

SUPPORT COLLAR GEOMETRY FOR LINEAR FRICTION WELDING

ABSTRACT

5 An example method of attaching an airfoil for an integrally bladed rotor
includes placing a support collar in an installed position around at least a leading edge
and trailing edge of an airfoil stub to be repaired in an integrally bladed rotor. The
support collar and the airfoil stub together have a midline that is positioned between
opposing, laterally outer surfaces of the airfoil stub when the support collar is in the
10 installed position. The method performs linear friction welding to add a replacement
airfoil to the airfoil stub.

Figure 1