

FABRICATED REPAIR OF CAST NOZZLE

ABSTRACT

A method for repairing a turbine nozzle segment (10) having at least one vane (12) disposed between outer (14) and inner (16) bands includes separating the inner band from the nozzle segment, and joining the inner band to a newly manufactured replacement casting (30) having an outer band (32) and at least one vane (34). The replacement casting includes a mounting platform (44) formed on one end of the vane and a boss (46) formed on the mounting platform. A collar (38) is joined to the inner band and has a slot (42) formed therein. The boss is then inserted into the slot, and the mounting platform is received in a recess (40) formed in the inner band. Joining is completed by joining the boss to the collar and the mounting platform to the inner band. The thickness (T) of the collar is tapered in an axial direction, and a relief (47) is formed in the collar to provide assembly clearance with adjacent components.

Fig. 8