

Equipment Introduction

Lens Automatic Coupling System

On the basis of meeting the functional requirements of lens coupling, the system frees the hands of operators to a greater extent, enhances the intelligence of the system and improves the efficiency. The machine consists of an automatic slide table module, a visual positioning system, an automatic dispensing system and a marble vibration isolation system. A 5-axis high-precision stepping motor is used to realize accurate control of the parallelism between the Box and the Lens in combination with ingenious structural design. Combined with machine vision, the accuracy of Lens coupling position is improved, the coupling time is greatly reduced, and the position difference introduced by material difference is reduced.

Combined with the algorithm, the near-field and far-field switching can be realized, and the collimating Lens can be coupled. Maximum coupling power is achieved. Scanned raw data and test results are saved to the database. The system integrates the automatic dispensing function, which can be used for single-point dispensing and continuous dispensing.



Technology & Function	Specification & Parameters
<ul style="list-style-type: none">◆ Automatic material gripping and delivery to the set position through material tray loading;◆ Supports automatic analysis and calculation of near-field and far-field spots;◆ Supports Lens automatic coupling, so that the diameter and ellipticity of near-field and far-field spots reach the target value and the difference between the two is less than the set value;◆ Supports automatic dispensing and UV curing;◆ Supports the processing of coupling results, and automatically judging whether the results are qualified compared with specifications.	<ul style="list-style-type: none">◆ Clamping accuracy of fixture: ≤ 0.015 mm◆ Repeatability before and after UV curing: variation of spot diameter measured before and after UV curing ≤ 15 μm◆ Machine shock absorption specification: static within 2.5s◆ Current stability of DC power supply: 0.1 mA◆ Control accuracy of glue amount: 3%