

Abstract

**METHOD AND INSTALLATION FOR THE ULTRASONIC PEENING OF THE
ANNULAR RECESSES THAT ATTACH BLADES TO A ROTOR**

The invention relates to a method for the ultrasonic peening of annular recesses (2) for the attachment of blades to a rotor rim (1), these recesses including a blade introduction opening. According to the method, a plurality of beads (10) is placed on a vibratory surface (8a) of a sonotrode (8), arranged in an intermediate position in a sleeve (16) having opposed closing-off means (14b) capable of sliding in the recess, the introduction opening (5) is placed facing the sonotrode (8), the sonotrode (8) and the sleeve (16) are moved together toward the introduction opening (5) into a peening position in which the closing-off means (14b) face the recess ends opening into said opening (5), then the rotor rim (1) is turned about its axis so as to bring the closing-off means into a first end (5a) of the recess (2) so as to form a closed chamber containing the beads. The rim is turned and the vibratory surface is vibrated to mobilize the beads within the chamber, thereby peening the recess.

Figure 3