レオロジーアナライザ(印刷性評価装置)の開発

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Development of Rheology Analyzer for Evaluation of Solder Printing

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Abstract

Basic solder-paste printer performance evaluation considers to what extent the solder paste loaded in the metal mask opening is transferred to the pad surface of a printed circuit board without losing shape or quantity.

The resistance of the solder paste against the wall surface of the metal mask opening greatly influences the results of the transfer, but traditionally, there has been no way to ascertain this resistance as a numerical value.

To address this problem, we developed a rheology analyzer that can evaluate printability by simulating the flow of the solder paste in the metal mask opening and measuring the resistance of the solder paste against the wall surface of the opening.

As a result, it is now possible to ascertain how the transfer quantity of subject materials changes with the pressure applied at the time of printing as a numerical value.

Key Words: Solder Paste, Printer, Rheology, Syringe, Needle

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