عنوان مقاله:

Automatic implementation of a new recovery coefficient for Reliable contour milling

محل انتشار:

دو فصلنامه تحقیقات کاربردی در مهندسی مکانیک, دوره 9, شماره 2 (سال: 1398)

تعداد صفحات اصل مقاله: 12

نویسنده:

Elhachemi Bahloul - *Mechanical Engineering Department,Faculty of Technology, Batna ۲ Universite, Fesdis-۰۵۰۰۰, Batna, Algeria*

خلاصه مقاله:

In contour milling, to render the machining process more automated with significant productivity without remaining material after machining, a new recovery coefficient was developed. The coefficient was inserted in the computation of contour parallel tool paths to fix the radial depth of cut in the way to ensure an optimized overlap area between the passes in the corners, without residuals. Thus, this parameter, which has been earlier inserted by the user, is now being independent and is implemented automatically from the input data of the contour shape of the pocket. In order to prove the effectiveness of the present approach, a detailed comparison with the classical methods found in the literature we also performed. The results clearly show that the new method removes the residuals efficiently in an automatic way and minimizes the toolpath length respect to the other methods. Furthermore, this proposed approach .can easily be worked on the actual machine tool

کلمات کلیدی:

Cutting parameter, reliable trajectory, optimized overlap, automatic implementation