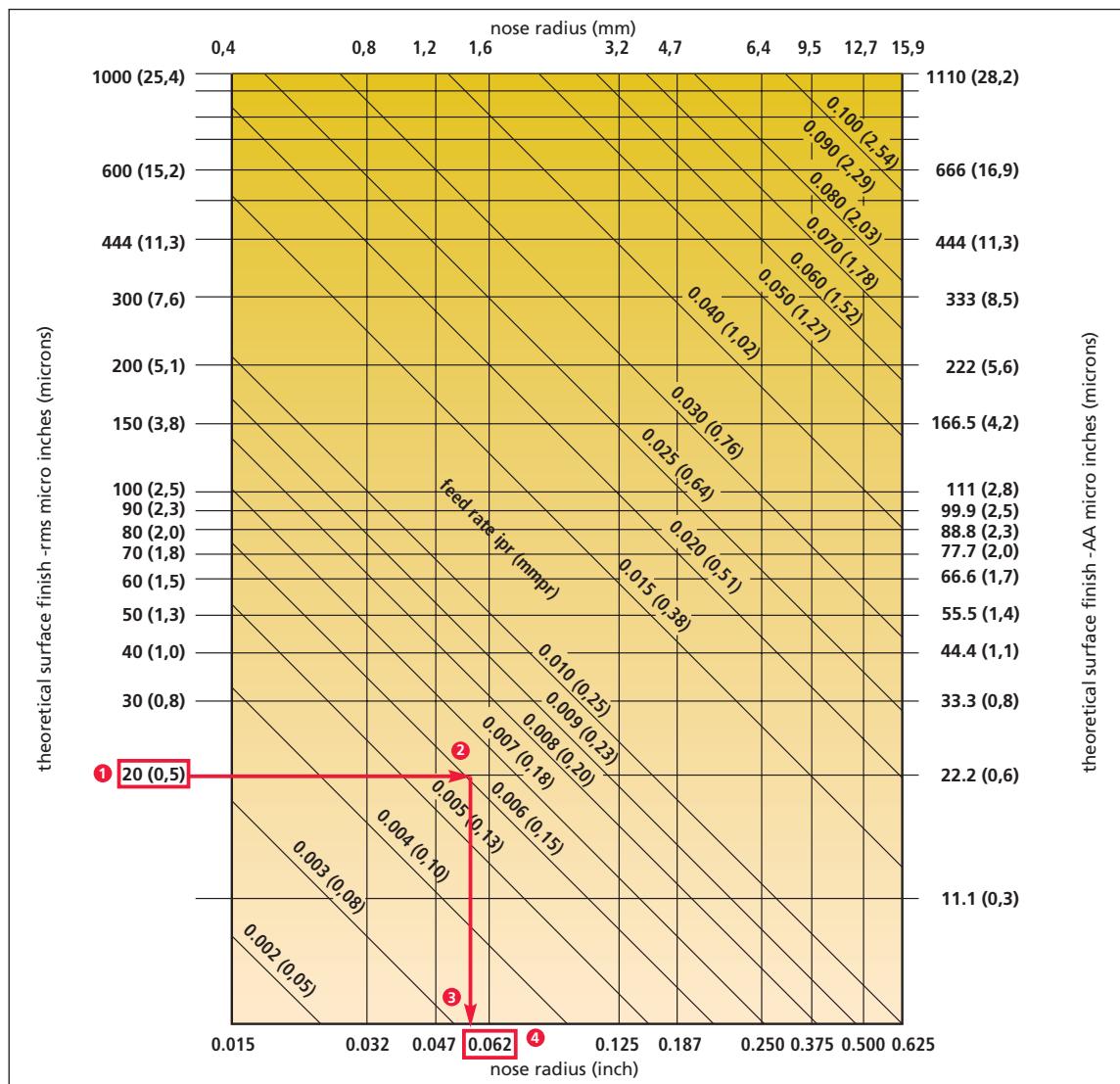




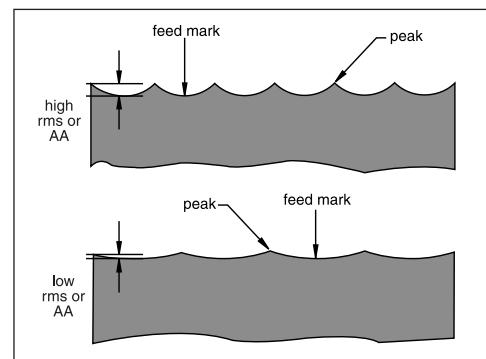
# Nose Radius Selection and Surface Finish

Application Guidelines for Conventional Inserts\*



Nose radius and feed rate have the greatest impact on surface finish. To determine the nose radius required for a theoretical surface finish, use the following procedure and the chart above.

- Locate the required surface finish (rms or AA) on the vertical axis.
- Follow the horizontal line corresponding to the desired theoretical finish to where it intersects the diagonal line corresponding to the intended feed rate.
- Project a line downward to the nose radius scale and read the required nose radius.
- If this line falls between two values, choose the larger value.
  - If no available nose radius will produce the required finish, feed rate must be reduced.
  - Reverse the procedure to obtain surface finish from a given nose radius.



NOTE:

Peaks produced with a small radii insert (top) compared to those produced with a large radius insert (bottom).

\*NOTE: See pages A20 - A23 for radius and surface finish specifications using wiper-style inserts.