

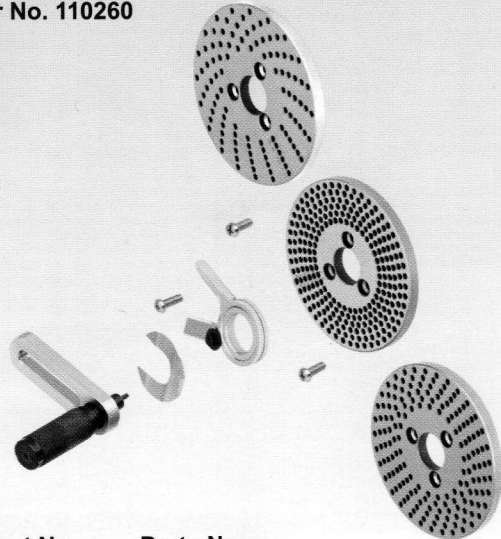
Dividing Mechanism & Indexing Plates



SPECIAL ACCESSORIES

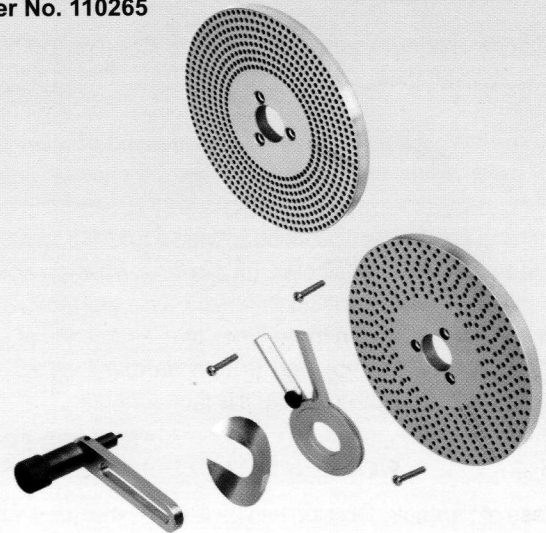
Simple indexing consists of a series of preset holes in a backing plate, these divisions are provided for the most common angles (such as 90°, 45° and 30°). The remaining divisions of a circle are provided by manually rotating the dividing arm using index plates. Calculations are required to use this method.

Order No. 110260



Part No.	Parts Names
01	Sector Arm
02	Screw M5 - 8x10
03	Set Screw M4 - 7x6
04	Flat Washer 4mm
05	Crank Handle
06	Sector Arm Spring
07	Dividing Plate 15-20
08	Dividing Plate 21-33
09	Dividing Plate 37-49

Order No. 110265



Part No.	Parts Names
01	Sector Arm
02	Screw 3/16" - 32
03	Set Screw M4 - 7x6
04	Flat Washer 4mm
05	Crank Handle
06	Sector Arm Spring
07	Dividing Plate 26-57 / 28-59
08	Dividing Plate 61-97 / 63-99

Description of In the index table.

This table is the one being calculated for the index plate with hole number shown below.

NUMBER OF HOLES

DP-110260

A Plate.....15, 16, 17, 18, 19, 20
B Plate.....21, 23, 27, 29, 31, 33
C Plate.....37, 39, 41, 43, 47, 49

DP-110265

A Plate.....26, 28, 30, 32, 34, 37, 38, 39, 41, 43, 44, 46, 47, 49, 51, 53, 57, 59
B Plate.....61, 63, 67, 69, 71, 73, 77, 79, 81, 83, 87, 89, 91, 93, 97, 99

Dimensions

Order No.	Major dimension of DM							Weight		Shipping Measurement ft	Indexing Plates	Suitable for
	Dividing plate set screw	Inner diameter of sector arm		Outer diameter of spring clip		Grove width in handle plate						
		Inch	mm	Inch	mm	Inch	mm	Kg	lb			
110260	PCD. ³² 1.26Ø	0.83	21	0.71	18	0.03	9	2.5	5.51	0.12	3	110239, 110241, 110242, 111325, 111335
110265	(3holes) ⁴⁶ PCD. 1.81	1.12	28.7	1.73	44	0.39	10	4	8.82	0.12	2	110243, 110244

SOME POSSIBLE USES OF A ROTARY TABLE

- Cutting gears
- Machining hex or square on a shaft
- Drilling holes equal distance around a circle eg holes in a flywheel
- Used as an adjustable angle plate - eg machine one face then rotate 90° degrees and machine the next face
- Milling a radius or an arc
- Create wheels with spokes by using the rotary table to machine out the triangular shaped holes in a wheel

IN CASE OF AN OPTIONAL DM DEVICE ATTACHED

Indexing of 2 to 100 can be made accurately and quickly.

Equation of Indexing

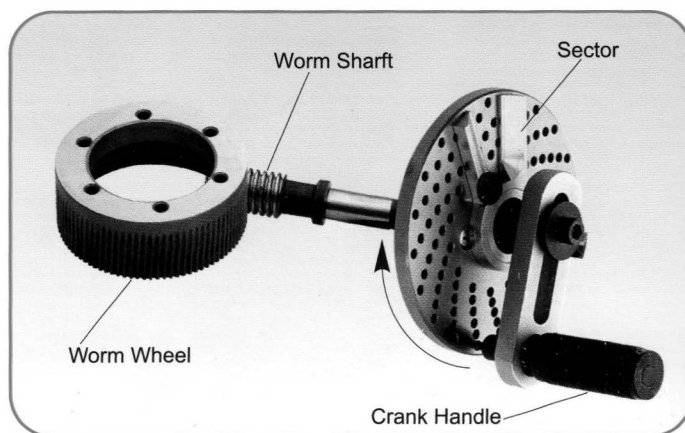
Since the worm ratio is 1 : 90, when the handle is made to rotate a 360° revolution, the table therefore will rotate a 1/90 revolution. The relationships between handle revolution 'N' and dividual number 'T' to be sought are shown in the following equation:

$$N = \frac{90}{T}$$

Remarks: The index table on Page-8 is made on the basis of this equation.

(Example)

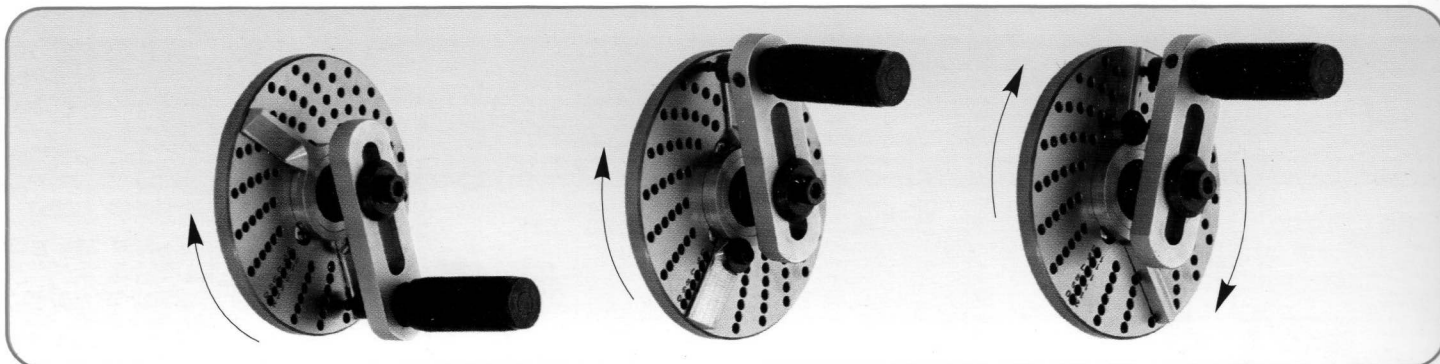
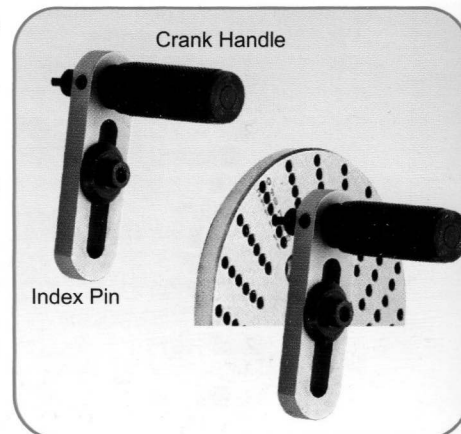
In case where the operator wants to index the position divided into 29 equal parts. Hints on operation As for 29 dividual numbers, the number of crank handle revolutions (N) is 9/87 as shown in the table on Page-8 so that the handle should be rotated a full 360° revolution three times plus an interval of nine holes. (in this time, it means hole intervals not hole numbers). After setting this point as a start point, rotate the handle a full 360° revolution three times plus an interval of nine holes. When the procedure is repeated in turn as many as 29 times, the indexing of dividing into 29 equal parts is thus achieved.



OPERATIONS OF CRANK HANDLE AND SECTOR

In case of Example 'Division into 29 Equal Parts' aforesaid, it is natural that indexing operation should proceed with the intervals of nine holes after setting the index plate (B plate) on which a row of 87 holes are provided. But in this method, the operator has to count nine holes' intervals one by one. In this viewpoint, it is necessary to use a device called 'sector' to avoid such troublesome procedures. The following will describe some necessary procedures for operation of the sector.

- Loosen the crank handle lock nut, adjust its length so as to cause the index, pin to fall in the train of 87 holes, and retighten it.
- Loosen the set-screws of the sector, open two arms in accordance with the interval of nine holes (total numbers of holes are ten), and retighten with set-screws.
- First, bring the left arm of the sector near to the index pin's left side.
- Next, rotate the crank handle clock-wise to apply it to the right arm of the sector so that the index pin will fall in the hole located at this right arm's left side surface.
- Rotate the sector clockwise this time, and put the right side surface of the life arm to the side surface of the left arm to the left side of the index pin. In this time, the relationships between the index pin and the sector's left arm in their positions are the same as in Par. c). The index plate hole that actually accommodates the index pin is located at the point where goes across ten holes to the right away from the hole as in Par. c)
- Repeat the same procedures as necessary.



OPERATORS RESPONSIBILITY:-

Please take the time to read the users instructions.

Descriptive notations in our catalogue and discussions with staff are offered as a guide only. Purchasers must satisfy themselves as to

(a) The suitability of the product for their particular application and

(b) The process by which the product is used.

Horizontal & Vertical Rotary Table



INDEX TABLES FOR 6", 8", 10" & 12" HORIZONTAL / VERTICAL ROTARY TABLE 90:1 RATIO

DP - 1 for HV-6

Number	Plate and Circle	Complete Turns	Part of Turn	Number	Plate and Circle	Complete Turns	Part of Turn
1	ANY	90		51	N/A		
2	ANY	45		52	N/A		
3	ANY	30		53	N/A		
4	A20	22	10/20	54	A18	1	12/18
5	ANY	18		55	B33	1	21/33
6	ANY	15		56	N/A		
7	B21	12	18/21	57	A19	1	11/19
8	A20	11	5/20	58	B29	1	16/29
9	ANY	10		59	N/A		
10	ANY	9		60	A20	1	10/20
11	B33	8	6/33	61	N/A		
12	A20	7	10/20	62	B31	1	14/31
13	C39	6	36/39	63	B21	1	9/21
14	B21	6	9/21	64	N/A		
15	ANY	6		65	C39	1	15/39
16	A16	5	10/16	66	B33	1	12/33
17	A17	5	5/17	67	N/A		
18	ANY	5		68	N/A		
19	A19	4	14/19	69	B23	1	7/23
20	A20	4	10/20	70	B21	1	6/21
21	B21	4	6/21	71	N/A		
22	B33	4	3/33	72	A20	1	5/20
23	B23	3	21/23	73	N/A		
24	A20	3	15/20	74	C37	1	8/37
25	A20	3	12/20	75	A20	1	4/20
26	C39	3	18/39	76	N/A		
27	A18	3	6/18	77	N/A		
28	N/A			78	C39	1	6/39
29	B29	3	3/29	79	N/A		
30	ANY	3		80	A16	1	2/16
31	B31	2	28/31	81	A18	1	2/18
32	A16	2	13/16	82	C41	1	4/41
33	B33	2	24/33	83	N/A		
34	A17	2	11/17	84	N/A		
35	B21	2	12/21	85	N/A		
36	A20	2	10/20	86	C43	1	2/43
37	C37	2	16/37	87	B29	1	1/29
38	A19	2	7/19	88	N/A		
39	C39	2	12/39	89	N/A		
40	A20	2	5/20	90	ANY		
41	C41	2	8/41	91	N/A		
42	B21	2	3/21	92	N/A		
43	C43	2	4/43	93	B31		30/31
44	N/A			94	C47		45/47
45	ANY	2		95	A19		18/19
46	B23	1	22/23	96	A16		15/16
47	C47	1	43/47	97	N/A		
48	A16	1	14/16	98	C49		45/49
49	C49	1	41/49	99	B33		30/33
50	A20	1	16/20	100	A20		18/20

DP - 2 for HV-8 DP - 3 for HV-10, 12

Number	Plate and Circle	Complete Turns	Part of Turn	Number	Plate and Circle	Complete Turns	Part of Turn
2	ANY	45		48	A32	1	28/32
3	ANY	30		49	A49	1	41/49
4	A26	22	13/26	50	A30	1	24/30
4	A28	22	14/28	51	A34	1	26/34
5	ANY	18		52	A26	1	19/26
6	ANY	15		53	A53	1	37/53
7	A28	12	24/28	54	A30	1	20/30
7	B77	12	66/77	54	B63	1	42/63
8	A28	11	7/28	55	A44	1	28/44
8	A44	11	11/44	55	B77	1	49/77
9	ANY	10		56	A28	1	17/28
10	ANY	9		57	A38	1	22/38
11	A44	8	8/44	58	B87	1	48/87
11	B77	8	14/77	59	A59	1	31/59
12	A26	7	13/26	60	A34	1	17/34
12	A28	7	14/28	60	A32	1	16/32
13	A26	6	24/26	61	B61	1	29/61
13	B91	6	84/91	62	B93	1	42/93
14	A28	6	12/28	63	A49	1	21/49
14	B77	6	33/77	63	B77	1	33/77
15	ANY	6		64	A32	1	13/32
16	A32	5	20/32	65	A26	1	10/26
17	A34	5	10/34	65	B91	1	35/91
18	ANY	5		66	A44	1	16/44
19	A38	4	28/38	66	B99	1	36/99
20	A26	4	13/26	67	B67	1	23/67
20	A28	4	14/28	68	A34	1	11/34
21	A28	4	8/28	69	A46	1	14/46
21	B77	4	22/77	69	B69	1	21/69
22	A44	4	4/44	70	A28	1	8/28
22	B77	4	7/77	70	B63	1	18/63
23	A46	3	42/46	71	B71	1	19/71
23	B69	3	63/69	72	A32	1	8/32
24	A28	3	21/28	72	A44	1	11/44
24	B44	3	33/44	73	B73	1	17/73
25	A30	3	18/30	74	A37	1	8/37
26	A26	3	12/26	75	A30	1	6/30
26	B91	3	42/91	76	A38	1	7/38
27	A30	3	10/30	77	B77	1	13/77
27	B63	3	21/63	78	A39	1	6/39
28	A28	3	6/28	78	B91	1	14/91
29	B87	3	9/87	79	B79	1	11/79
30	ANY	3		80	A32	1	4/32
31	B93	2	84/93	81	B63	1	7/63
32	A32	2	26/32	81	B81	1	9/81
33	B99	2	72/99	82	A41	1	4/41
34	A34	2	22/34	83	B83	1	7/83
35	A28	2	16/28	84	A28	1	2/28
35	B63	2	36/63	85	A34	1	2/34
36	A26	2	13/26	86	A43	1	2/43
36	A28	2	14/28	87	B87	1	3/87
37	A37	2	16/37	88	A44	1	1/44
38	A38	2	14/38	89	B89	1	1/89
39	A26	2	8/26	90	ANY	1	
39	B91	2	28/91	91	B91		90/91
40	A28	2	7/28	92	A46		45/46
40	A44	2	11/44	93	B93		90/93
41	A41	2	8/41	94	A47		45/47
42	A28	2	4/28	95	A38		36/38
42	B63	2	9/63	96	A32		30/32
43	A43	2	4/43	97	B97		90/97
44	A44	2	2/44	98	A49		45/49
45	ANY	2		99	A44		40/44
46	A46	1	44/46	99	B99		90/99
46	B69	1	66/69	100	A30		27/30
47	A47	1	43/47				

For index numbers greater than 10, use formula