

Size Cam screen from DYNACAM for a radial cam with oscillating roller follower

Drawing the Cam

For radial cams, the cam contour is displayed on the *Draw Cam* screen after calculation as shown in Figure A-9. This screen allows the prime (or base) circle and, if translating, the offset, to be changed further. Cam rotation direction can also be changed here and the cam contour will be recalculated and redisplayed. Changes to other parameters can be accomplished via the *Back* button which returns you to the *Size Cam* screen. The maximum and minimum pressure angles and radii of curvature are shown in the right side-bar. For more information on these parameters, select the *Show Summary* radio button at the lower right. This will change the cam image to a summary of pressure angle and radius of curvature information. The *Show Cam* radio button will redraw the cam contour. Selecting the *Show Conjugate* radio button computes and displays the conjugate of the cam previously shown.

In the cam profile drawing, a curved arrow indicates the direction of cam rotation. The initial position of a translating roller follower at cam angle $\theta=0$ is shown as a filled circle with rectangular stem, and of a flat-faced follower as a filled rectangle. Any eccentricity shows as a shift up or down of the roller follower with respect to the X axis through the cam center. The smallest circle on the cam centerline represents the camshaft, and its keyway is shown as a solid dot. The larger circle is the base circle. The prime circle is not drawn.

The default image shows the inner cam surface. Check boxes above the image allow the outer surface, the track of the follower, or the cutter path around the cam to be displayed instead. When the follower path is shown, the pitch curve is drawn through the locus of the roller follower centers.