



FIGURE A-9

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

The check box labeled *Cam vs. Machine Zero* phase-shifts the cam contour to machine zero and redisplay it. In the case of an oscillating arm follower, the cam contour is reoriented to put the keyway at the selected o'clock position. For a translating follower, the follower is kept in a fixed orientation along the x axis and the keyway rotated to the correct relative position. These phase shifts incorporate the start angle, follower angle, and keyway location.

The radial lines that form pieces of pie within the base circle represent the segments of the cam. If the cam turns counterclockwise, the radial lines are numbered clockwise around the circumference and vice versa.

The *Next* button returns you to the Home Screen. The cam profile is now ready for export. Whether the *Show Cam* or *Show Conjugate* radio button was selected when *Next* was clicked determines which of those two cam contours will be the one exported. So to generate cutter data for a pair of conjugate cams requires sequential calculation and export of their respective data to files. The state of the *Inner Surface/Outer Surface* radio buttons at the time *Next* was clicked also dictates which cam surface will be exported. Generating both cam surfaces also requires sequential calculation and export of data.

The cam profile for a radial cam can be displayed at any time from the *Home* screen with the *Draw Cam* button. So, for creation of multiple cam surfaces or conjugates of radial cams, it is only necessary to revisit the *Draw Cam* screen without resizing the cam. Clicking *Next* on the *Draw Cam* screen returns you to the *Home Screen* where a dialog box appears with instructions on exporting the cam contour data for manufacturing.