

Abstract

To develop, with respect to an air classification device for a crushed polycrystalline silicon material excellent in reduction in surface metal contamination, one that can
5 sophisticatedly sort between even the chunk material and the chip material that are heavy by improving the sorting effect thereof. A crushed polycrystalline silicon mixture air sorting device (1) includes: a first air sorting tube part (2) for chunk material and small particle diameter material that
10 includes a tubular body provided so as to stand vertically, that is provided with an inlet (3) for a crushed polycrystalline silicon mixture containing chunk material and small particle diameter material having a smaller particle diameter than that of the chunk material, specifically, chip material and
15 powder material, the inlet being formed in an axially middle area of the tubular body; and a flow tube path (9) for the small particle diameter material which path is connected to an upper end of the first air sorting tube part (2) and is provided with a sucking section located upstream of the flow
20 tube path (9), the sucking section being configured to apply a suction force that allows the chunk material in the crushed polycrystalline silicon mixture that has introduced into the tubular body to fall downwards and that sucks the small particle diameter material upwards.

(Figure 1)