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POWDER SEALING DEVICE OF POWDER BEAM
PROCESSING MACHINE

ABSTRACT OF THE DISCLOSURE

A powder sealing device of a powder beam processing machine including a processing chamber for processing a workpiece by jetting powder beams to the workpiece, includes: a thin film cylinder member for sealing a space between an operating shaft passing through an opening portion formed in a peripheral surface of the processing chamber and the opening portion; and a substantially cylindrical mounting bracket having a small chamber communicated to the processing chamber and mounted to the opening portion. The thin film cylinder member is formed of a flexible thin film material into a substantially conical shape, and has one end mounted to one end of the mounting bracket on the opening portion side and the other end mounted to the outer peripheral side of the operating shaft. When the processing chamber is in a negative pressure state, an intermediate portion of the conical thin film cylinder member is expandedly sucked inward of the small chamber without generation of any wrinkle, so that it is possible to structurally eliminate breakage of the thin film cylinder member and hence to prolong the service life of the powder sealing device.

Figure 2

This Sheet Has Been Replaced

