ABSTRACT

The embodiment of the present invention provides a mixing device and an automated mixing system, relating to the field of sample reaction and processing equipment. According to the mixing device provided by the embodiments of the present invention, the sample container has an opening facing a first direction. Since the force applying mechanism drives the fixing mechanism to reciprocate along a second direction perpendicular to the first direction, the sample contained in the sample container is shaken in the second direction during the reciprocating movement of the fixing mechanism and thus is mixed. Therefore, during the shaking of the sample container, the sample does not directly impact the opening of the sample container facing the first direction during the shaking process, but impacts the inner wall of the sample container, simulating a manual shaking manner. Thereby, the risk of sample leakage from the sample container body due to the sample directly impacting the opening of the sample container is reduced. Since the sample directly impacts the inner wall of the sample container, the possibility of the sample adhering to the inner wall of the sample container is also reduced, and the residue of the sample at the opening can also be reduced.