

Compound Indexing using the Smith Indexer

Step 1 Find the divisions need on the chart in this case 77 Divisions

Step 2 Install the dividing plate in this case it is B (2)

Step 3 Set the Sector Arm at 9 holes

Step 4 Find the second hole circle need.

Step 5 Make mark on the Smith Indexer for the second hole circle for indexing in this case it is 3 holes to move forward in this case 3 holes.

{ note some division will need to go backward in this chart displayed in (-##)}

{ Note all indexing need the Sector Arm Spring/retaining clip this holes the sector arm for sliding. Replace if you missing this part a compression spring is not as good }

Compound Indexing on 40 tooth worm

Plate A 15, 16, 17, 18, 19, 20 ~ Plate B 21, 23, 27, 29, 31, 33 ~ Plate C 37, 39, 41, 43, 47, 49
or Plate D 15, 16, 17, 18, 19, 20 ~ Plate E 21, 23, 27, 29, 31, 33 ~ Plate F 37, 39, 41, 43, 47, 49

Divisions	Plate letter	Hole circle	Number of turns	Holes	Second Hole circle	holes	No of times a round	Degrees and minutes per cut
73	C	47	6	28	49	(-1)	12	59° - 11' 60"
77	B	21	0	9	33	3	1	4° - 11' 60"
79	C	43	2	42	49	3	6	27° - 21' 60"
81	C	41	5	5	49	(-9)	10	44° - 27' 60"

Step 1 points to the 'Divisions' column.

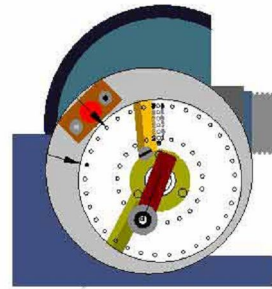
Step 2 points to the 'Hole circle' column.

Step 3 points to the 'Holes' column.

Step 4 points to the 'Second Hole circle' column.

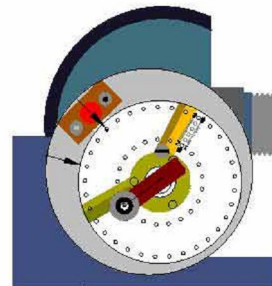
Step 5 points to the 'holes' column.

Always test your setup be for making the first cut. Take the blank and place a mark at ever cut by using the Dividing head. This will take little time to do but no one wants a 1#2 tooth on the last cut do any errors.

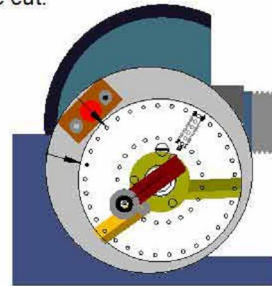


First indexing

- 1) Pull out the index needle and Move the Hand Crank to the next location on the Sector Arm Push in the index needle.
- 2) Place a pin or mark the index plate where marks on the Smith indexer



- 2) Next Push/unlock in the Smith Indexer pin and rotate the index plate using the Hand crank Do not pull out the index needle line up the pin/mark with Smith Indexer pointer. Pull out/ locking the Smith Indexer needle and lock the Index head for the cut.



- 3) Reset the Sector Arm and move pin/mark

How to use a Compound Indexer