

Order of calculations:

$$L = \sqrt{9,25^2 + 41^2} = 42,03049488$$

$$A = \tan^{-1} (9,25 / 41) = 12,71363216^\circ$$

$$B = \sin^{-1} (7 / L) = 9,58704161^\circ$$

$$C = A - B = 3,12659056^\circ$$

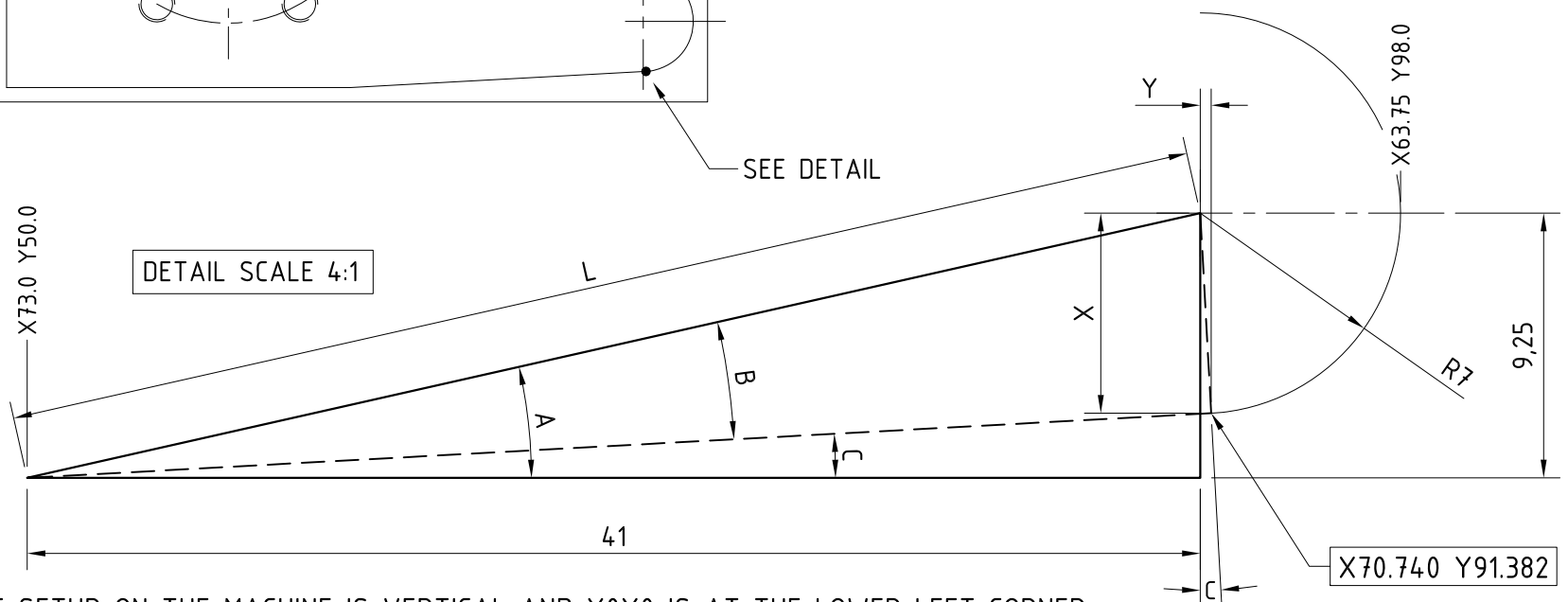
$$X = 7 \times \cos C = 6,98958026$$

$$Y = 7 \times \sin C = 0,38179555$$

Point coordinates:

$$X\text{-coordinate} = 31 + 18,75 + 14 + X = 70,740$$

$$Y\text{-coordinate} = 50 + 41 + Y = 91,382$$



NOTE - THE PART SETUP ON THE MACHINE IS VERTICAL AND X0Y0 IS AT THE LOWER LEFT CORNER

Peter Smid

CAD/CAM
2D

Multitool programming and machining project
Details and calculations

MULTITOOL PROJECT - DATA