53 1/12	49	44 11/12	40 5/6	36 3/4	32 2/3	28 7/12	24 1/2
..	50	..	83 1/3	75	66 2/3	58 1/3	54 1/6	50	45 5/6	41 2/3	37 1/2	33 1/3	29 1/6	25
..	51	..	85	76 1/2	68	59 1/2	55 1/4	51	46 3/4	42 1/2	38 1/4	34	29 3/4	25 1/2
..	52	..	86 2/3	78	69 1/3	60 2/3	56 1/2	52	47 5/6	43 1/3	39	34 2/3	30 1/3	26
..	53	..	88 1/3	79 1/2	70 2/3	61 5/6	57 3/4	53	48 1/4	44 1/6	39 3/4	35 1/3	30 11/12	26 1/2
..	54	..	90	81	72	63	58 1/2	54	49 1/2	45	40 1/2	36	31 1/2	27
..	55	..	91 2/3	82 1/2	73 1/3	64 1/6	59 5/12	55	50 7/12	45 5/6	41 1/4	36 2/3	32 1/12	27 1/2
..	56	..	93 1/3	84	74 2/3	65 1/3	60 2/3	56	51 1/3	46 2/3	42	37 1/3	32 2/3	28
..	57	..	95	85 1/2	76	66 1/2	61 3/4	57	52 1/4	47 1/2	42 3/4	38	33 1/4	28 1/2
..	58	..	96 2/3	87	77 1/3	67 2/3	62 5/6	58	53 1/6	48 1/3	43 1/2	38 2/3	33 5/6	29
..	59	..	98 1/3	88 1/2	78 2/3	68 5/6	63 11/12	59	54 1/12	49 1/6	44 1/4	39 1/3	34 5/12	29 1/2
..	60	..	100	90	80	70	65	60	55	50	45	40	35	30
	61	..	101 2/3	91 1/2	81 1/3	71 1/6	66 1/12	61	55 11/12	50 5/6	45 3/4	40 2/3	35 7/12	30 1/2
.	62	..	103 1/3	93	82 2/3	72 1/3	67 1/6	62	56 5/6	51 2/3	46 1/2	41 1/3	36 1/6	31
..	63	..	105	94 1/2	84	73 1/2	68 1/4	63	57 3/4	52 1/2	47 1/4	42	36 3/4	31 1/2
..	64	..	106 2/3	96	85 1/3	74 2/3	69 1/3	64	58 2/3	53 1/3	48	42 2/3	37 1/3	32
..	65	..	108 1/3	97 1/2	86 2/3	75 5/6	70 5/12	65	59 7/12	54 1/6	48 3/4	43 1/3	37 11/12	32 1/2
..	66	..	110	99	88	77	71 1/2	66	60 1/2	55	49 1/2	44	38 1/2	33
..	67	..	111 2/3	100 1/2	89 1/3	78 1/6	72 7/12	67	61 5/12	55 5/6	50 1/4	44 2/3	39 1/12	33 1/2
..	68	..	113 1/3	102	90 2/3	79 1/3	73 2/3	68	62 1/3	56 2/3	51	45 1/3	39 2/3	34
..	69	..	115	103 1/2	92	80 1/2	74 3/4	69	63 1/4	57 1/2	51 3/4	46	40 1/4	34 1/2
..	70	..	116 2/3	105	93 1/3	81 2/3	75 5/6	70	64 1/6	58 1/3	52 1/2	46 2/3	40 5/6	35

STUD	SECTOR	HOLE	Threads Per Inch.											
48	44	2	18 1/3	16 1/2	14 2/3	12 5/6	11 11/12	11	10 1/12	9 1/6	8 1/4	7 1/3	6 5/12	5 1/2
..	45	..	18 3/4	16 7/8	15	13 1/8	12 3/16	11 1/4	10 5/16	9 3/8	8 7/16	7 1/2	6 9/16	5 5/8
..	46	..	19 1/6	17 1/4	15 1/3	13 5/12	12 11/24	11 1/2	10 13/24	9 7/12	8 5/8	7 2/3	6 17/24	5 3/4
..	47	..	19 7/12	17 5/8	15 2/3	13 13/24	12 25/48	11 3/4	10 35/48	9 11/24	8 13/16	7 5/6	6 37/48	5 7/8
..	49	..	20 5/12	18 3/8	16 1/3	14 7/24	13 13/48	12 1/4	11 11/48	10 5/24	9 3/16	8 1/6	7 7/48	6 1/8
..	50	..	20 5/6	18 3/4	16 2/3	14 7/12	13 13/24	12 1/2	11 11/24	10 5/12	9 3/8	8 1/3	7 7/24	6 1/4
..	51	..	21 1/4	19 1/8	17	14 7/8	13 13/16	12 3/4	11 11/16	10 5/8	9 9/16	8 1/2	7 7/16	6 3/8
..	52	..	21 2/3	19 1/2	17 1/3	15 1/6	14 1/12	13	11 11/12	10 5/6	9 3/4	8 2/3	7 7/12	6 1/2
..	53	..	22 1/12	19 7/8	17 2/3	15 11/24	14 23/48	13 1/4	12 1/48	11 1/24	9 15/16	8 5/6	7 35/48	6 5/8
..	54	..	22 1/2	20 1/4	18	15 3/4	14 5/8	13 1/2	12 3/8	11 1/4	10 1/8	9	7 7/8	6 3/4
..	55	..	22 11/12	20 5/8	18 1/3	16 1/24	14 23/48	13 3/4	12 29/48	11 11/24	10 7/16	9 1/6	8 1/48	6 7/8
..	56	..	23 1/3	21	18 2/3	16 1/3	15 1/6	14	12 5/6	11 2/3	10 1/2	9 1/3	8 1/6	7
..	57	..	23 3/4	21 3/8	19	16 5/8	15 7/16	14 1/4	13 1/16	11 7/8	10 11/16	9 1/2	8 5/16	7 1/8
..	58	..	24 1/6	21 3/4	19 1/3	16 11/12	15 17/24	14 1/2	13 7/24	12 1/12	10 7/8	9 2/3	8 11/24	7 1/4
..	59	..	24 7/12	22 1/8	19 2/3	17 5/24	15 37/48	14 3/4	13 11/48	12 7/24	11 1/16	9 5/6	8 23/48	7 3/8
..	60	..	25	22 1/2	20	17 1/2	16 1/4	15	13 3/4	12 1/2	11 1/4	10	8 3/4	7 1/2
..	61	..	25 5/12	22 7/8	20 1/3	17 11/24	16 25/48	15 1/4	13 35/48	12 17/24	11 7/16	10 1/6	8 41/48	7 5/8
..	62	..	25 5/6	23 1/4	20 2/3	18 1/12	16 19/24	15 1/2	14 5/24	12 11/12	11 5/8	10 1/3	9 1/24	7 3/4
..	63	..	26 1/4	23 5/8	21	18 3/8	17 1/16	15 3/4	14 7/16	13 1/8	11 13/16	10 1/2	9 3/16	7 7/8
..	64	..	26 2/3	24	21 1/3	18 2/3	17 1/3	16	14 2/3	13 1/3	12	10 2/3	9 1/3	8
..	65	..	27 1/12	24 3/8	21 2/3	18 19/24	17 29/48	16 1/4	14 43/48	13 13/24	12 3/16	10 5/6	9 23/48	8 1/8
..	56	..	27 1/2	24 3/4	22	19 1/4	17 7/8	16 1/2	15 1/8	13 3/4	12 3/8	11	9 5/8	8 1/4
..	67	..	27 11/12	25 1/8	22 1/3	19 13/24	18 5/48	16 3/4	15 19/48	13 17/24	12 7/16	11 1/6	9 35/48	8 3/8
..	68	..	28 1/3	25 1/2	22 2/3	19 5/6	18 5/12	17	15 7/12	14 1/6	12 3/4	11 1/3	9 11/12	8 1/2
..	69	..	28 3/4	25 7/8	23	20 1/8	18 11/16	17 1/4	15 13/16	14 3/8	12 15/16	11 1/2	10 1/16	8 5/8
..	70	..	29 1/6	26 1/4	23 1/3	20 5/12	18 23/24	17 1/2	16 1/24	14 7/12	13 1/8	11 2/3	10 5/24	8 3/4

STUD	SECTOR	HOLE	Threads Per Inch											
48	44	3	4 7/12	4 1/8	3 2/3	3 1/24	2 29/48	2 3/4	2 23/48	2 1/24	1 17/16	1 5/6	1 29/48	1 3/8
..	45	..	4 1/2	3 15/32	3 3/8	3 3/32	2 25/32	2 1/16	2 7/32	2 1/32	1 23/32	1 7/8	1 21/32	1 5/16
	46	..	4 11/24	4 1/8	3 2/3	3 13/24	3 11/48	2 7/8	2 25/48	2 13/24	2 1/32	1 11/12	1 35/48	1 7/16
	47	..	4 23/48	4 19/32	3 17/32	3 5/16	3 3/32	2 15/16	2 13/32	2 11/32	2 1/16	1 23/32	1 41/48	1 17/32
.	49	..	5 1/48	4 23/32	4 1/32	3 23/32	3 5/32	3 1/16	2 29/32	2 23/32	2 17/32	2 1/32	1 43/48	1 9/32
..	50	..	5 1/24	4 11/16	4 1/8	3 21/32	3 3/16	3 1/8	2 29/32	2 25/32	2 11/32	2 1/16	1 37/48	1 5/16
..	51	..	5 1/16	4 25/32	4 1/4	3 23/32	3 7/32	3 1/4	2 31/32	2 27/32	2 13/32	2 1/8	1 25/32	1 3/8
..	52	..	5 5/48	4 7/8	4 1/3	3 13/24	3 5/24	3 1/3	2 35/48	2 19/24	2 7/16	2 1/6	1 13/48	1 7/24
..	53	..	5 23/48	4 31/32	4 7/32	3 29/32	3 13/32	3 7/16	3 3/32	2 29/32	2 21/32	2 5/16	1 37/32	1 11/32
..	54	..	5 5/8	5 1/16	4 1/2	3 15/16	3 3/8	3 3/8	3 1/16	2 13/16	2 11/16	2 1/4	1 31/32	1 1/16
..	55	..	5 23/48	5 5/32	4 7/32	4 1/32	3 17/32	3 7/16	3 5/32	2 31/32	2 23/32	2 3/16	2 1/32	1 29/32
..	56	..	5 5/6	5 1/4	4 2/3	4 1/12	3 1/2	3 1/3	3 1/12	2 11/12	2 5/6	2 1/3	2 1/12	1 5/6
..	57	..	5 11/16	5 11/32	4 3/32	4 5/32	3 23/32	3 9/16	3 17/32	3 1/32	2 27/32	2 7/16	2 5/32	1 23/32
..	58	..	6 1/24	5 7/16	4 5/8	4 11/16	3 19/32	3 5/8	3 21/32	3 1/16	2 29/32	2 7/16	2 11/32	1 13/16
..	59	..	6 7/16	5 13/32	4 11/32	4 19/32	3 25/32	3 11/16	3 27/32	3 5/32	2 31/32	2 11/16	2 23/32	1 27/32
..	60	..	6 1/4	5 5/8	5	4 3/8	4 1/16	3 3/4	3 7/16	3 1/8	2 13/16	2 1/2	2 3/16	1 7/8
..	61	..	6 17/48	5 23/32	5 1/16	4 25/32	4 9/32	3 13/16	3 29/32	3 11/32	2 27/32	2 13/16	2 25/32	1 29/32
..	62	..	6 11/24	5 13/16	5 1/8	4 29/32	4 13/32	3 7/8	3 31/32	3 1/16	2 29/32	2 7/8	2 29/32	1 15/16
..	63	..	6 7/16	5 29/32	5 1/4	4 23/32	4 1/16	3 15/16	3 23/32	3 5/32	2 25/32	2 15/16	2 27/32	1 31/32
..	64	..	6 2/3	6	5 1/3	4 2/3	4 1/3	4	3 2/3	3 1/3	3	2 2/3	2 1/3	2
..	65	..	6 29/48	6 5/32	5 7/32	4 31/32	4 17/32	4 1/16	3 23/32	3 15/32	3 7/32	2 31/32	2 25/32	2 1/32
..	56	..	6 5/8	6 1/8	5 1/4	4 3/8	4 1/16	4 1/8	3 3/16	3 1/8	3 1/16	2 3/4	2 11/32	2 1/16
..	67	..	6 35/48	6 3/32	5 7/32	4 29/32	4 13/32	4 3/16	3 13/32	3 7/32	3 1/32	2 13/16	2 23/32	2 3/32
..	68	..	7 1/12	6 1/8	5 1/3	4 5/12	4 1/24	4 1/4	3 5/24	3 1/12	2 5/6	2 5/8	2 1/24
..	69	..	7 1/8	6 15/32	5 3/8	5 1/32	4 7/32	4 5/16	3 9/32	3 1/32	2 27/32	2 9/16	2 21/32	2 5/32
..	70	..	7 5/24	6 7/16	5 5/12	5 1/48	4 17/48	4 3/8	4 1/48	3 5/24	3 1/12	2 1/2	2 17/48	2 1/8

Metric Transposing Plates

THE HENDEY MACHINE CO. TORRINGTON CONN. U. S. A.

STUD	SECTOR	HOLE	PITCH IN MILLIMETERS													
45	127/129	1	0.1875	0.208 +	0.234 +	0.268 −	0.289 −	0.3125	0.341 −	0.375	0.417 −	0.469 −	0.536 −	0.625
"	" "	2	0.75	0.833 +	0.9375	1.071 +	1.154 −	1.25	1.364 −	1.5	1.667 −	1.875	2.143 −	2.5
"	" "	3	3.	3.333 +	3.75	4.286 −	4.615 +	5.	5.454 +	6.	6.667 −	7.5	8.571 +	10.
54	" "	1	0.225	0.25	0.281 +	0.321 +	0.346 +	0.375	0.409 +	0.45	0.5	0.5625	0.643 −	0.75
"	" "	2	0.9	1.	1.125	1.286 −	1.385	1.5	1.636 +	1.8	2.	2.25	2.571 +	3.
"	" "	3	3.6	4.	4.5	5.143 −	5.538 +	6.	6.545 +	7.2	8.	9.	10.286 −	12.
63	" "	1	0.2625	0.292 −	0.328 +	0.375	0.404 −	0.4375	0.477 +	0.525	0.583 +	0.656 +	0.75	0.875
"	" "	2	1.05	1.167 −	1.3125	1.5	1.615 +	1.75	1.909 +	2.1	2.333 +	2.625	3.	3.5
"	" "	3	4.2	4.667 −	5.250	6.	6.461 +	7.	7.636 +	8.4	9.333 +	10.5	12.	14.
72	" "	1	0.3	0.333 +	0.375	0.429 −	0.462 −	0.5	0.545 +	0.6	0.667 −	0.75	0.857 +	1.
"	" "	2	1.2	1.333 +	1.5	1.714 +	1.846 +	2.	2.182 −	2.4	2.667 −	3.	3.429 −	4.
"	" "	3	4.8	5.333 +	6.	6.857 −	7.384 +	8.	8.727 +	9.6	10.667 −	12.	13.714 +	16.

12″ or 14″ Lathe

THE HENDEY MACHINE CO. TORRINGTON CONN. U. S. A.

STUD	SECTOR	HOLE	PITCH IN MILLIMETERS													
40	127/132	1	0.15	0.167 −	0.1875	0.214 +	0.230 +	0.25	0.273 +	0.3	0.333 +	0.375	0.429 −	0.5
"	"	2	0.6	0.667 −	0.75	0.857 +	0.923 +	1.	1.091 −	1.2	1.333 +	1.5	1.714 +	2.
"	"	3	2.4	2.666 +	3.	3.428 +	3.692 +	4.	4.364 −	4.8	5.333 +	6.	6.857 −	8.
50	"	1	0.1875	0.208 +	0.234 +	0.268 −	0.289 −	0.3125	0.341 −	0.375	0.417 −	0.469 −	0.536 −	0.625
"	"	2	0.75	0.833 +	0.9375	1.071 +	1.154 −	1.25	1.364 −	1.5	1.667 −	1.875	2.143 −	2.5
"	"	3	3.	3.333 +	3.75	4.286 −	4.615 +	5.	5.454 +	6.	6.667 −	7.5	8.571 +	10.
60	"	1	0.225	0.25	0.281 +	0.321 +	0.346 +	0.375	0.409 +	0.45	0.5	0.5625	0.643 −	0.75
"	"	2	0.9	1.	1.125	1.286 −	1.385	1.5	1.636 +	1.8	2.	2.25	2.571 +	3.
"	"	3	3.6	4.	4.5	5.143 −	5.538 +	6	6.545 +	7.2	8.	9	10.286 −	12.
70	"	1	0.2625	0.292 −	0.328 +	0.375	0.404 −	0.4375	0.477 +	0.525	0.583 +	0.656 +	0.75	0.875
"	"	2	1.05	1.167 −	0.3125	1.5	1.615 +	1.75	1.909 +	2.1	2.333 +	2.625	3.	3.5
"	"	3	4.2	4.667 −	5.25	6.	6.461 +	7.	7.636 +	8.4	9.333 +	10.5	12.	14.
80	"	1	0.3	0.333 +	0.375	0.429 −	0.462 −	0.5	0.545 +	0.6	0.667 −	0.75	0.857 +	1.
"	"	2	1.2	1.333 +	1.5	1.714 +	1.846 +	2.	2.182 −	2.4	2.667 −	3.	3.429 −	4.
"	"	3	4.8	5.333 +	6.	6.857 −	7.384 +	8.	8.727 +	9.6	10.667 −	12.	13.714 +	16.

16″ Lathe

THE HENDEY MACHINE Co. TORRINGTON CT. U.S.A.

STUD	SECTOR	HOLE	PITCH IN MILLIMETRES													
35	127−128	1	.25	.269 +	.292 −	.318 +	.35	.389 −	.4375	.5	.583 +	.7	.777 +	.875
"	" "	2	1.	1.077 −	1.166 +	1.272 +	1.4	1.555 +	1.75	2.	2.333 +	2.8	3.111 +	3.5
"	" "	3	4.	4.307 +	4.666 +	5.091 −	5.6	6.222 +	7	8.	9.333 +	11.2	12.444 +	14.
45	" "	1	.321 +	.346 +	.375	.409 +	.45	.5	.5625	.643 −	.75	.9	1.	1.125
"	" "	2	1.286 −	1.384 +	1.5	1.636 +	1.8	2.	2.25	2.571 +	3.	3.6	4.	4.5
"	" "	3	5.143 −	5.538 +	6.	6.545 +	7.2	8.	9.	10.285 +	12.	14.4	16.	18.
55	" "	1	.393 −	.423 +	.458 +	.5	.55	.611 +	.6875	.786 −	.916 +	1.1	1.222 +	1.375
"	" "	2	1.571 +	1.692 +	1.833 +	2.	2.2	2.444 +	2.75	3.143 −	3.666 +	4.4	4.889 −	5.5
"	" "	3	6.285 +	6.769 +	7.333 +	8.	8.8	9.778 −	11.	12.571 +	14.666 +	17.6	19.555 +	22
70	" "	1	.5	.538 +	.583 +	.636 +	.7	.778 −	.875	1.	1.166 +	1.4	1.555 +	1.75
"	" "	2	2.	2.154 −	2.333 +	2.545 +	2.8	3.111 +	3.5	4.	4.666 +	5.6	6.222 +	7.
"	" "	3	8.	8.615 +	9.333 +	10.181 +	11.2	12.444 +	14.	16.	18.666 +	22.4	24.889 −	28.
75	" "	1	.536 −	.577 −	.625	.682 −	.75	.833 +	.9375	1.071	1.25	1.5	1.666 +	1.875
"	" "	2	2.143 −	2.308 −	2.5	2.727 +	3.	3.333 +	3.75	4.286	5.	6.	6.666 +	7.5
"	" "	3	8.571 +	9.231 −	10.	10.908 +	12.	13.333 +	15.	17.143 −	20.	24.	26.666 +	30.

FEEDS 6 TIMES THREADS PER INCH

18″ Lathe

THE HENDEY MACHINE CO. TORRINGTON CONN. U.S.A.

STUD	SECTOR	HOLE	PITCH IN MILLIMETRES													
35	127−136	1	.25	.269 +	.292 −	.318 +	.35	.389 −	.4375	.5	.583 +	.7	.777 +	.875
"	" "	2	1.	1.077 −	1.166 +	1.272 +	1.4	1.555 +	1.75	2.	2.333 +	2.8	3.111 +	3.5
"	" "	3	4.	4.307 +	4.666 +	5.091 −	5.6	6.222 +	7.	8.	9.333 +	11.2	12.444 +	14.
45	" "	1	.321 +	.346 +	.375	.409 +	.45	.5	.5625	.643 −	.75	.9	1.	1.125
"	" "	2	1.286 −	1.384 +	1.5	1.636 +	1.8	2.	2.25	2.571 +	3.	3.6	4.	4.5
"	" "	3	5.143 −	5.538 +	6.	6.545 +	7.2	8.	9.	10.285 +	12.	14.4	16.	18.
55	" "	1	.393 −	.423 +	.458 +	.5	.55	.611 +	.6875	.786 −	.916 +	1.1	1.222 +	1.375
"	" "	2	1.571 +	1.692 +	1.833 +	2.	2.2	2.444 +	2.75	3.143 −	3.666 +	4.4	4.889 −	5.5
"	" "	3	6.285 +	6.769 +	7.333 +	8.	8.8	9.778 −	11.	12.571 +	14.666 +	17.6	19.555 +	22.
70	" "	1	.5	.538 +	.583 +	.636 +	.7	.778 −	.875	1.	1.166 +	1.4	1.555 +	1.75
"	" "	2	2.	2.154 −	2.333 +	2.545 +	2.8	3.111 +	3.5	4.	4.666 +	5.6	6.222 +	7.
"	" "	3	8.	8.615 +	9.333 +	10.181 +	11.2	12.444 +	14.	16.	18.666 +	22.4	24.889 −	28.
75	" "	1	.536 −	.577 −	.625	.682 −	.75	.833 +	.9375	1.071	1.25	1.5	1.666 +	1.875
"	" "	2	2.143 −	2.308 −	2.5	2.727 +	3.	3.333 +	3.75	4.286	5.	6.	6.666 +	7.5
"	" "	3	8.571 +	9.231 −	10.	10.908 +	12.	13.333 +	15.	17.143 −	20.	24.	26.666 +	30.

FEEDS-6 TIMES THREADS PER INCH

20″ Lathe

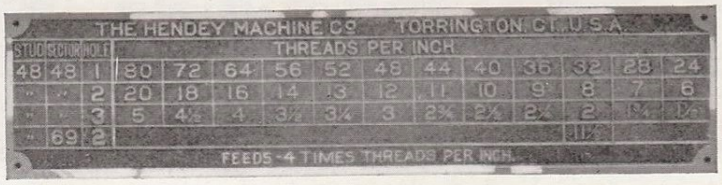
ILLUSTRATION of Index Plates showing metric threads as obtained on 12″, 14″, 16″, 18″ and 20″ lathes with English pitch Lead Screw and Compound Gear Box, using Transposing Gears.

All possible pitches are not illustrated, but any pitch between the coarsest and finest given on the Index can be cut by the use of extra change gears. Those illustrated are considered sufficient for ordinary use.

We recommend this arrangement to the attention of customers wishing to cut Metric as well as English Pitches in the same lathe. Also the cross-feed screw and nose of spindle may be furnished with metric pitch thread if desired as on a regular metric engine lathe.

Note: Where 18″ and 20″ lathes have a 2 per inch lead screw, the second sector gear is omitted, and the feeds are 12 times threads per inch.

Standard Index Plates Showing Range of Threads and Feeds

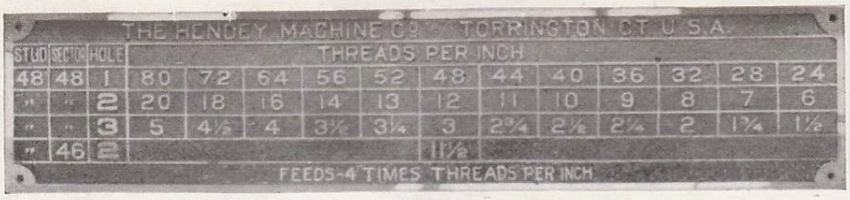


THE HENDEY MACHINE Co TORRINGTON CT. U.S.A.

STUD	SECTOR	HOLE	THREADS PER INCH											
48	48	1	80	72	64	56	52	48	44	40	36	32	28	24
"	"	2	20	18	16	14	13	12	11	10	9	8	7	6
"	"	3	5	4½	4	3½	3¼	3	2¾	2½	2¼	2	1¾	1½
"	69	2										11½		

FEEDS-4 TIMES THREADS PER INCH

12″ and 14″ Lathes

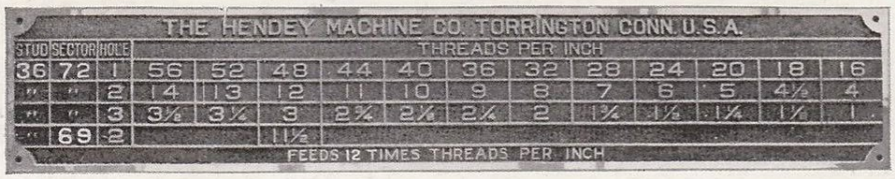


THE HENDEY MACHINE Co TORRINGTON CT. U.S.A.

STUD	SECTOR	HOLE	THREADS PER INCH											
48	48	1	80	72	64	56	52	48	44	40	36	32	28	24
"	"	2	20	18	16	14	13	12	11	10	9	8	7	6
"	"	3	5	4½	4	3½	3¼	3	2¾	2½	2¼	2	1¾	1½
"	46	2						11½						

FEEDS-4 TIMES THREADS PER INCH

16″ Lathe

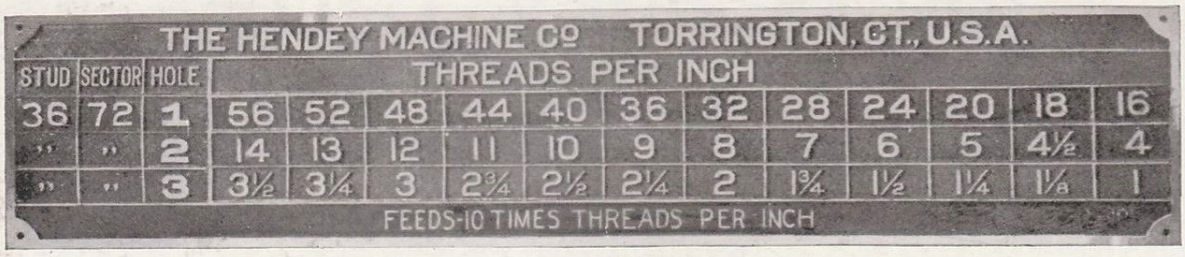


THE HENDEY MACHINE CO. TORRINGTON CONN. U.S.A.

STUD	SECTOR	HOLE	THREADS PER INCH											
36	72	1	56	52	48	44	40	36	32	28	24	20	18	16
"	"	2	14	13	12	11	10	9	8	7	6	5	4½	4
"	"	3	3½	3¼	3	2¾	2½	2¼	2	1¾	1½	1¼	1⅛	1
"	69	2			11½									

FEEDS 12 TIMES THREADS PER INCH

18″ and 20″ Cone Head Lathes 18″, 20″ and 24″ Geared Head Lathes



THE HENDEY MACHINE Co TORRINGTON, CT., U.S.A.

STUD	SECTOR	HOLE	THREADS PER INCH											
36	72	1	56	52	48	44	40	36	32	28	24	20	18	16
"	"	2	14	13	12	11	10	9	8	7	6	5	4½	4
"	"	3	3½	3¼	3	2¾	2½	2¼	2	1¾	1½	1¼	1⅛	1

FEEDS-10 TIMES THREADS PER INCH

24″ Cone Head Lathe only

12″ to 16″ swing lathes cut 1½ to 80 threads per inch without gear change. 18″ to 24″ lathes cut 1 to 56 without gear change. Each lathe therefore cuts 36 threads without gear change, no two of which are duplicates. In this list there are very few fractional threads, and these are in the coarse run or confined below 5 per inch.

In setting up for a given thread, the figures in the vertical column, under the word "hole," refer to the 1, 2, 3 on outer gear box. Threads per inch in horizontal columns are directly over the notches in the main gear box. To change from one thread to another in the horizontal row, as from 7 to 14, simply bring the latched handle directly under 14, allowing it to lock into place. To change from one thread to another in a vertical column, as from 32 to 2, locate handle in outer gear box directly under figure arranged on the same horizontal line as thread desired. Any change is easily and quickly made, and there is no occasion for cutting the wrong pitch, as changes in the outer box are too widely separated (4–1) not to be instantly noticed, while the horizontal pitches can be read in no other way than directly over the controlling handle.

Additional threads obtained with extra change gears are shown on pages 4, 5 and 6.

Note: Where 18″ and 20″ lathes have a 4 per inch lead screw, the stud and sector gears have 48 and 48 teeth respectively, and the feeds are 6 times threads per inch.