

ABSTRACT

VACUUM PUMP

5 Provided is a vacuum pump regarding which adhesion of products can be prevented even when a rotating body is stopped, by heating the rotating body using an alternating current (AC) magnetic field, and also regarding which the rotating body can be heated highly efficiently.

10 Two poles, of a heating electromagnet 3A and a heating electromagnet 3B, are disposed facing each other across a rotating body 103, between a protective bearing 1 and an upper-side radial-direction sensor 107. The heating electromagnet 3A and the heating electromagnet 3B are equivalent to a heating device 3, and the heating device 3 receives supply of AC electric current from a heating electric power source 21. Excitation of the heating electromagnet 3A and the heating electromagnet 3B occurs due to this AC electric
15 current, generating an AC magnetic field. In this configuration, the generated AC magnetic field intersects with the rotating body 103. Eddy current is generated around the intersecting AC magnetic field. The rotating body 103 is heated by this eddy current. This heating enables deposition of products to be prevented even further, and improved pump operation efficiency can be realized.

20 Figure 1