

DUAL LASER SHOCK PEENING

ABSTRACT OF THE DISCLOSURE

A method and system for dual laser shock peening an article are provided. The method allows for defining a spot pattern (104) comprising a plurality of spots on a first surface (46) of the article to be peened. The method further allows for defining a spot pattern (106) comprising a plurality of spots on a second surface (48) of the article to be peened. The first and second surfaces comprise mutually opposite surfaces relative to one another. Each one of the respective spots on the second surface is arranged to correspond to a respective spot on the first surface and comprising a plurality of matched pair of spots. A generating step (108) allows for generating dual laser beams being respectively aligned to simultaneously impinge on each respective matched pair of spots.

Figure 8.