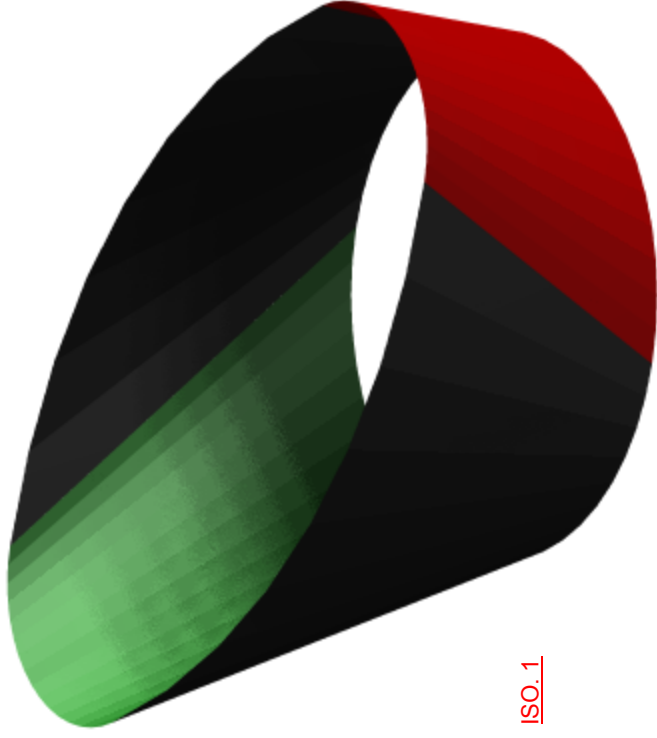


TUTORIAL: HOW TO MAKE A CIRCLE TO OFFSET OVAL FROM 4 OBLIQUE CONES



FRONT ELEVATION



ISO.1

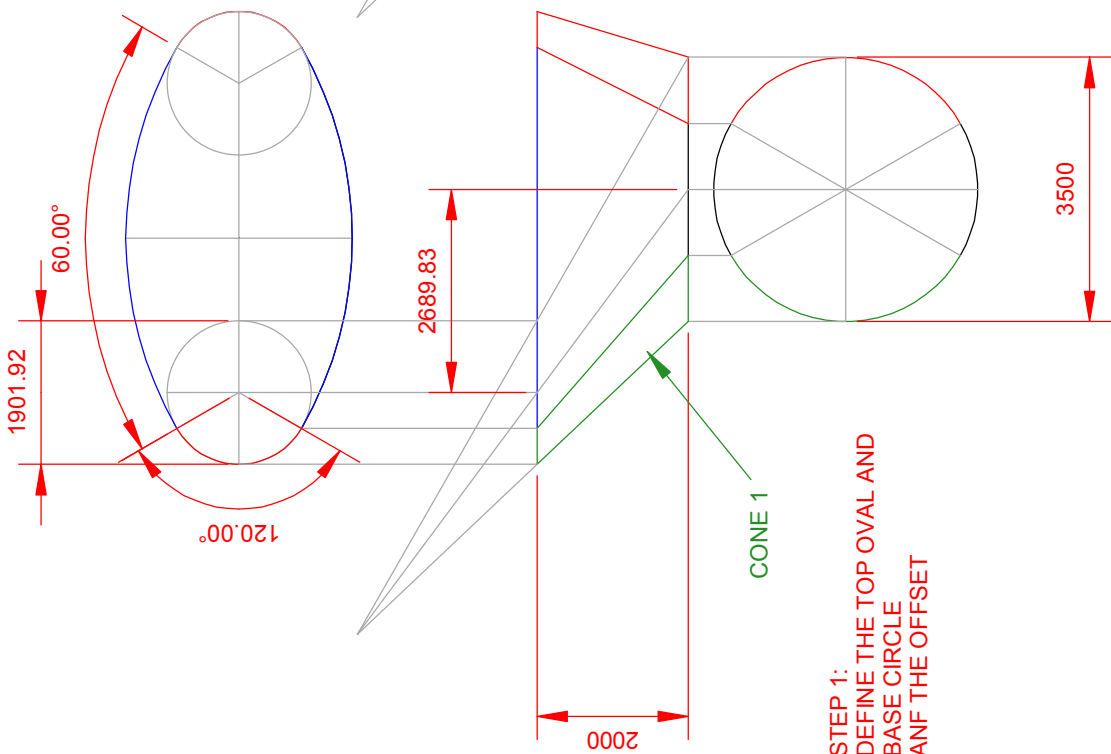


PLAN

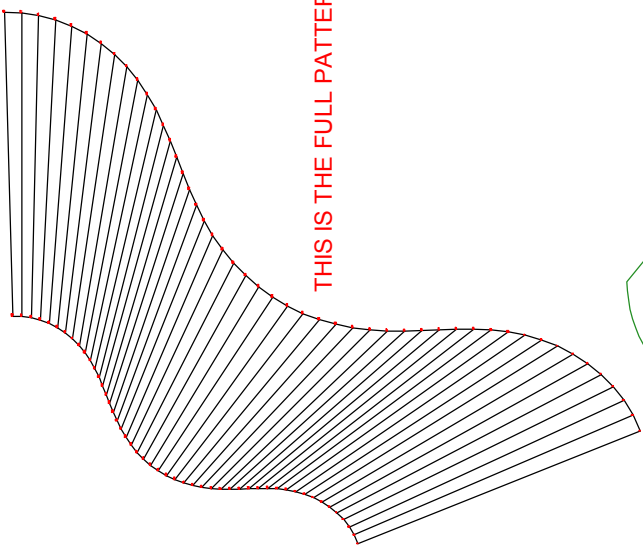


ISO.2

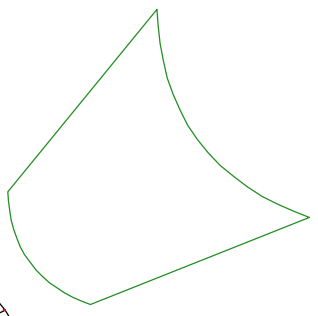
THE 60DEG 120 DEG AS DEFINED BY DICKASON: 'THE GEOMETRY OF SHEET METAL'



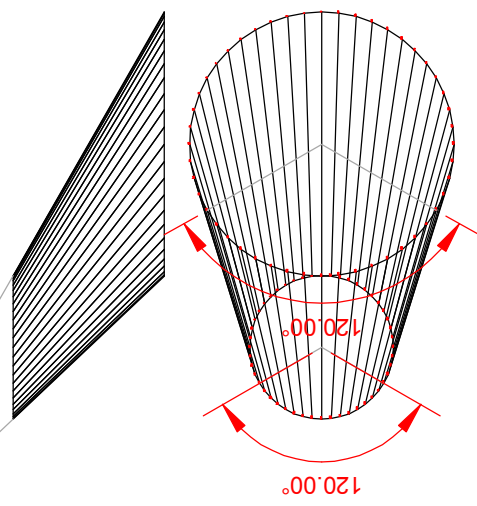
CONET SOFTWARE 2D EXPORT



THIS IS THE FULL PATTERN



USING CONET TO EXTRACT JUST 16 TO 32



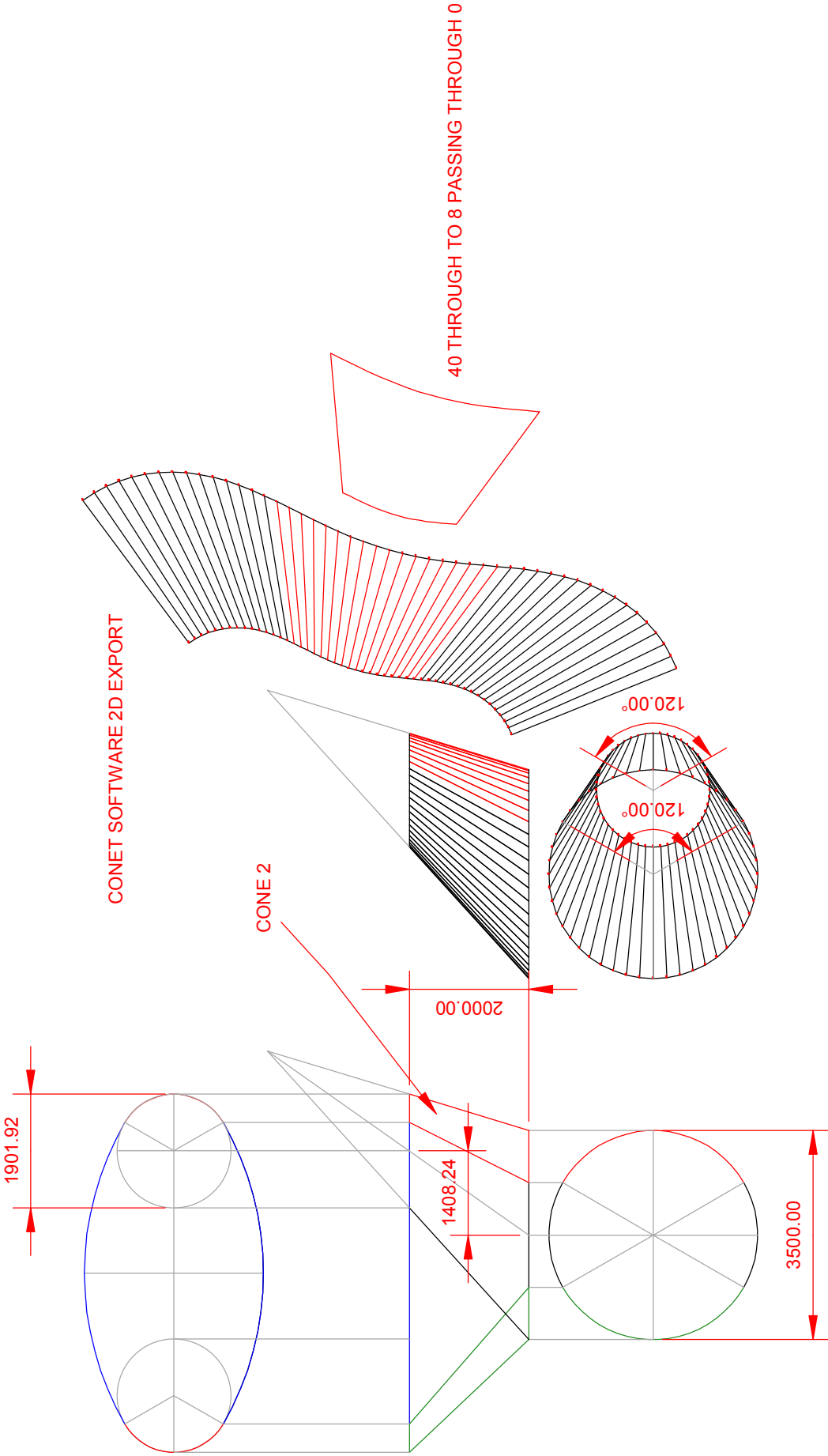
120 DEG OF CONE 1 IS POINTS 16 THROUGH TO 32

STEP 1:
DEFINE THE TOP OVAL AND
BASE CIRCLE
AND THE OFFSET

ISOLATE EACH CONE AND DETERMINE THE DIMENSIONS
USE THESE DIMS IN THE CONET SOFTWARE

| | |
|----------|--------------------------------------|
| SCALE | CIRCLE TO OFFSET OVAL TRANSFORMER |
| DRN. TH | DRAWING NUMBER |
| DATE | COO_2 |
| 16/01/12 | |

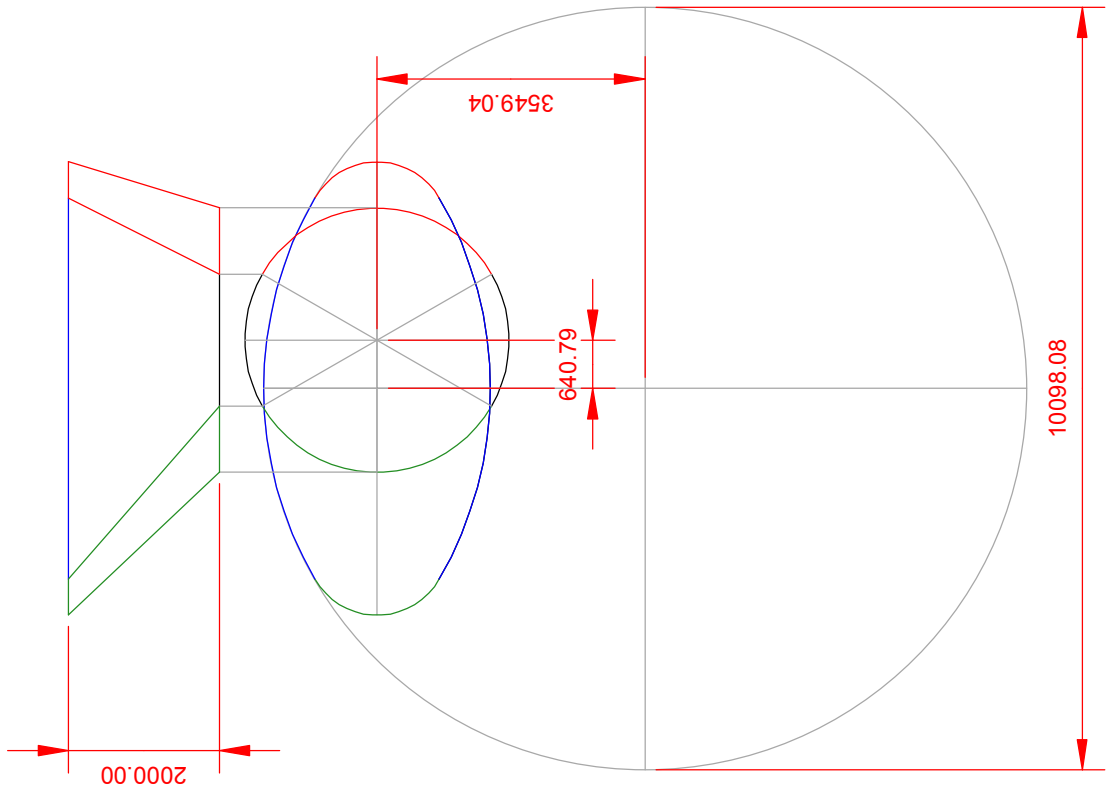
STEP 2: SAME PRINCIPLE EXTRACT CONE 2 DIMS AND FEED INTO THE CONET SOFTWARE.



| | |
|----------|-----------------------|
| SCALE | CIRCLE TO OFFSET OVAL |
| DRN. TH | TRANSFORMER |
| DATE | DRAWING NUMBER |
| 16/01/12 | COO_3 |

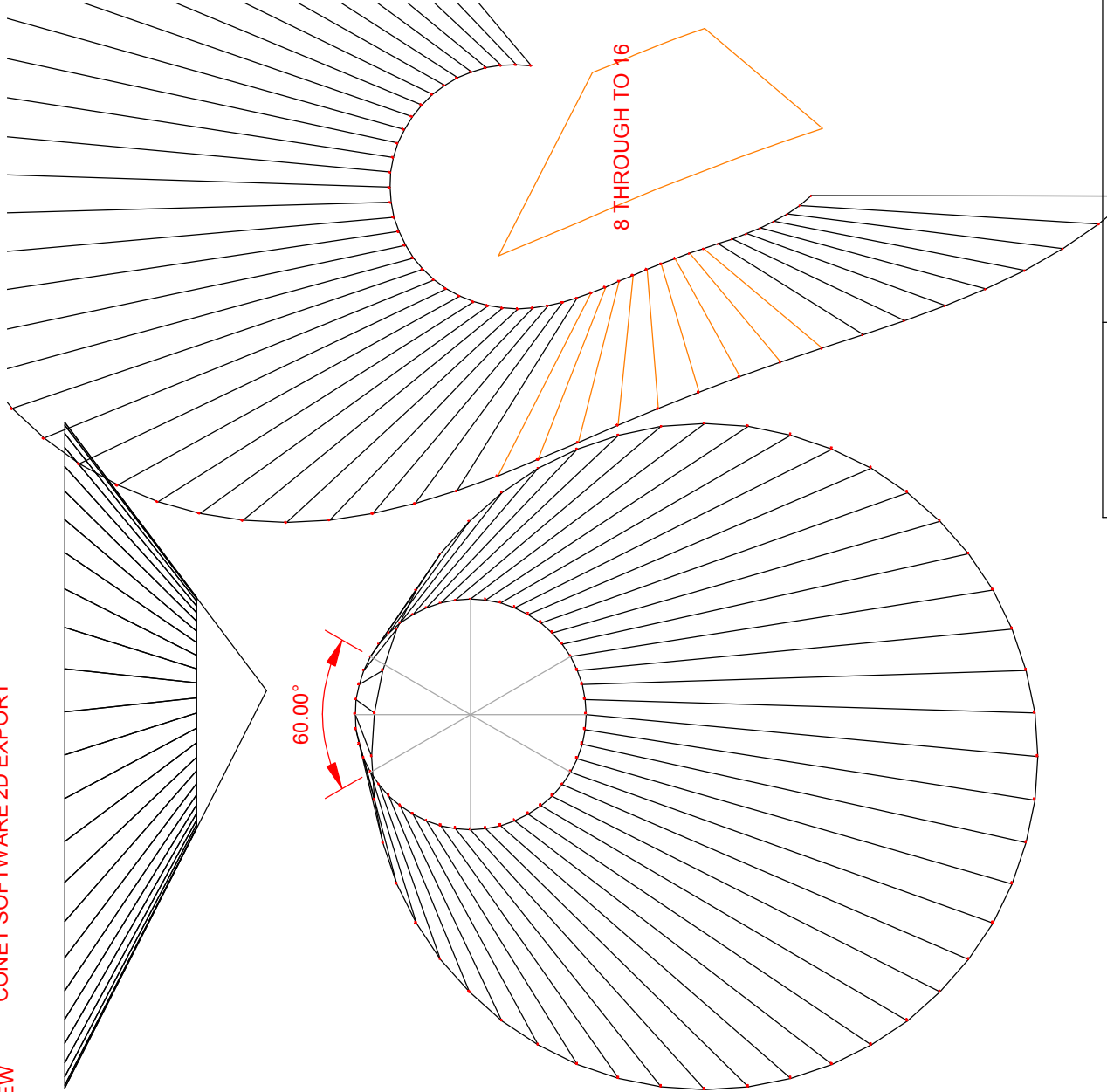
CONET SOFTWARE 2D EXPORT

CONE 3 IS MORE DIFFICULT TO VISULISE UNTIL YOU'VE DONE A FEW



THIS IS THE TOP DIAMETER

TY HARNESS CONSULTING
www.tyharness.co.uk



SCALE

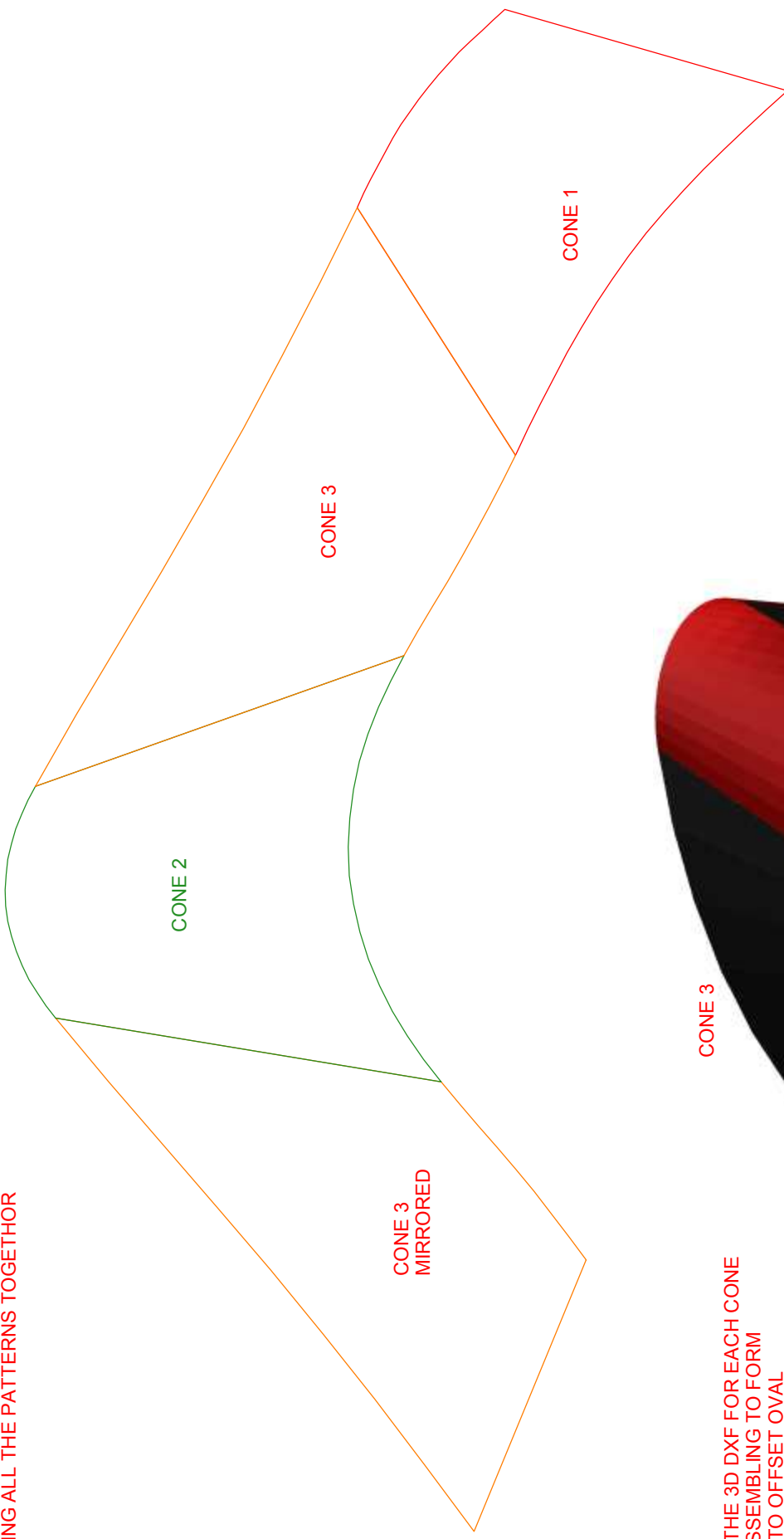
DRN. TH

DATE 16/01/12

CIRCLE TO OFFSET OVAL
TRANSFORMER

DRAWING NUMBER COO_4

STEP 4 PUTTING ALL THE PATTERNS TOGETHER



EXPORTING THE 3D DXF FOR EACH CONE
AND THEN ASSEMBLING TO FORM
THE CIRCLE TO OFFSET OVAL



| | |
|--------------------------------------|----------|
| SCALE | |
| DRN. | TH |
| DATE | 16/01/12 |
| CIRCLE TO OFFSET OVAL TRANSFORMER | |
| DRAWING NUMBER | COO_5 |