

Title (en)
DIE FOR FORGING ROTOR MATERIAL AND METHOD FOR FORGING ROTOR MATERIAL

Title (de)
GESENK ZUM SCHMIEDEN VON ROTORMATERIAL UND VERFAHREN ZUM SCHMIEDEN VON ROTORMATERIAL

Title (fr)
EMPREINTE ET PROCÉDÉ DE FORGEAGE D UN MATÉRIAU POUR ROTOR

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Application
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Abstract (en)
To produce a rotor material efficiently. The present invention is directed to a die assembly having a lower die 10 and an upper die 30 for applying forming loads and configured to forge a cylindrical columnar rotor material having a center hole 3 and a vane groove 4. The lower die 10 has a vane groove forming vane portion 13 protruded in a forming hole, and a center hole forming center pin 16 to be arranged in a center of the forming hole. The upper die 30 has an upper die body 31 for applying a main load to portions other than the center pin 16 and the vane portion 13 of the lower die 10, a back-pressure pin 40 fitted in a center pin corresponding hole 35 formed in the upper die body 31 in an advanceable and retractable manner, the back-pressure pin being configured to apply a first sub-load to the center pin 16, and a back-pressure plate 41 fitted in a vane portion corresponding hole 36 formed in the upper die body 31 in an advanceable and retractable manner, the back-pressure plate being configured to apply a second sub-load to the vane portion 13. A tip end face of the vane portion is arranged so as to coincide with or distance from an opening face of the vane portion corresponding hole 36 at the time of die matching.

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